

This is a repository copy of *Interventions for Complex Traumatic Events (INCiTE): Systematic review and research prioritisation exercise*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/148106/>

Version: Published Version

Article:

Melton, Hollie Anne orcid.org/0000-0003-3837-510X, Meader, Nicholas orcid.org/0000-0001-9332-6605, Dale, Holly et al. (10 more authors) (2020) Interventions for Complex Traumatic Events (INCiTE): Systematic review and research prioritisation exercise. NIHR Journals Library. pp. 1-350.

<https://doi.org/10.3310/hta24430>

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.

Health Technology Assessment

Volume 24 • Issue 43 • September 2020

ISSN 1366-5278

Interventions for adults with a history of complex traumatic events: the INCiTE mixed-methods systematic review

Hollie Melton, Nick Meader, Holly Dale, Kath Wright, Julie Jones-Diette, Melanie Temple, Iram Shah, Karina Lovell, Dean McMillan, Rachel Churchill, Corrado Barbui, Simon Gilbody and Peter Coventry



Interventions for adults with a history of complex traumatic events: the INCiTE mixed-methods systematic review

Hollie Melton¹, Nick Meader¹, Holly Dale²,
Kath Wright¹, Julie Jones-Diette¹, Melanie Temple³,
Iram Shah³, Karina Lovell⁴, Dean McMillan^{5,6},
Rachel Churchill¹, Corrado Barbui⁷, Simon Gilbody^{5,6}
and Peter Coventry^{1,5*}

¹Centre for Reviews and Dissemination, University of York, York, UK

²School of Health Sciences, University of Manchester, Manchester, UK

³Schoen Clinic, York, UK

⁴Division of Nursing, Midwifery and Social Work, University of Manchester, Manchester, UK

⁵Department of Health Sciences, University of York, York, UK

⁶Hull York Medical School, University of York, York, UK

⁷Department of Neurosciences, Biomedicine and Movement Sciences, University of Verona, Verona, Italy

*Corresponding author

Declared competing interests of authors: Rachel Churchill was part of a Systematic Reviews Programme Advisory Group. Simon Gilbody is/was a member of the following committees: Health Technology Assessment (HTA) Clinical Trials Board (2008–14), HTA Commissioning Board (2016–19), HTA Efficient Study Designs (2015–16), HTA End of Life Care and Add on Studies (2016), HTA Funding Boards Policy Group (formerly CSG) (2017–20), HTA Funding Teleconference Members (2015–16) and HTA Post-board Funding Teleconference (2017–20). Peter Coventry is a member of the following committees: HTA General Board (2018–19) and Health Services and Delivery Research Funding Committee Members (2019–22).

Published September 2020

DOI: 10.3310/hta24430

This report should be referenced as follows:

Melton H, Meader N, Dale H, Wright K, Jones-Diette J, Temple M, *et al.* Interventions for adults with a history of complex traumatic events: the INCiTE mixed-methods systematic review. *Health Technol Assess* 2020;**24**(43).

Health Technology Assessment is indexed and abstracted in *Index Medicus/MEDLINE*, *Excerpta Medica/EMBASE*, *Science Citation Index Expanded (SciSearch®)* and *Current Contents®/Clinical Medicine*.

ISSN 1366-5278 (Print)

ISSN 2046-4924 (Online)

Impact factor: 3.370

Health Technology Assessment is indexed in MEDLINE, CINAHL, EMBASE, the Cochrane Library and Clarivate Analytics Science Citation Index.

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics (COPE) (www.publicationethics.org/).

Editorial contact: journals.library@nihr.ac.uk

The full HTA archive is freely available to view online at www.journalslibrary.nihr.ac.uk/hta. Print-on-demand copies can be purchased from the report pages of the NIHR Journals Library website: www.journalslibrary.nihr.ac.uk

Criteria for inclusion in the *Health Technology Assessment* journal

Reports are published in *Health Technology Assessment* (HTA) if (1) they have resulted from work for the HTA programme, and (2) they are of a sufficiently high scientific quality as assessed by the reviewers and editors.

Reviews in *Health Technology Assessment* are termed 'systematic' when the account of the search appraisal and synthesis methods (to minimise biases and random errors) would, in theory, permit the replication of the review by others.

HTA programme

Health Technology Assessment (HTA) research is undertaken where some evidence already exists to show that a technology can be effective and this needs to be compared to the current standard intervention to see which works best. Research can evaluate any intervention used in the treatment, prevention or diagnosis of disease, provided the study outcomes lead to findings that have the potential to be of direct benefit to NHS patients. Technologies in this context mean any method used to promote health; prevent and treat disease; and improve rehabilitation or long-term care. They are not confined to new drugs and include any intervention used in the treatment, prevention or diagnosis of disease.

The journal is indexed in NHS Evidence via its abstracts included in MEDLINE and its Technology Assessment Reports inform National Institute for Health and Care Excellence (NICE) guidance. HTA research is also an important source of evidence for National Screening Committee (NSC) policy decisions.

This report

The research reported in this issue of the journal was funded by the HTA programme as project number 16/11/03. The contractual start date was in March 2017. The draft report began editorial review in November 2018 and was accepted for publication in June 2019. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HTA editors and publisher have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the draft document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health and Social Care. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health and Social Care.

© Queen's Printer and Controller of HMSO 2020. This work was produced by Melton *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health and Social Care. This issue may be freely reproduced for the purposes of private research and study and extracts (or indeed, the full report) may be included in professional journals provided that suitable acknowledgement is made and the reproduction is not associated with any form of advertising. Applications for commercial reproduction should be addressed to: NIHR Journals Library, National Institute for Health Research, Evaluation, Trials and Studies Coordinating Centre, Alpha House, University of Southampton Science Park, Southampton SO16 7NS, UK.

Published by the NIHR Journals Library (www.journalslibrary.nihr.ac.uk), produced by Prepress Projects Ltd, Perth, Scotland (www.prepress-projects.co.uk).

Editor-in-Chief of *Health Technology Assessment* and NIHR Journals Library

Professor Ken Stein Professor of Public Health, University of Exeter Medical School, UK

NIHR Journals Library Editors

Professor John Powell Chair of HTA and EME Editorial Board and Editor-in-Chief of HTA and EME journals. Consultant Clinical Adviser, National Institute for Health and Care Excellence (NICE), UK, and Senior Clinical Researcher, Nuffield Department of Primary Care Health Sciences, University of Oxford, UK

Professor Andrée Le May Chair of NIHR Journals Library Editorial Group (HS&DR, PGfAR, PHR journals) and Editor-in-Chief of HS&DR, PGfAR, PHR journals

Professor Matthias Beck Professor of Management, Cork University Business School, Department of Management and Marketing, University College Cork, Ireland

Dr Tessa Crilly Director, Crystal Blue Consulting Ltd, UK

Dr Eugenia Cronin Senior Scientific Advisor, Wessex Institute, UK

Dr Peter Davidson Consultant Advisor, Wessex Institute, University of Southampton, UK

Ms Tara Lamont Senior Scientific Adviser (Evidence Use), Wessex Institute, University of Southampton, UK

Dr Catriona McDaid Senior Research Fellow, York Trials Unit, Department of Health Sciences, University of York, UK

Professor William McGuire Professor of Child Health, Hull York Medical School, University of York, UK

Professor Geoffrey Meads Professor of Wellbeing Research, University of Winchester, UK

Professor John Norrie Chair in Medical Statistics, University of Edinburgh, UK

Professor James Raftery Professor of Health Technology Assessment, Wessex Institute, Faculty of Medicine, University of Southampton, UK

Dr Rob Riemsma Reviews Manager, Kleijnen Systematic Reviews Ltd, UK

Professor Helen Roberts Professor of Child Health Research, UCL Great Ormond Street Institute of Child Health, UK

Professor Jonathan Ross Professor of Sexual Health and HIV, University Hospital Birmingham, UK

Professor Helen Snooks Professor of Health Services Research, Institute of Life Science, College of Medicine, Swansea University, UK

Professor Ken Stein Professor of Public Health, University of Exeter Medical School, UK

Professor Jim Thornton Professor of Obstetrics and Gynaecology, Faculty of Medicine and Health Sciences, University of Nottingham, UK

Professor Martin Underwood Warwick Clinical Trials Unit, Warwick Medical School, University of Warwick, UK

Please visit the website for a list of editors: www.journalslibrary.nihr.ac.uk/about/editors

Editorial contact: journals.library@nihr.ac.uk

Abstract

Interventions for adults with a history of complex traumatic events: the INCiTE mixed-methods systematic review

Hollie Melton¹, Nick Meader¹, Holly Dale², Kath Wright¹,
Julie Jones-Diette¹, Melanie Temple³, Iram Shah³, Karina Lovell⁴,
Dean McMillan^{5,6}, Rachel Churchill¹, Corrado Barbui⁷,
Simon Gilbody^{5,6} and Peter Coventry^{1,5*}

¹Centre for Reviews and Dissemination, University of York, York, UK

²School of Health Sciences, University of Manchester, Manchester, UK

³Schoen Clinic, York, UK

⁴Division of Nursing, Midwifery and Social Work, University of Manchester, Manchester, UK

⁵Department of Health Sciences, University of York, York, UK

⁶Hull York Medical School, University of York, York, UK

⁷Department of Neurosciences, Biomedicine and Movement Sciences, University of Verona, Verona, Italy

*Corresponding author peter.coventry@york.ac.uk

Background: People with a history of complex traumatic events typically experience trauma and stressor disorders and additional mental comorbidities. It is not known if existing evidence-based treatments are effective and acceptable for this group of people.

Objective: To identify candidate psychological and non-pharmacological treatments for future research.

Design: Mixed-methods systematic review.

Participants: Adults aged ≥ 18 years with a history of complex traumatic events.

Interventions: Psychological interventions versus control or active control; pharmacological interventions versus placebo.

Main outcome measures: Post-traumatic stress disorder symptoms, common mental health problems and attrition.

Data sources: Cumulative Index to Nursing and Allied Health Literature (CINAHL) (1937 onwards); Cochrane Central Register of Controlled Trials (CENTRAL) (from inception); EMBASE (1974 to 2017 week 16); International Pharmaceutical Abstracts (1970 onwards); MEDLINE and MEDLINE Epub Ahead of Print and In-Process & Other Non-Indexed Citations (1946 to present); Published International Literature on Traumatic Stress (PILOTS) (1987 onwards); PsycINFO (1806 to April week 2 2017); and Science Citation Index (1900 onwards). Searches were conducted between April and August 2017.

Review methods: Eligible studies were singly screened and disagreements were resolved at consensus meetings. The risk of bias was assessed using the Cochrane risk-of-bias tool and a bespoke version of a quality appraisal checklist used by the National Institute for Health and Care Excellence. A meta-analysis was conducted across all populations for each intervention category and for population subgroups. Moderators of effectiveness were assessed using metaregression and a component network meta-analysis. A qualitative synthesis was undertaken to summarise the acceptability of interventions with the relevance of findings assessed by the GRADE-CERQual checklist.

Results: One hundred and four randomised controlled trials and nine non-randomised controlled trials were included. For the qualitative acceptability review, 4324 records were identified and nine studies were included. The population subgroups were veterans, childhood sexual abuse victims, war affected, refugees and domestic violence victims. Psychological interventions were superior to the control post treatment for reducing post-traumatic stress disorder symptoms (standardised mean difference -0.90, 95% confidence interval -1.14 to -0.66; number of trials = 39) and also for associated symptoms of depression, but not anxiety. Trauma-focused therapies were the most effective interventions across all populations for post-traumatic stress disorder and depression. Multicomponent and trauma-focused interventions were effective for negative self-concept. Phase-based approaches were also superior to the control for post-traumatic stress disorder and depression and showed the most benefit for managing emotional dysregulation and interpersonal problems. Only antipsychotic medication was effective for reducing post-traumatic stress disorder symptoms; medications were not effective for mental comorbidities. Eight qualitative studies were included. Interventions were more acceptable if service users could identify benefits and if they were delivered in ways that accommodated their personal and social needs.

Limitations: Assessments about long-term effectiveness of interventions were not possible. Studies that included outcomes related to comorbid psychiatric states, such as borderline personality disorder, and populations from prisons and humanitarian crises were under-represented.

Conclusions: Evidence-based psychological interventions are effective and acceptable post treatment for reducing post-traumatic stress disorder symptoms and depression and anxiety in people with complex trauma. These interventions were less effective in veterans and had less of an impact on symptoms associated with complex post-traumatic stress disorder.

Future work: Definitive trials of phase-based versus non-phase-based interventions with long-term follow-up for post-traumatic stress disorder and associated mental comorbidities.

Study registration: This study is registered as PROSPERO CRD42017055523.

Funding: This project was funded by the National Institute for Health Research (NIHR) Health Technology Assessment programme and will be published in full in *Health Technology Assessment*; Vol. 24, No. 43. See the NIHR Journals Library website for further project information.

Contents

List of tables	xiii
List of figures	xvii
List of abbreviations	xxv
Plain English summary	xxvii
Scientific summary	xxix
Chapter 1 Background	1
Trauma- and stressor-related disorders and their relevance to complex traumatic events	1
Impact and burden of complex trauma	2
Treating mental health problems in people affected by complex trauma	2
Rationale and aims of this review	3
Chapter 2 Methods of the effectiveness review and meta-analysis	5
Aims and objectives	5
Literature searches	5
Inclusion and exclusion criteria	6
<i>Population</i>	6
<i>Interventions</i>	6
<i>Comparators</i>	7
<i>Outcomes</i>	8
Study selection	8
<i>Advisory group</i>	9
Data extraction	9
Risk of bias	9
<i>Randomised controlled studies of clinical effectiveness</i>	9
<i>Non-randomised controlled intervention studies</i>	10
Data analysis	10
<i>Meta-analyses of clinical effectiveness and attrition</i>	10
<i>Subgroup analyses: categorising interventions</i>	11
Meta-regression analyses: predictors of treatment effectiveness	11
Components network meta-analyses	12
Acceptability sensitivity analyses	13
Chapter 3 Methods of the qualitative acceptability review	15
Objective	15
Literature searches	15
Study selection	15
<i>Population</i>	15
<i>Interventions</i>	15
<i>Comparators</i>	15
<i>Outcomes</i>	15
Data extraction	16
Quality assessment	16
Data analysis	16

Chapter 4 Results of the effectiveness review	17
Flow of the studies included	17
Studies included	17
<i>Characteristics of the randomised controlled trials included</i>	17
<i>Characteristics of the non-randomised controlled trials included</i>	18
Quality of the studies included	19
<i>Randomised controlled trials</i>	19
<i>Non-randomised controlled trials</i>	20
Meta-analyses of clinical effectiveness	20
<i>All populations and trauma exposure combined</i>	23
<i>Psychological interventions versus control</i>	33
<i>Pharmacological interventions versus placebo</i>	43
Meta-analysis of attrition	45
<i>Intervention categories</i>	45
<i>Trauma populations</i>	47
Meta-regression analyses: predictors of treatment effectiveness	48
<i>Model 1: predictors of treatment effectiveness by population type</i>	48
<i>Model 2: predictors of treatment effectiveness by intervention components</i>	48
<i>Model 3: treatment effectiveness by delivery method</i>	48
Components network meta-analyses	49
<i>Model selection</i>	49
<i>Findings from the intervention component network meta-analysis (model 3)</i>	50
Acceptability sensitivity analyses	51
Adverse events for pharmacological interventions	52
Non-randomised studies of clinical effectiveness	54
<i>Post-traumatic stress disorder symptoms</i>	54
<i>Depression</i>	55
<i>Anxiety</i>	56
<i>Quality of life</i>	57
<i>Sleep quality</i>	57
<i>Attrition</i>	57
Chapter 5 Results of the qualitative acceptability review	59
Studies included	59
Quality of the studies included: Critical Appraisal Skills Programme assessment	61
Narrative synthesis	61
<i>Therapeutic context</i>	61
<i>Skills strengthening</i>	62
<i>Self-efficacy and reward</i>	63
<i>Summary</i>	64
Chapter 6 Patient and public involvement and the research prioritisation exercise	65
Aims	65
Aim 1: consultation on the overall aims and design of the review	65
<i>Methods</i>	65
<i>Participants</i>	65
<i>Format and timing of focus groups</i>	66
<i>Topic guide</i>	66
<i>Results</i>	66
Aims 2 and 3: setting research priorities and disseminating findings	67
<i>Process</i>	67
<i>Results</i>	68

Chapter 7 Discussion	71
Summary of results across all populations with complex trauma for post-traumatic stress disorder	71
<i>Summary of results for psychological interventions across populations for depression and anxiety</i>	72
<i>Summary of population subgroup analyses</i>	72
<i>Summary of results of pharmacological interventions</i>	74
Heterogeneity	74
Component network meta-analysis	75
Attrition	76
Acceptability and feasibility of interventions: qualitative findings	76
Comparison with other reviews and guidance	76
Strengths and limitations	78
Conclusions and implications for research	80
Acknowledgements	83
References	85
Appendix 1 Literature search strategies for the effectiveness review	121
Appendix 2 Literature search strategies for the qualitative acceptability review	159
Appendix 3 List of studies excluded, with reasons	175
Appendix 4 Characteristics of randomised controlled trials included	185
Appendix 5 Population characteristics of included randomised controlled trials	213
Appendix 6 Characteristics of included non-randomised controlled studies	235
Appendix 7 Population characteristics of included non-randomised controlled studies	237
Appendix 8 Risk-of-bias gradings of included randomised controlled trials	241
Appendix 9 Summary tables of clinical effectiveness analyses	243
Appendix 10 Forest plots of results of effectiveness meta-analyses	267
Appendix 11 Characteristics of qualitative studies included	309

List of tables

TABLE 1 Risk-of-bias gradings for the non-randomised controlled studies included	21
TABLE 2 Predictors of effectiveness of psychological interventions by population type (univariable analyses)	48
TABLE 3 Univariable predictors of treatment effectiveness by intervention component	49
TABLE 4 Predictors of treatment effectiveness by delivery method	49
TABLE 5 Comparing the goodness of fit for different component network meta-analysis models	50
TABLE 6 Mean difference for outcomes by intervention component	51
TABLE 7 Odds ratios of attrition per population shown across all studies and across only those trials rated as being at a low risk of attrition bias	52
TABLE 8 Pharmacological intervention withdrawals and adverse events as reported	52
TABLE 9 Non-randomised trial intervention characteristics and effects on PTSD outcomes	54
TABLE 10 Non-randomised trial intervention characteristics and effects on depression outcomes	56
TABLE 11 Non-randomised trial intervention characteristics and effects on anxiety outcomes	56
TABLE 12 Odds ratios of attrition for each trial reporting data	57
TABLE 13 Risk-of-bias assessment of the qualitative studies included using the CASP tool	60
TABLE 14 Research priorities developed from research prioritisation exercise attendees and the share of the online vote	69
TABLE 15 Search strategy for CINAHL via EBSCOhost	121
TABLE 16 Search strategy for CENTRAL via The Cochrane Library	124
TABLE 17 Search strategy for EMBASE via Ovid	133
TABLE 18 Search strategy for International Pharmaceutical Abstracts via ProQuest	138
TABLE 19 Search strategy for MEDLINE via Ovid	138
TABLE 20 Search strategy for PILOTS via ProQuest	143
TABLE 21 Search strategy for PsycINFO via Ovid	150

TABLE 22 Search strategy for Science Citation Index via Web of Science	156
TABLE 23 Search strategy for CINAHL via EBSCOhost	159
TABLE 24 Search strategy for EMBASE via Ovid	162
TABLE 25 Search strategy for MEDLINE via Ovid	166
TABLE 26 Search strategy for PsycINFO via Ovid	170
TABLE 27 Studies excluded at full-text screening stage, with reasons for exclusion	175
TABLE 28 Intervention characteristics for the randomised controlled studies included comparing psychological interventions	186
TABLE 29 Intervention characteristics for randomised controlled studies included comparing pharmacological interventions	203
TABLE 30 Intervention characteristics for randomised controlled studies included comparing combined psychological and pharmacological interventions	208
TABLE 31 Population characteristics of the randomised studies of intervention effectiveness included	214
TABLE 32 Characteristics of the interventions in the non-randomised controlled studies of intervention effectiveness included	235
TABLE 33 Population characteristics of the non-randomised studies of intervention effectiveness included	238
TABLE 34 Effectiveness of psychological interventions on PTSD outcomes for all trauma populations	244
TABLE 35 Effectiveness of psychological interventions on CPTSD outcomes for all trauma populations	245
TABLE 36 Effectiveness of psychological interventions on depression outcomes for all trauma populations	247
TABLE 37 Effectiveness of psychological interventions on anxiety outcomes for all trauma populations	248
TABLE 38 Effectiveness of psychological interventions on quality-of-life outcomes for all trauma populations	249
TABLE 39 Effectiveness of psychological interventions on sleep quality outcomes for all trauma populations	250
TABLE 40 Effectiveness of psychological interventions for veteran populations	251
TABLE 41 Effectiveness of psychological interventions for war-affected populations	254

TABLE 42 Effectiveness of psychological interventions for childhood sexual abuse populations	256
TABLE 43 Effectiveness of psychological interventions for refugee populations	258
TABLE 44 Effectiveness of psychological interventions for domestic violence populations	261
TABLE 45 Effectiveness of pharmacological interventions on PTSD outcomes for veteran populations	263
TABLE 46 Effectiveness of pharmacological interventions on depression outcomes for veteran populations	263
TABLE 47 Effectiveness of pharmacological interventions on psychosis outcomes for veteran populations	264
TABLE 48 Effectiveness of pharmacological interventions on sleep quality outcomes for veteran populations	265
TABLE 49 Characteristics of the qualitative studies included	310

List of figures

FIGURE 1 The PRISMA flow diagram indicating the flow of studies through the review process	17
FIGURE 2 Proportional distribution of the risk-of-bias grades across the RCTs included per domain of bias	19
FIGURE 3 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all psychological interventions with control	24
FIGURE 4 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing phase-based psychological interventions with control	25
FIGURE 5 Meta-analysis of post-treatment SMD for emotional dysregulation, comparing all psychological interventions with control	26
FIGURE 6 Meta-analysis of post-treatment SMD for emotional dysregulation, comparing phase-based psychological interventions with control	27
FIGURE 7 Meta-analysis of post-treatment SMD for negative self-concept, comparing all psychological interventions with control (positive SMD equals improvement in symptoms)	27
FIGURE 8 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all psychological interventions with control	29
FIGURE 9 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing phase-based interventions with control	30
FIGURE 10 Meta-analysis of post-treatment effect size (ES) for anxiety symptoms, comparing all psychological interventions with control	31
FIGURE 11 Meta-analysis of post-treatment effect size (ES) for anxiety symptoms, comparing trauma-focused CBT with control	31
FIGURE 12 Meta-analysis of post-treatment effect size (ES) for quality of life, comparing all psychological interventions with control (positive ES favours intervention)	32
FIGURE 13 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing all psychological interventions with control in veteran populations	33
FIGURE 14 Meta-analysis of post-treatment SMD for total depression symptoms, comparing all psychological interventions with control in veteran populations	35
FIGURE 15 Meta-analysis of post-treatment SMD for total anxiety symptoms, comparing all psychological interventions with control in veteran populations	36

FIGURE 16 Meta-analysis of post-treatment effect size (ES) for total PTSD symptoms, comparing all psychological interventions with control in war-affected populations	37
FIGURE 17 Meta-analysis of post-treatment effect size (ES) for total depression symptoms, comparing all trauma-focused CBT interventions with control in war-affected populations	38
FIGURE 18 Meta-analysis of post-treatment effect size (ES) for total anxiety symptoms, comparing trauma-focused CBT with control in war-affected populations	38
FIGURE 19 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing all psychological interventions with control in childhood sexual abuse populations	39
FIGURE 20 Meta-analysis of post-treatment SMD for depression symptoms, comparing all psychological interventions with control in childhood sexual abuse populations	40
FIGURE 21 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing all psychological interventions with control in refugee populations	42
FIGURE 22 Meta-analysis of post-treatment SMD for depression symptoms, comparing all psychological interventions with control in refugee populations	42
FIGURE 23 Meta-analysis of ORs of attrition for trauma-focused CBT interventions compared with control	46
FIGURE 24 Network plot for all combinations of components extracted from the studies included	50
FIGURE 25 The PRISMA diagram of the flow of records through the review process	59
FIGURE 26 Risk-of-bias ratings across the domains of the Cochrane tool for all included RCTs	242
FIGURE 27 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all IPT interventions with control	267
FIGURE 28 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all trauma-focused CBT interventions with control	268
FIGURE 29 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all EMDR interventions with control	269
FIGURE 30 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all mindfulness interventions with control	269
FIGURE 31 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all non-trauma-focused CBT interventions with control	270
FIGURE 32 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all single-component trauma-focused interventions with control	270

FIGURE 33 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all multicomponent trauma-focused interventions with control	271
FIGURE 34 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all single-component non-trauma-focused interventions with control	271
FIGURE 35 Meta-analysis of post-treatment SMD for emotional dysregulation, comparing trauma-focused CBT interventions with control	272
FIGURE 36 Meta-analysis of post-treatment SMD for emotional dysregulation, comparing single-component and non-trauma-focused interventions with control	272
FIGURE 37 Meta-analysis of post-treatment SMD for negative self-concept, comparing all trauma-focused CBT interventions with control (positive SMD equals improvement in symptoms)	273
FIGURE 38 Meta-analysis of post-treatment SMD for negative self-concept, comparing all multicomponent and trauma-focused interventions with control (positive SMD equals improvement in symptoms)	273
FIGURE 39 Meta-analysis of post-treatment SMD for negative self-concept, comparing all single-component and non-trauma-focused interventions with control (positive SMD equals improvement in symptoms)	273
FIGURE 40 Meta-analysis of post-treatment SMD for interpersonal problems, comparing all psychological interventions with control	274
FIGURE 41 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all trauma-focused CBT interventions with control	274
FIGURE 42 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all EMDR interventions with control	275
FIGURE 43 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all IPT interventions with control	275
FIGURE 44 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all mindfulness interventions with control	276
FIGURE 45 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all non-trauma-focused CBT interventions with control	276
FIGURE 46 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all single-component and trauma-focused CBT interventions with control	277
FIGURE 47 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all multicomponent and trauma-focused interventions with control	277
FIGURE 48 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all single-component and non-trauma-focused interventions with control	278

FIGURE 49 Meta-analysis of post-treatment effect size (ES) for anxiety symptoms, comparing EMDR interventions with control	278
FIGURE 50 Meta-analysis of post-treatment effect size (ES) for anxiety symptoms, comparing single-component and trauma-focused interventions with control	279
FIGURE 51 Meta-analysis of post-treatment effect size (ES) for anxiety symptoms, comparing multicomponent and trauma-focused interventions with control	279
FIGURE 52 Meta-analysis of post-treatment effect size (ES) for anxiety symptoms, comparing single-component and non-trauma-focused interventions with control	280
FIGURE 53 Meta-analysis of post-treatment effect size (ES) for quality of life, comparing trauma-focused CBT interventions with control (positive ES favours intervention)	280
FIGURE 54 Meta-analysis of post-treatment effect size (ES) for sleep quality, comparing all psychological interventions with control	281
FIGURE 55 Meta-analysis of post-treatment effect size (ES) for sleep quality, comparing trauma-focused CBT interventions with control	281
FIGURE 56 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing trauma-focused CBT interventions with control in veteran populations	282
FIGURE 57 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing EMDR interventions with control in veteran populations	282
FIGURE 58 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing mindfulness interventions with control in veteran populations	283
FIGURE 59 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing single-component and trauma-focused interventions with control in veteran populations	283
FIGURE 60 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing multicomponent and trauma-focused interventions with control in veteran populations	284
FIGURE 61 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing single-component and non-trauma-focused interventions with control in veteran populations	284
FIGURE 62 Meta-analysis of post-treatment SMD for total depression symptoms, comparing trauma-focused CBT interventions with control in veteran populations	285
FIGURE 63 Meta-analysis of post-treatment SMD for total depression symptoms, comparing EMDR interventions with control in veteran populations	285
FIGURE 64 Meta-analysis of post-treatment SMD for total depression symptoms, comparing mindfulness interventions with control in veteran populations	286

FIGURE 65 Meta-analysis of post-treatment SMD for total depression symptoms, comparing single-component and trauma-focused interventions with control in veteran populations	286
FIGURE 66 Meta-analysis of post-treatment SMD for total depression symptoms, comparing multicomponent and trauma-focused interventions with control in veteran populations	287
FIGURE 67 Meta-analysis of post-treatment SMD for total depression symptoms, comparing single-component and non-trauma-focused interventions with control in veteran populations	287
FIGURE 68 Meta-analysis of post-treatment SMD for total anxiety symptoms, comparing trauma-focused CBT interventions with control in veteran populations	288
FIGURE 69 Meta-analysis of post-treatment SMD for total anxiety symptoms, comparing EMDR interventions with control in veteran populations	288
FIGURE 70 Meta-analysis of post-treatment effect size (ES) for total PTSD symptoms, comparing trauma-focused CBT interventions with control in war-affected populations	289
FIGURE 71 Meta-analysis of post-treatment effect size (ES) for total PTSD symptoms, comparing multicomponent trauma-focused interventions with control in war-affected populations	289
FIGURE 72 Meta-analysis of post-treatment SMD for depression symptoms, comparing single-component and trauma-focused interventions with control in war-affected populations	290
FIGURE 73 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing multicomponent and trauma-focused interventions with control in war-affected populations	290
FIGURE 74 Meta-analysis of post-treatment SMD for total anxiety symptoms, comparing single-component and trauma-focused interventions with control in war-affected populations	291
FIGURE 75 Meta-analysis of post-treatment effect size (ES) for total anxiety symptoms, comparing multicomponent and trauma-focused interventions with control in war-affected populations	291
FIGURE 76 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing trauma-focused CBT interventions with control in childhood sexual abuse populations	292
FIGURE 77 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing non-trauma-focused CBT interventions with control in childhood sexual abuse populations	292
FIGURE 78 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing single-component and trauma-focused interventions with control in childhood sexual abuse populations	293

FIGURE 79 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing single-component and non-trauma-focused interventions with control in childhood sexual abuse populations	293
FIGURE 80 Meta-analysis of post-treatment SMD for depression symptoms, comparing trauma-focused CBT interventions with control in childhood sexual abuse populations	294
FIGURE 81 Meta-analysis of post-treatment SMD for depression symptoms, comparing single-component and trauma-focused interventions with control in childhood sexual abuse populations	294
FIGURE 82 Meta-analysis of post-treatment SMD for depression symptoms, comparing single-component and non-trauma-focused interventions with control in childhood sexual abuse populations	295
FIGURE 83 Meta-analysis of post-treatment SMD for anxiety symptoms, comparing single-component and trauma-focused interventions with control in childhood sexual abuse populations	295
FIGURE 84 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing trauma-focused CBT interventions with control in refugee populations	296
FIGURE 85 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing EMDR interventions with control in refugee populations	296
FIGURE 86 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing single-component and trauma-focused interventions with control in refugee populations	297
FIGURE 87 Meta-analysis of post-treatment SMD for depression symptoms, comparing trauma-focused CBT interventions with control in refugee populations	297
FIGURE 88 Meta-analysis of post-treatment SMD for depression symptoms, comparing EMDR interventions with control in refugee populations	298
FIGURE 89 Meta-analysis of post-treatment SMD for depression symptoms, comparing single-component and trauma-focused interventions with control in refugee populations	298
FIGURE 90 Meta-analysis of post-treatment SMD for PTSD symptoms, comparing antidepressants with placebo	299
FIGURE 91 Meta-analysis of post-treatment SMD for PTSD symptoms, comparing SSRIs with placebo	299
FIGURE 92 Meta-analysis of post-treatment SMD for PTSD symptoms, comparing antipsychotics with placebo	300
FIGURE 93 Meta-analysis of post-treatment SMD for PTSD symptoms, comparing anticonvulsants with placebo	300

FIGURE 94 Meta-analysis of post-treatment SMD for PTSD symptoms, comparing prazosin with placebo	300
FIGURE 95 Meta-analysis of post-treatment SMD for depression symptoms, comparing antidepressants with placebo	301
FIGURE 96 Meta-analysis of post-treatment SMD for depression symptoms, comparing antipsychotics with placebo	301
FIGURE 97 Meta-analysis of post-treatment SMD for depression symptoms, comparing anticonvulsants with placebo	301
FIGURE 98 Meta-analysis of post-treatment weighted mean difference (WMD) for positive psychotic symptoms, comparing risperidone with placebo	302
FIGURE 99 Meta-analysis of post-treatment weighted mean difference (WMD) for negative psychotic symptoms, comparing risperidone with placebo	302
FIGURE 100 Meta-analysis of post-treatment weighted mean difference (WMD) for total psychotic symptoms, comparing risperidone with placebo	302
FIGURE 101 Meta-analysis of post-treatment weighted mean difference (WMD) for general psychopathology symptoms, comparing risperidone with placebo	303
FIGURE 102 Meta-analysis of OR of attrition from all psychological interventions compared with control, among a veteran population	303
FIGURE 103 Meta-analysis of OR of attrition from all psychological interventions compared with active controls, among a veteran population	304
FIGURE 104 Meta-analysis of OR of attrition from antidepressants compared with placebo, among a veteran population	304
FIGURE 105 Meta-analysis of OR of attrition from antipsychotics compared with placebo, among a veteran population	305
FIGURE 106 Meta-analysis of OR of attrition from anticonvulsants compared with placebo, among a veteran population	305
FIGURE 107 Meta-analysis of OR of attrition from all psychological interventions compared with control, among a childhood sexual abuse population	306
FIGURE 108 Meta-analysis of OR of attrition from all psychological interventions compared with control, among a refugee population	306
FIGURE 109 Meta-analysis of OR of attrition from all psychological interventions compared with control, among a domestic violence population	307
FIGURE 110 Meta-analysis of OR of attrition from all psychological interventions compared with control, among a war-affected population	307

List of abbreviations

CAPS	Clinician-Administered PTSD Scale	ISTSS	International Society for Traumatic Stress Studies
CASP	Critical Appraisal Skills Programme	MBSR	mindfulness-based stress reduction
CBT	cognitive-behavioural therapy	NA	not applicable
CENTRAL	Cochrane Central Register of Controlled Trials	NET	narrative exposure therapy
CI	confidence interval	NICE	National Institute for Health and Care Excellence
CINAHL	Cumulative Index to Nursing and Allied Health Literature	NR	did not report information
CPT	cognitive processing therapy	OR	odds ratio
CPTSD	complex post-traumatic stress disorder	PANSS	Positive and Negative Syndrome Scale
DBT	dialectical behaviour therapy	PILOTS	Published International Literature On Traumatic Stress
DESNOS	disorders of extreme stress not otherwise specified	PPI	patient and public involvement
DIC	deviance information criterion	PTSD	post-traumatic stress disorder
DSM	<i>Diagnostic and Statistical Manual of Mental Disorders</i>	RCT	randomised controlled trial
EMDR	eye movement desensitisation and reprocessing	ROBINS-I	Risk Of Bias In Non-randomized Studies – of Interventions
ICD	<i>International Classification of Diseases</i>	SE	standard error
ICD-10	<i>International Classification of Diseases, Tenth Revision</i>	SMD	standardised mean difference
INCiTE	INterventions for Complex Traumatic Events	SSRI	selective serotonin reuptake inhibitor
IPT	interpersonal psychotherapy	STAIR	Skills Training in Affect and Interpersonal Regulation
		WHO	World Health Organization

Plain English summary

Traumatic events that happen often and that are difficult to escape from, such as childhood abuse, are sometimes known as complex traumatic events. People who have a history of complex traumatic events can develop post-traumatic stress disorder and can also suffer from other mental health problems. It is not known if people who experience complex traumatic events can benefit from existing psychological treatments or medications, or if these treatments are acceptable. This review aimed to find out which treatments are most effective and acceptable for mental health problems in people with complex trauma histories, and to identify the frontrunners for future research. We searched electronic databases for evidence about treatment effectiveness and acceptability in adults with a history of complex traumatic events. We found 104 randomised controlled trials and nine non-randomised controlled trials that tested the effectiveness of psychological and/or medications, as well as nine studies that used interviews and focus groups to describe the acceptability of psychological treatments. The studies were split across different populations that included veterans, refugees, people who had experienced childhood sexual abuse and domestic violence, and civilians affected by war. We found that psychological treatments that focused on improving symptoms associated with trauma were effective for reducing post-traumatic stress disorder symptoms and depression across all populations and fewer people dropped out of these treatments, suggesting that they are acceptable. However, trauma-focused treatments were less effective among veterans than among other groups and less effective for reducing other psychological symptoms commonly experienced by people with complex trauma histories. Phased treatments that first start with helping people to feel safe before focusing on trauma symptoms might be beneficial for both post-traumatic stress disorder and additional psychological symptoms. There was little evidence that medications, other than antipsychotics, were effective for post-traumatic stress disorder symptoms. Future work should test if phased treatments are more effective than non-phased treatments over the long term.

Scientific summary

Background

There is growing evidence that, in addition to post-traumatic stress disorder symptoms, exposure to prolonged and repetitive trauma of an interpersonal nature, such as childhood sexual abuse, is associated with mental health symptoms related to problems of emotional regulation, negative self-concept and interpersonal dysfunction. To better capture the symptom profile of people exposed to prolonged and multiple forms of trauma, a separate diagnosis of complex post-traumatic stress disorder has been proposed as part of the new *International Classification of Diseases*, Eleventh Edition.

Evidence-based treatments exist for single-event post-traumatic stress disorder and these include trauma-focused psychological interventions, which are recommended as first-line therapies, and also pharmacological therapies. However, it is not known if these therapeutic approaches are effective for people with a history of complex trauma or if they are safe and acceptable among this population. People with complex mixes of comorbidities may be excluded from clinical trials and they are further disadvantaged because their health needs are not well met by health services, such as Improving Access to Psychological Therapy services.

Complex trauma is increasingly prominent and relevant to the NHS, but existing mental health services are not well equipped to appropriately manage patients with complex traumatic histories. There is a need to identify candidate psychological and pharmacological treatments for this group with a view to informing practice and prioritising future research.

Objectives

The primary research question set by the Health Technology Assessment programme was the following: how effective are interventions that treat mental health problems associated with a history of complex traumatic events? The funding brief further elaborated on this research question by stating that the global objective was to undertake a broad evidence synthesis that builds on and extends previous reviews, reflective of the patient group seen in clinical practice, and to include pharmacological as well as non-pharmacological interventions. A key objective was to identify leading candidate interventions that the Health Technology Assessment programme could fund as part of a future round of primary research.

To achieve these objectives, we specifically aimed to:

- descriptively synthesise evidence from randomised and non-randomised controlled trials of psychological and/or pharmacological interventions for mental health in people with a history of complex traumatic events
- quantitatively assess, with meta-analysis if feasible, the clinical effectiveness of interventions delivered to adults, aged ≥ 18 years, with trauma and stressor disorders after exposure to complex traumatic events
- provide evaluations of the comparative clinical effectiveness of psychological interventions and pharmacological interventions using a network meta-analysis

- identify, appraise and synthesise qualitative and quantitative data that address service user and provider perspectives about the acceptability and feasibility of using psychological and/or pharmacological interventions to treat mental health problems after complex traumatic events
- identify leading candidate interventions that could be feasibly tested and used in the NHS and make recommendations to the Health Technology Assessment programme about future research priorities.

Methods

A mixed-methods systematic review was conducted that included eligible studies to address questions about the effectiveness and acceptability of psychological and/or pharmacological interventions for mental health problems in adults, aged ≥ 18 years, with a history of complex trauma. The methods for screening and data extraction and analysis followed guidance from the Cochrane Collaboration and the Centre for Reviews and Dissemination.

The quantitative and qualitative findings were presented at a stakeholder research prioritisation day attended by the research team, as well as by practitioners with an interest and experience in complex trauma, by voluntary and third-sector providers of services to people affected by complex trauma, and by experts through experience. Research priorities were co-produced during workshops and ranked following an online voting exercise, which was facilitated by the Beyond The Room (<http://beyondtheroom.net/>).

Data sources

- Cumulative Index to Nursing and Allied Health Literature (CINAHL) via EBSCOhost (1937 onwards; search date: 20 April 2017).
- Cochrane Central Register of Controlled Trials (CENTRAL) via The Cochrane Library (from inception; search date: 21 April 2017).
- EMBASE via Ovid (1974 to 2017 week 16; search date: 19 April 2017).
- International Pharmaceutical Abstracts via ProQuest (1970 onwards; search date: 30 August 2017).
- MEDLINE Epub Ahead of Print and In-Process & Other Non-Indexed Citations, Ovid MEDLINE Daily and Ovid MEDLINE via Ovid (1946 to present; search date: 18 April 2017).
- Published International Literature On Traumatic Stress (PILOTS) via ProQuest (1987 onwards; search date: 2 May 2017).
- PsycINFO via Ovid (1806 to April week 2 2017; search date: 18 April 2017).
- Science Citation Index via Web of Science (1900 onwards; search date: 20 April 2017).

Two separate searches were run to capture eligible studies relevant to questions of effectiveness and acceptability of interventions.

Study selection

We identified the population of interest as adults, aged ≥ 18 years, exposed to deliberate and premeditated events, to a series of events that were extreme and prolonged or to events of a repetitive nature from which escape was difficult or impossible. Studies were included if they assessed treatment effectiveness and acceptability in this population. This approach approximated the definition of complex trauma used to describe complex post-traumatic stress disorder, although we did not use the newly defined *International Classification of Diseases*, Eleventh Edition, diagnostic category of complex post-traumatic stress disorder to search for eligible studies. Eligible studies for the effectiveness review needed to be randomised or non-randomised controlled trials and needed to measure post-traumatic stress disorder and/or mental health outcomes. Eligible studies for the qualitative acceptability review

needed to have used qualitative methods, such as in-depth interviews or focus groups. Studies that evaluated any first- or second-line psychological therapy that aimed to improve symptoms (including comorbidities) of trauma- and stressor-related disorders, delivered to either individuals or groups, were included. Complementary and alternative therapeutic interventions were excluded. All drug treatments subjected to experimental testing in the context of the treatment of mental health problems in people with a history of complex trauma were considered for inclusion.

Data extraction

Data were singly extracted by the review team using a prespecified data extraction Microsoft Excel® (Microsoft Corporation, Redmond, WA, USA) spreadsheet that included domains for study and participant characteristics, outcomes and attrition. The risk of bias for randomised controlled trials was assessed using the Cochrane risk-of-bias tool. The risk of bias for non-randomised controlled intervention studies was assessed using a bespoke version of a quality appraisal checklist used by the National Institute for Health and Care Excellence in public health guidance, and based on the Graphical Appraisal Tool for Epidemiological studies.

Quality assessments of the qualitative data were undertaken using the Critical Appraisal Skills Programme checklist and the validity and relevance of the data to the questions were assessed using the GRADE-CERQual checklist.

Data synthesis

For the quantitative review of effectiveness, we undertook a series of meta-analyses that pooled results across all populations for each intervention category. Mean differences and 95% confidence intervals were computed for outcomes measured using the same scale. Standardised mean differences with 95% confidence intervals were computed for outcomes measured using different scales. We also evaluated the effectiveness of interventions with a meta-analysis across population subgroups. In addition to the meta-analyses, we explored if the treatment effects of interventions were moderated by population subgroup, intervention components and delivery methods (e.g. individual or group). We further explored whether or not certain components of composite interventions were more effective than each other using a component network meta-analysis.

For the qualitative review of acceptability of interventions, we undertook a narrative synthesis of qualitative data extracted from the included studies, mapping data to themes and subthemes related to acceptability and feasibility.

Results

In the effectiveness review, 104 studies were included. Of these, 95 were randomised controlled trials and nine were non-randomised controlled trials. The population subgroups that were included were veterans, childhood sexual abuse, war affected, refugees and domestic violence.

Effectiveness of psychological interventions across all populations

The pooled results across all populations with complex trauma showed that existing evidence-based psychological interventions were effective at reducing post-traumatic stress disorder symptoms when compared with the control post treatment (standardised mean difference -0.90, 95% confidence

interval -1.14 to -0.66 ; number of trials = 39), and there was some evidence that this finding held when treatment effects were measured up to 6 months post treatment. Trauma-focused cognitive-behavioural therapy and more broadly single-component and trauma-focused interventions were more effective than the control post treatment and at follow-up. Multicomponent and trauma-focused interventions for post-traumatic stress disorder symptoms post treatment were also effective, but the treatment effects were smaller than for single-component and trauma-focused interventions.

For the symptom cluster associated with complex post-traumatic stress disorder, we found no evidence that either trauma- or non-trauma-focused psychological interventions were superior in improving emotional dysregulation or interpersonal problems. Multicomponent and single-component trauma-focused interventions showed benefits for negative self-concept. Phase-based interventions that included stabilisation work before exposure therapy had positive effects on emotional dysregulation and interpersonal problems, although the results for these outcomes were of borderline significance.

Collectively, psychological interventions were superior to the control, but not the active control, post treatment and at follow-up for managing associated symptoms of depression in all populations with complex trauma (standardised mean difference -0.94 , 95% confidence interval -1.20 to -0.68 ; number of trials = 22). The most consistent and the largest effects for depression across all time points were observed in trials that tested single-component and trauma-focused interventions. Similarly, pooled results showed that psychological interventions of any type were effective for reducing anxiety in all populations with complex trauma (standardised mean difference -0.81 , 95% confidence interval -1.18 to -0.46 ; number of trials = 13). Trauma-focused approaches, when delivered as either a single-component or a multicomponent intervention, were superior to the control for anxiety symptoms when effects were pooled across all populations.

There were insufficient data to assess the effectiveness of psychological interventions for other secondary outcomes.

Effectiveness of psychological interventions across population subgroups

Among veterans, psychological interventions were effective for reducing post-traumatic stress disorder symptoms, but the size of the treatment effect was much smaller than in analyses that pooled results across all populations (standardised mean difference -0.48 , 95% confidence interval -0.72 to 0.24 ; number of trials = 14). Trauma-focused cognitive-behavioural therapy and eye movement desensitisation and reprocessing therapy were the most efficacious treatments in this subgroup for post-traumatic stress disorder, but superior effects were observed when multicomponent and trauma-focused interventions were compared with the control. These two therapies were also effective for reducing depression and anxiety in veterans.

For people exposed to childhood sexual abuse, psychological interventions were effective for reducing post-traumatic stress disorder symptoms (standardised mean difference -0.90 , 95% confidence interval -1.43 to -0.37 ; number of trials = 9). The largest effects for reducing depression in this subgroup were observed in the meta-analysis that compared multicomponent trauma-focused interventions with the control. There was no clear indication about which treatments were effective for reducing anxiety in people with a history of childhood sexual abuse.

Among war-affected populations, psychological interventions as a whole were effective at reducing symptoms of post-traumatic stress disorder (standardised mean difference -0.46 , 95% confidence interval -0.68 to -0.25 ; number of trials = 8). Individual trauma-focused cognitive-behavioural therapy was the most effective intervention in this subgroup for post-traumatic stress disorder symptoms and for depression; there was insufficient evidence to draw firm conclusions about the effectiveness of interventions for anxiety symptoms among war-affected populations.

Large and positive effects in favour of psychological interventions for post-traumatic stress disorder symptoms were observed in refugee populations (standardised mean difference -1.84 , 95% confidence interval -2.18 to -1.49 ; number of trials = 6). Trauma-focused cognitive-behavioural therapy and eye movement desensitisation and reprocessing therapy were the most effective interventions for both post-traumatic stress disorder and depression in this subgroup; meta-analyses that assessed the effectiveness of interventions for anxiety among refugees were not possible.

Only two trials were included in the meta-analyses of psychological interventions for people exposed to domestic violence. Trauma-focused cognitive-behavioural therapy was effective for reducing post-traumatic stress disorder and depression in this subgroup.

The meta-regression showed that psychological interventions were most effective for post-traumatic stress disorder symptoms in populations exposed to domestic violence and were least effective among veterans. The component network meta-analysis showed that cognitive restructuring, imaginal exposure and relaxation were effective components of trauma-focused cognitive-behavioural therapy. Mindfulness and phase-based interventions were also effective components of composite interventions for post-traumatic stress disorder symptoms.

Effectiveness of pharmacological interventions

All but one of the six trials that compared pharmacological interventions with placebo were conducted in veterans. Overall, only antipsychotic medicine was effective in reducing post-traumatic stress disorder symptoms in veterans (standardised mean difference -0.45 , 95% confidence interval -0.85 to -0.05 ; number of trials = 5). No pharmacological intervention was effective for reducing symptoms of depression or psychosis in veterans. There was evidence from just two studies that prazosin had positive benefits for sleep quality among veterans.

Quality of evidence

The risk of bias across randomised controlled trials was difficult to ascertain for five of six domains of the Cochrane risk-of-bias tool, owing to inadequate reporting. Only a small proportion (20–30%) of randomised controlled trials were rated as being at low risk of bias for sequence generation, allocation concealment and blinding of outcome assessments, which were the primary indicators of study quality. Similarly, study quality was variable among the non-randomised controlled trials. There was a high risk of bias for outcome assessment, with only three of nine studies taking steps to blind investigators; domains related to allocation bias were poorly reported, leading to judgements that the internal validity of non-randomised trials was low or difficult to assess.

Acceptability of interventions

Eight qualitative studies were included in the acceptability synthesis. The acceptability of interventions was associated with how congruent they were with participants' therapeutic needs and social contexts, as well as the means by which they were able to provide participants with opportunities to engage in personal and interpersonal improvement and confer demonstrable improvements. The feasibility of interventions hinged on more instrumental features, such as scheduling and timing of treatment sessions.

Conclusions

Trauma-focused cognitive-behavioural therapy and other trauma-focused interventions, including eye movement desensitisation and reprocessing therapy, delivered as single-component or multicomponent approaches, are superior to the control for post-traumatic stress disorder symptoms and associated

mental disorder comorbidities. Positive effects were mainly found post treatment, with few studies showing benefit over the long term. The quality of the randomised controlled trial evidence was generally low or sufficiently unclear to be able to make fundamental recommendations about the effectiveness of interventions. We identified only a small subset of evidence from non-randomised controlled studies in which study quality was variable and internal validity was low. The sizes of the positive treatment effects were not evenly distributed across populations exposed to complex trauma, with the smallest effects observed among veterans and war-affected populations and the largest effects observed in those affected by domestic violence. Phase-based interventions, along with non-trauma-focused intervention components including mindfulness and relaxation, are potentially among the most effective approaches for post-traumatic stress disorder symptoms in people with a history of complex trauma, such as childhood sexual abuse. In addition, there is inconclusive evidence that existing trauma-focused interventions are effective in treating the symptom cluster associated with disturbances of self-organisation typically seen in complex post-traumatic stress disorder. There was little evidence of effectiveness of pharmacological interventions for post-traumatic stress disorder or for associated mental comorbidities.

Recommendations for research

Following the research prioritisation day and based on the synthesis of the effectiveness and acceptability reviews, we have identified the following priorities for future research:

- definitive and fully powered evaluations of effectiveness of interventions in complex trauma with long-term follow-up (i.e. at least 12 months), especially in veterans, people exposed to childhood sexual abuse and populations affected by humanitarian crises
- qualitative and quantitative process evaluations to assess the relationship between intervention and programme theory and anticipated outputs and trial results
- qualitative evaluations of the acceptability and feasibility of interventions among people exposed to complex interventions to inform barriers to and facilitators of treatment uptake, especially in refugees and asylum seekers
- evaluations of the lived experience of people with a history of complex trauma across population subgroups
- safety and adverse event profiles of trauma- and non-trauma-focused interventions for people with complex trauma
- a core outcome set for trials in complex trauma that includes outcomes related to disturbances of self-organisation and mental comorbidities
- the validity of the new *International Classification of Diseases*, Eleventh Edition, diagnostic category for complex post-traumatic stress disorder to identify and recruit eligible participants to experimental studies.

Study registration

This study is registered as PROSPERO CRD42017055523.

Funding

This project was funded by the National Institute for Health Research (NIHR) Health Technology Assessment programme and will be published in full in *Health Technology Assessment*; Vol. 24, No. 43. See the NIHR Journals Library website for further project information.

Chapter 1 Background

Trauma- and stressor-related disorders and their relevance to complex traumatic events

Trauma- and stressor-related disorders, also known as reactions to severe stress and adjustment disorders, are mental health problems directly related to exposure to a traumatic event or series of traumatic events. Post-traumatic stress disorder (PTSD) is among the most common mental health disorders to occur after experiencing (or witnessing) a major traumatic event. Typical symptoms include involuntary re-experiencing of the traumatic event in a vivid and distressing way (e.g. flashbacks, nightmares), avoidance of activities reminiscent of the trauma, persistent numbness, emotional blunting and detachment from other people and previously significant activities, along with hyperarousal in the presence of reminders of the trauma (including hypervigilance, difficulty sleeping, irritability, poor concentration and an exaggerated startle response). People with PTSD may also experience comorbid psychological problems including substance use disorders, depression (with increased risk of suicide) and other anxiety disorders (e.g. panic disorders), and functional somatic syndromes, which can further impair social, educational and occupational functioning.

Post-traumatic stress disorder can occur at any age and it is relatively common, with a lifetime prevalence of 7.8%;¹ 12-month prevalence ranges from 3% to 4%.² Rates vary depending on the type of stressor experienced; for example, physical assaults in women are associated with a lifetime prevalence of 29%, combat experience in men is associated with a lifetime prevalence of 39% and lifetime prevalence is 15.4% in people exposed to war and displacement.³

It is argued, however, that the PTSD symptom clusters described in the current and previous versions of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) and the *International Classification of Diseases*, Tenth Revision (ICD-10), do not adequately capture the full range of clinical symptoms exhibited by those who experience complex trauma (i.e. developmentally adverse interpersonal trauma such as prolonged domestic or community violence, childhood abuse, torture or exploitation).⁴ People who experience complex trauma especially, but not exclusively or necessarily in formative periods, are more at risk of other psychiatric disorders. Complex PTSD (CPTSD) and disorders of extreme stress not otherwise specified (DESNOS) are labels that have been used to define syndromes that involve, in addition to core PTSD symptoms, pathological disassociation, emotional dysregulation, somatisation and altered core schemas about the self, relationships and sustaining beliefs.⁵

Recent empirical work using latent class analysis in people exposed to different types of acute and chronic stress has gone some way to endorse the distinction (to be included in ICD-11)⁶ between PTSD and CPTSD, with the CPTSD class scoring highest for symptoms related to affective dysregulation, negative self-concept and interpersonal problems.^{7,8} The symptom profile of CPTSD is thus characterised by the loss of emotional, social, cognitive and psychological skills, because either the person's development has been interrupted during a formative phase or they have been seriously impaired owing to exposure to complex trauma. Beyond the prototypical case of childhood sexual abuse, complex trauma experiences have also come to embrace 'other types of catastrophic, deleterious and entrapping traumatisation occurring in childhood and/or adulthood, such as repeated domestic violence, trafficking and exploitation, and being forcibly displaced'.⁹ Compared with single-event PTSD, complex trauma is characterised by sustained or repeated instances of trauma of an interpersonal nature that are 'extremely threatening or horrific and from which escape is difficult or impossible due to physical, psychological, maturational, family/environmental, or social constraints'.¹⁰

Impact and burden of complex trauma

Mass conflict, persecution, generalised violence and human rights violations pose a critical threat to global mental health. By the end of 2014, 59.5 million people across the world were forcibly displaced (19.5 million refugees, 1.8 million asylum seekers and 38.2 million internally displaced persons) and this figure has certainly been surpassed owing to exceptional numbers fleeing conflict in the Middle East.¹¹ Asylum trends show that there has been a huge increase in applications in industrialised countries, with 80% being lodged in European countries (82% of these in EU countries); the UK saw a 5% increase in asylum applications from 2013 to 2014.¹²

Among forcibly displaced people, 30.6% are affected by PTSD; reported torture is consistently the strongest population risk factor associated with PTSD in this group.³ Depression and anxiety occur as frequently as, if not more often than, PTSD among refugees and asylum seekers, with rates as high as 40% observed among some displaced groups.¹³ Similarly, human trafficking (i.e. recruitment and movement of individuals by force, coercion or deception for exploitative purposes) is associated with high levels of physical and mental health problems.¹⁴ Worldwide, up to 2.5 million people are known to be in conditions of forced labour and are exposed to high levels of physical and sexual violence, economic restrictions and controlling behaviour.¹⁵ The risk of depression, anxiety and PTSD is significantly higher in women who have been exploited for ≥ 6 months compared with the general population,¹⁶ and higher in women trafficked for sexual exploitation than in women trafficked for labour exploitation.¹⁷

Other critical cases of complex trauma are associated with exposure to childhood sexual and physical abuse. Although under-reported (one in three cases are not reported), 1 in 20 children has been sexually abused in the UK.¹⁸ Victims of child abuse are three times more likely to experience PTSD over their lifetime. Rates of PTSD and alcohol dependence are especially high in women who have experienced childhood abuse and related interpersonal violence. In total, the cost of physical and mental health (depression and PTSD) and substance abuse to the UK is estimated to be £3.2B per year, in part owing to under- and unemployment and the high spend in the criminal justice system, as well as costs attributed to the use of mental health services.¹⁹ Stigma, discrimination and depression similarly affect victims of childhood abuse and severely impair their quality of life.

Treating mental health problems in people affected by complex trauma

Existing international guidance makes no distinction between more complex variants of PTSD and recommends the use of trauma-focused therapies for people with comorbidities and PTSD. However, many of the trials included in existing systematic reviews [on which National Institute for Health and Care Excellence (NICE) guidance is based]²⁰ were carried out in North American or Western European countries where the type and severity of trauma experienced by participants may not be comparable to settings and scenarios with a higher risk of prolonged exposure to complex interpersonal trauma. In addition, the World Health Organization (WHO) guideline excluded systematic reviews based on trials of treatment of PTSD in refugee populations.²¹ As such, it is unclear if treatments that are effective for people with single-event PTSD are equally effective for people exposed to complex traumatic events, who have significantly greater psychological comorbidity and functional impairment than the former group. Standard cognitive and behavioural therapies and exposure-based treatments for PTSD might have limited utility and might be harmful if used prematurely for people with psychological problems following complex traumatic events.²² Many people with CPTSD have high levels of disassociation and psychological comorbidities that might limit their capacity to engage in exposure-based therapies, and findings from effectiveness studies in single-event PTSD cannot be generalised to people with complex trauma.²³ Compared with brief trauma-focused treatments, phase-based approaches or sequential interventions that first focus on stabilisation (ensuring individuals' safety, resolving symptoms – including dissociative symptoms – and increasing emotional, social and psychological competencies),

followed by processing unresolved aspects of individuals' trauma, with an emphasis on consolidation of treatment gains to facilitate re-engagement with social, educational or occupational relationships, can be effective in more complex presentations of PTSD following childhood sexual abuse.²⁴

However, the quality of the evidence for the CPTSD expert consensus guidelines is mixed: two studies were not randomised controlled trials (RCTs); only three included an active control and none included head-to-head comparisons with trauma-focused therapies; three studies did not follow up with participants; and all of the evidence was drawn from populations exposed to childhood sexual abuse and no other types of complex trauma, which limits the validity and generalisability of the conclusions.²⁵ Indeed, patients with a history of complex traumatic events might benefit from existing evidence-based psychological and pharmacological treatments. Crumlish and O'Rourke identified 10 trials ($n = 528$) in a review of psychotherapy for refugees and asylum seekers.²⁶ Cognitive-behavioural therapy (CBT) and narrative exposure therapy (NET) emerged as candidate interventions for reducing core PTSD symptoms, but small sample sizes, inadequate allocation concealment and the use of different comparisons limit the conclusions. Similarly, Palic and Elklit, in a review of 25 experimental and non-experimental studies ($n = 1113$) of psychosocial treatments for PTSD among refugees, identified CBT as the most effective therapy for reducing PTSD symptoms.²⁷ Trauma-focused therapies such as CBT and NET appear to be equally efficacious across different types of trauma too, including repeated traumatisation. Powers *et al.*, in a review of 13 trials ($n = 675$), showed that there was no significant difference in effect sizes for prolonged exposure therapy across types of trauma (combat/terror, childhood sexual abuse, rape, mixed; $p = 0.14$).²⁸

More complex presentations of PTSD include psychiatric comorbidities and there is growing evidence that existing non-phase-based approaches are effective in this group. A wide-ranging review with a meta-analysis that included 148 anxiety-disordered treatment samples (47 in PTSD; combined $n = 3534$) showed that effect sizes post treatment or at follow-up were generally unrelated to psychiatric comorbidity (for comparisons with active and non-active psychological or pharmacotherapy treatments).²⁹ However, in cases of PTSD, there was a positive association between the presence of comorbidities and the treatment outcome: people with comorbidities did better. More specifically, there is emerging evidence that PTSD symptoms in patients with comorbid dissociation, depression, substance abuse and/or mild borderline personality disorder can be successfully and safely treated with existing evidence-based trauma-focused therapies, and their outcomes are comparable with those for patients without these comorbidities.³⁰ CBT is also possibly the most effective approach for PTSD symptoms when compared with multicomponent interventions that seek to first address additional social and psychological problems in refugees.³¹

In addition, consistent with NICE guidance, trauma-focused therapies that target PTSD symptoms can have a positive impact on comorbidities. A review of 93 studies with 116 comparisons showed that there was a strong correlation between effect sizes for PTSD and depression outcomes, suggesting that psychological and pharmacological therapies are equally efficacious for PTSD and depressive symptoms.³²

Rationale and aims of this review

In summary, there is expert consensus that phase-based approaches effectively treat symptoms associated with CPTSD in adults, but the evidence on which this consensus is based is methodologically weak and exclusively based on studies that recruited participants with childhood abuse; findings might not translate to other populations with complex trauma histories. These consensus guidelines also did not review evidence about the effectiveness of pharmacological interventions in CPTSD. There is accumulating evidence that trauma-focused psychological therapies can reduce PTSD symptoms in people exposed to complex traumatic events who have psychiatric comorbidities. These treatments can also reduce comorbid illness in people with PTSD and can be used safely without a stabilisation phase.

BACKGROUND

However, existing reviews of the use of trauma-focused therapies in people with complex trauma histories have focused on narrowly defined population subgroups and we still do not know how effective psychological therapies are across all populations with complex trauma. The comparative effectiveness of psychological interventions for mental health outcomes is also unknown for people with complex trauma histories in all settings. The acceptability of psychological interventions, either phased based or trauma focused, has been less well studied. There are also no comprehensive overviews of the effectiveness of pharmacological interventions in people who have been exposed to complex traumatic events. As such, a broad synthesis of evidence is needed to build on and extend the findings from previous reviews, but uncertainties and questions remain about which interventions warrant further evaluation. Furthermore, both pharmacological and psychological interventions should be included across a wide range of populations with a history of complex traumatic events.

Chapter 2 Methods of the effectiveness review and meta-analysis

Parts of this chapter are based on Coventry *et al.*³³ © 2020 Coventry *et al.* This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Aims and objectives

The aim of this review was to provide a broad synthesis of evidence about the effectiveness of psychological and/or pharmacological interventions to treat mental health problems (with or without PTSD symptoms) in people exposed to complex traumatic events. In addition, where feasible, the review aimed to identify and synthesise qualitative and quantitative evidence about the acceptability and uptake of delivering mental health interventions for people with a history of complex traumatic events. Together, these syntheses aimed to offer estimates of the clinical effectiveness and acceptability of existing and novel treatments and to describe uncertainties about the strength of this evidence to inform a broader understanding about which interventions are likely to be candidates for testing in future definitive trials.

More specifically, the objectives of this review were as follows.

- **Descriptive synthesis:** to provide an overview of existing RCTs and non-RCTs of psychological and/or pharmacological interventions for mental health problems in people with a history of complex traumatic events with specific reference to participant characteristics, intervention format and content, and the outcomes measured.
- **Clinical effectiveness:** narratively and quantitatively, with a meta-analysis if feasible, to report on the clinical effectiveness of interventions delivered to adults aged 18 years and over with trauma and stressor disorders after exposure to complex traumatic events.
- **Comparative effectiveness:** to provide evaluations of comparative clinical effectiveness of psychological interventions (e.g. phase-based vs. conventional trauma-focused therapies) and different pharmacological interventions using a network meta-analysis.
- **Acceptability and feasibility:** to identify, appraise and synthesise narratively qualitative and quantitative data that address service user and provider perspectives about the acceptability and feasibility of using psychological and/or pharmacological interventions to treat mental health problems after complex traumatic events.
- **Research priorities:** to identify candidate interventions that could feasibly be tested and used in the NHS and to make recommendations to the Health Technology Assessment programme about future research priorities.

Literature searches

Literature searches of the following databases were conducted:

- Cumulative Index to Nursing and Allied Health Literature (CINAHL) via EBSCOhost (1937 onwards; search date: 20 April 2017).
- Cochrane Central Register of Controlled Trials (CENTRAL) via The Cochrane Library (from inception; search date: 21 April 2017).
- EMBASE via Ovid (1974 to 2017 Week 16; search date: 19 April 2017).
- International Pharmaceutical Abstracts via ProQuest (1970 onwards; search date: 30 August 2017).

- MEDLINE Epub Ahead of Print and In-Process & Other Non-Indexed Citations, Ovid MEDLINE Daily and Ovid MEDLINE via Ovid (1946 to present; search date: 18 April 2017).
- Published International Literature On Traumatic Stress (PILOTS) via ProQuest (1987 onwards; search date: 2 May 2017).
- PsycINFO via Ovid (1806 to April Week 2 2017; search date: 18 April 2017).
- Science Citation Index via Web of Science (1900 onwards; search date: 20 April 2017).

The full search strategies used are available in *Appendix 1*.

Inclusion and exclusion criteria

Population

Neither DSM-IV nor ICD-10 distinguishes between PTSD and CPTSD. DSM-V does include a dissociative subtype, but it is unlikely that many studies have yet been conducted using this approach. ICD-11 criteria that will include CPTSD are not yet published and few studies will have used these criteria, making it difficult to identify studies using this diagnostic label. Our goal was therefore to identify studies based primarily on trauma history rather than diagnostic criteria.

We included adults > 18 years of age who had been exposed to complex interpersonal traumatic events, which were defined as follows:

... deliberate and premeditated event or series of events of an extreme and prolonged or repetitive nature that is experienced as extremely threatening or horrific and from which escape is difficult or impossible due to physical, psychological, maturational, family/environmental, or social constraints.

Cloitre et al.¹⁰

This included (but was not limited to) adults exposed to childhood physical and/or sexual abuse, being a victim of or witnessing domestic violence, forcibly displaced persons (refugees, asylum seekers, internally displaced persons), torture survivors, those recruited into armed conflict as a child, those who had experienced ongoing armed conflict and combat, and those who had been relocated through human trafficking.

Studies were identified primarily based on trauma history rather than diagnostic criteria, and only those with adults > 18 years of age were included. The interpersonal trauma experience may have occurred at any age, but only studies of adults were included. Inclusion in the review was not restricted based on psychiatric comorbidities, with the exception of substance misuse disorders.

If studies included a mix of participants with complex interpersonal trauma history and single-event trauma history, studies were included if > 75% of participants had experienced complex interpersonal trauma (unless the data were presented separately).

Studies examining preventative therapies or interventions in populations not yet exhibiting psychological problems following complex traumatic events were excluded.

Interventions

Psychological interventions

Studies that evaluated any first- or second-line psychological therapy aimed at improving symptoms (including comorbidities) of trauma- and stressor-related disorders delivered either to individuals or in a group were included. Complementary and alternative therapeutic interventions were excluded from

this review. As per the protocol registered with PROSPERO³⁴ and in keeping with the classification used by NICE,²⁰ the following interventions were considered:

- trauma-focused CBT that included one or more of the following types of treatment techniques: exposure, cognitive therapy, stress management
- eye movement desensitisation and reprocessing (EMDR)
- other psychological treatments used to treat trauma survivors and victims but that predominantly use non-CBT techniques: supportive therapy and non-directive counselling, psychodynamic therapies including interpersonal psychotherapy (IPT), hypnotherapy, mindfulness and compassion-focused therapies, acceptance and commitment therapies, accelerated resolution, and sensorimotor therapies.

A more detailed study categorisation was undertaken to better describe the volume of evidence (see *Subgroup analyses: categorising interventions*).

Where possible, analyses of group trauma-focused CBT and group non-trauma-focused CBT were considered, as planned. The approach used is detailed in *Meta-regression analyses: predictors of treatment effectiveness*. The volume of evidence permitted further superordinate categorisation (see *Subgroup analyses: categorising interventions*).

Pharmacological interventions

All drug treatments subjected to experimental testing in the context of the treatment of mental health problems in people with a history of complex trauma were considered for inclusion. The following categories of pharmacotherapy were considered: selective serotonin reuptake inhibitors (SSRIs), antidepressants as a whole, antipsychotics, anticonvulsants and other medications typically used in the context of managing the symptoms of trauma and stressor disorders.

Comparators

Psychological interventions

Psychological interventions were compared with the following:

- waitlist
- treatment as usual (defined as non-experimental active treatments that conform to best and/or clinical guideline recommended care and that are ordinarily made available to patients)
- no intervention
- symptom monitoring
- repeated assessment or other minimal attention control group akin to psychological placebo
- alternative psychological treatment
- pharmacological treatment.

Pharmacological interventions

Pharmacological interventions were compared with the following:

- placebo
- other medication
- no intervention
- psychological therapy.

Head-to-head comparisons

Comparisons of two or more active interventions were included. Differences in comparators were taken into account during data summary and analyses. Network meta-analyses were conducted to provide comparisons of all interventions within a connected network (including comparisons of active interventions not originally evaluated in the included trials).

Outcomes

The outcomes measured were core symptoms related to trauma- and stressor-related disorders and outcomes associated with psychological and psychiatric comorbidities even in the absence of PTSD. However, all outcomes reported within studies were extracted to gain a comprehensive overview of all commonly reported outcomes.

Primary outcomes

- Reduction in severity of traumatic stress symptoms as measured using a validated and standardised clinician-rated scale.
- Reduction in symptoms of difficulties with emotion regulation (e.g. Difficulties with Emotion Regulation Scale³⁵) and interpersonal relationship problems (e.g. Inventory of Interpersonal Problems³⁶).

Secondary outcomes

- Severity of self-reported traumatic stress symptoms using a standardised measure (e.g. Modified PTSD Symptom Scale³⁷).
- Reduction in depressive and/or anxiety symptoms measured using validated clinician-rated instruments (e.g. Hamilton Depression Rating Scale³⁸) or validated patient self-reported instruments (e.g. Hospital Anxiety and Depression Scale³⁹).
- Reduction in symptoms of panic disorder.
- Reduction in symptoms of disassociation.
- Reduction in symptoms of functional somatic syndromes.
- Reduction in substance misuse.
- Acceptability measured in terms of intervention uptake, adherence and withdrawal (dropouts).
- Adverse events and harms from trial data (e.g. worsening of traumatic stress symptoms).
- Suicidal ideation, attempts and completion.
- Functioning, disability and quality of life measured by validated clinician-rated scales (e.g. Global Assessment of Functioning) or validated self-reported scales (e.g. Short Form questionnaire-36 items).
- Study designs.
- RCTs and cluster RCTs (where relevant).

Because CPTSD and complex trauma make up an emerging and relatively new diagnostic category, we proposed to also identify and include non-randomised controlled studies so as to capture data on emerging treatments and treatments tested in more pragmatic settings that might not have been tested in the context of a RCT. Studies undertaken in any country and setting (i.e. both low and middle-income countries and high-income countries) were included. Single-group before-and-after studies, uncontrolled observational studies, single-subject designs, case studies, opinion papers, descriptive studies and editorials were excluded.

Study selection

The selection criteria and process were independently checked by an advisory group (see *Advisory group*). Three researchers (Julie Jones-Diette, Hollie Melton and Holly Dale) independently screened titles and abstracts. The EndNote library was split evenly between those involved in screening, but, to ensure the distribution was not weighted to any particular year or author groups, each reviewer screened a cross-section of the library across dates and authors. To ensure that the inclusion criteria were consistently applied, a 10% sample of records was first double screened based on the title and abstract by pairs of researchers. Consensus meetings with the rest of the research team were held at regular intervals to resolve unclear decisions at the title and abstract screening phase. Full-text records were similarly screened with consensus meetings used to resolve disagreements.

Advisory group

We convened a study advisory group that comprised the principal investigator (Peter Coventry) and co-investigator (Rachel Churchill), along with content and clinical experts in trauma studies, PTSD and CPTSD. The advisory group provided independent advice about the strategic direction and scientific and policy relevance of the research undertaken by the INCiTE (INterventions for Complex Traumatic Events) review team. The broad aim of the advisory group was to ensure that the INCiTE study met its objectives and to maximise the impact and benefit of the review to end-users. The chairperson of the advisory group shared with the INCiTE team search terms and preliminary results associated with an update of a review of treatments for PTSD. Our search was shared with the advisory group and vetted for accuracy and credibility. Following the first advisory group meeting, the INCiTE team was advised to modify the inclusion criteria to include populations with a history of complex traumatic events who also had psychosis. In addition, feedback from the clinical content experts suggested that screening decisions should include combat trauma of all kinds because of the increased likelihood that veterans who present with PTSD may have encountered other traumatic events prior to military service and that it is the experience of multiple forms of trauma resulting in symptoms associated with CPTSD.

Data extraction

Data extraction was piloted on a small sample of studies by three researchers independently. Both RCTs and non-RCTs were extracted using the same template and were managed in separate Microsoft Excel® (Microsoft Corporation, Redmond, WA, USA) spreadsheets. After consensus checking, the included records were split between three reviewers to singly extract, owing to the volume of evidence. Uncertainties were resolved by consultation between reviewers tasked with data extraction or by deferring to the wider review team. Extracted data across domains related to study and participant characteristics and outcomes were compiled in a spreadsheet. When they were presented, intention-to-treat data were extracted instead of complete cases.

If an included study was published across multiple manuscripts, we used the primary publication as the main source of information. New and follow-up data were taken from subsequent publications but the unit of allocation remained the study rather than numbers of publications.

Risk of bias

Randomised controlled studies of clinical effectiveness

Studies were evenly distributed between researchers tasked with data extraction and each study was singly assessed for risk of bias. A subset of studies was used to pilot the Cochrane risk-of-bias tool. This tool assessed each study against domains known to be associated with bias in RCTs: selection, performance, detection, attrition, reporting and other biases (which were applied based on the specific context). Each study was assessed as being at 'low', 'unclear' or 'high' risk of bias across each of these domains. Attrition bias was used as an independent variable in the sensitivity analysis; this domain was checked by a further reviewer after all of the original appraisals had been made.

Selection bias was assessed by considering random sequence generation and allocation concealment; when these were not reported with sufficient detail, they were graded as at unclear risk. Performance bias considered the blinding of participants and personnel; when this was not possible owing to intervention type (e.g. comparing a psychological intervention with a waitlist), studies were graded as high risk. Detection bias was assessed by considering the blinding of outcomes assessors. The attrition bias domain took account of incomplete outcome data and how they were managed. When attrition was unequal, in high frequency or not appropriately managed by study authors, this was graded as high risk. Reporting bias was appraised by considering the risk of selective reporting. Generally, studies without a registered protocol were graded as being an unclear risk, while studies that favoured

significant outcomes or obscured results were graded as high risk. Finally, other biases were assessed and descriptively reported if there were possible concerns not addressed by the existing domains of the tool.

Non-randomised controlled intervention studies

Non-randomised controlled intervention studies that were subject to the same piloting and agreement process as RCTs were included. Two reviewers piloted the Risk Of Bias In Non-randomized Studies – of Interventions (ROBINS-I),⁴⁰ the Newcastle–Ottawa Scale⁴¹ and the NICE quality appraisal checklist.⁴² After piloting these tools, the pragmatic decision was taken to use a modified version of the NICE quality appraisal checklist⁴² used in public health guidance. There were few non-randomised controlled studies but the resources needed to use the ROBINS-I tool would have outstripped capacity in the team and compromised the schedule allocated for extracting data from the large volume of included RCTs.

Reviewers singly appraised the quality of each included non-randomised controlled intervention study. The checklist was originally developed based on the ‘Graphical Appraisal Tool for Epidemiological studies’ (GATE) tool⁴³ and includes domains of population bias, allocation, outcomes and analyses, as well as summary judgements for internal and external validity. Ten items were not directly relevant to the included studies, so were graded as ‘not applicable’ (items 2.3, 2.5, 3.2, 3.4, 3.5, 3.6, 4.3, 4.5 and 4.6). Each study was graded ‘++’ indicating minimal risk of bias, ‘+’ indicating potential sources of bias or ‘-’ indicating significant sources of bias. The additional grade ‘NR’ was used when studies did not report information and ‘NA’ was used when an item was not applicable to the given study design.

Data analysis

Meta-analyses of clinical effectiveness and attrition

Random-effects pairwise meta-analyses were conducted using Stata[®] 15 (StataCorp LP, College Station, TX, USA). We decided to use a frequentist approach for the pairwise meta-analyses, as this remains the standard approach in the literature.

Control conditions were grouped into two categories: controls (which included a waitlist or other controls with no or minimal therapeutic input) and active controls (including attention controls or treatment as usual with non-systematic psychological intervention input).

If multiple intervention groups were included in the study, we analysed the data in the following way:

- If one of the groups did not meet criteria for our review, we did not combine across groups but used data from the group that met our review criteria.
- If studies included two intervention groups that met criteria for the same intervention classification, we combined them together. For example, if a study included a prolonged exposure group and a cognitive processing therapy group, we combined them together into one group for the trauma-focused CBT analyses.
- However, of course, if a study included a mindfulness arm and a trauma-focused CBT arm, we did not combine them but included them in their appropriate subgroups.

Most outcomes were continuous. If all studies used the same scale, we calculated mean differences and their 95% confidence interval (CI). If studies used different scales to measure a particular outcome, we calculated standardised mean differences (SMDs) and their 95% CI. In keeping with established cut-off points of effect in behavioural medicine, SMDs of 0.56 to 1.2 were categorised as large, effect sizes of 0.33 to 0.55 were categorised as moderate and effect sizes ≤ 0.32 were categorised as small. For dichotomous outcomes, such as attrition, we calculated odds ratios (ORs) and their 95% CI.

Heterogeneity assessment was based on visual inspection of forest plots and the I^2 statistic.⁴⁴ A Q-value (approximating chi-squared distribution) of $p < 0.1$ indicated statistically significant heterogeneity.

Statistical heterogeneity was explored using subgroup analyses, meta-regression and components network meta-analyses.

Subgroup analyses: categorising interventions

Given the substantial and inherent heterogeneity expected from our broad research questions, we conducted a range of subgroup analyses.

First, we conducted meta-analyses including all psychological interventions versus controls or active controls in all populations.

Second, we grouped these meta-analyses of all psychological interventions into the following populations based on descriptions in the study and through discussion with clinical experts: veterans, people who had experienced childhood sexual abuse, refugees, people who had experienced domestic violence and war-affected civilians.

Third, we grouped the data according to intervention categories commonly reported in the literature based on reporting from the original papers and discussion with clinical experts: trauma-focused CBT, EMDR therapy, non-trauma-focused CBT, mindfulness, dialectical behaviour therapy (DBT) and IPT. We assessed the effectiveness of these intervention categories in the same populations as described above: all psychological interventions, veterans, childhood sexual abuse, refugees, domestic violence and war.

Fourth, we further grouped the data into three superordinate intervention categories:

1. single-component trauma-focused interventions: any trauma-focused intervention that includes a single therapeutic approach (e.g. trauma-focused CBT, EMDR)
2. multicomponent trauma-focused interventions: any intervention that is primarily trauma-focused but also includes elements of other theoretical approaches, such as mindfulness, present-centred therapy or counselling [e.g. Skills Training in Affect and Interpersonal Regulation (STAIR)]
3. single-component non-trauma-focused interventions: any non-trauma-focused intervention including a single theoretical approach (e.g. non-trauma-focused CBT, mindfulness, IPT, present-centred therapy).

These intervention categories were then grouped according to the populations listed above (i.e. all psychological interventions, veterans, childhood sexual abuse, refugees, domestic violence and war).

Meta-regression analyses: predictors of treatment effectiveness

Mixed-effects meta-regression analyses were conducted using the 'metareg' package in Stata 15 to examine the impact of differences in population and intervention components on the effectiveness of psychological interventions (using SMD as the outcome measure) for reducing trauma outcomes in all populations (number of trials = 46). We used a frequentist approach to supplement and compare with the more complex Bayesian approach used for the components network meta-analyses.

The impact of the following populations was explored based on the same categories described above for the subgroup analyses: veterans, people who had experienced childhood sexual abuse, refugees, people who had experienced domestic violence and war-affected civilians.

Intervention components were identified on the basis of study descriptions in the published manuscripts, accessing treatment manuals where available, and in discussion with clinical experts with experience of delivering these types of interventions. The following intervention components were included, as long as they had sufficient data to be included as covariates in the meta-regression: support, psychoeducation, relaxation, cognitive restructuring, in vivo exposure, imaginal exposure, virtual reality exposure, mindfulness and phased based.

We also assessed the impact of the following methods of intervention delivery on effectiveness: individual versus group, face to face versus other and duration of intervention (< 12 weeks, 12 weeks, > 12 weeks).

Components network meta-analyses

We sought to further explore the impact of different combinations of intervention components using network meta-analyses. We used a Bayesian approach, as this allows greater flexibility in fitting more complex models and, therefore, a more thorough exploration of heterogeneity.

As with the meta-regression analyses above, we began by conducting the component network meta-analyses using SMDs that combined different trauma outcomes and all populations. However, there were difficulties with compiling the model. Given the greater complexity of the network meta-analysis models, we judged that it would be appropriate to simplify the analyses by focusing on mean differences for the Clinician-Administered PTSD Scale (CAPS; i.e. the most frequently reported trauma outcome reporting scale; number of trials = 16) in all populations for this outcome.

We fitted models using WinBUGS 1.4.3 (MRC Biostatistics Unit, Cambridge, UK) based on the components network meta-analyses approach proposed by Welton *et al.*⁴⁵ and an adaptation of the WinBUGS code reported in Freeman *et al.*⁴⁶ All models used a normal likelihood for continuous outcomes and vague priors for treatment effect and between-trial standard deviation. Convergence was assessed based on visual assessment of trace plots, the Brooks–Gelman–Rubin statistic and autocorrelation plots using three Markov chain Monte Carlo methods. All models were judged to have reached convergence after 50,000 iterations. These iterations were then discarded and all results were based on a further 50,000 iterations.

Goodness of fit to the observed data was assessed using total residual deviance and the deviance information criterion (DIC). Total residual deviance approximately equal to the number of data points was considered to indicate acceptable fit.⁴⁷ Greater than 5 points on the DIC was considered a substantial difference in goodness of fit between models.⁴⁸

We compared four models:

1. Model 1 included the intervention categories used in the pairwise meta-analyses (trauma-focused CBT, EMDR, non-trauma-focused CBT, mindfulness and IPT) compared with either control or active control.
2. Model 2 included all intervention components originally assessed in the meta-regression analyses discussed above (support, psychoeducation, relaxation, cognitive restructuring, in vivo exposure, imaginal exposure, virtual reality exposure, mindfulness and phased based). In addition to these, it was also assumed that all active treatments and attention controls included a placebo component. We also took into account the effect of the control group (waitlist vs. active control). Each component had a separate effect and assumed the total effect of the intervention was a sum of these separate effects.
3. Model 3 included all intervention components in model 2 plus all available pairs of components. Seven pairs of intervention components were reported in two or more included studies and were therefore included in the analyses: support + psychoeducation, psychoeducation + relaxation, psychoeducation + cognitive restructuring, psychoeducation + imaginal exposure, relaxation + mindfulness, relaxation + cognitive restructuring and relaxation + imaginal exposure. This model allowed for interactions between pairs of interventions above or below what would be expected from the sum of their components.
4. Model 4 included all possible combinations of intervention components.

Acceptability sensitivity analyses

For the attrition outcome, we were concerned that any differences between interventions and the control may be confounded by study design characteristics. Therefore, we conducted sensitivity analyses on attrition outcomes including only studies with a low risk of attrition bias and compared these findings with all included studies.

Chapter 3 Methods of the qualitative acceptability review

Objective

The aim of this element of the review was to identify, appraise and synthesise narratively qualitative data that addressed service user and provider perspectives about the acceptability and feasibility of using psychological and/or pharmacological interventions to treat mental health problems after complex traumatic events.

Literature searches

Literature searches of the following databases were conducted: CINAHL, EMBASE, MEDLINE and PsycINFO. The searches identified 4289 records, which were downloaded, imported into EndNote [Clarivate Analytics (formerly Thomson Reuters), Philadelphia, PA, USA] bibliographic software and de-duplicated to leave 1574 unique records. The full qualitative search strategy is available in *Appendix 2*.

Study selection

Qualitative research was defined as those studies that collected data using specific qualitative techniques such as unstructured interviews, semistructured interviews or focus groups, either as a stand-alone methodology or as a discrete part of a larger mixed-method study, and analysed qualitatively. Studies that collected data using qualitative methods but then analysed these data using quantitative methods were therefore excluded.

For qualitative evaluations, the inclusion criteria for population, intervention and comparisons were largely unchanged from those used to identify studies for the effectiveness syntheses. In addition, to ensure that we identified non-trial-based qualitative evaluations of acceptability of psychological and/or pharmacological interventions, we also included stand-alone studies not specifically linked to RCTs.

Population

As per the effectiveness review.

Interventions

As per the effectiveness review.

Comparators

As per the effectiveness review.

Outcomes

The outcomes were qualitative thematic and verbatim data related to service user and/or provider experiences of psychological and/or pharmacological interventions for mental health problems in the presence of complex trauma histories.

Data extraction

The findings and supporting quotations from the nine qualitative studies included were extracted into a standardised template designed for the purpose of the review. For each study, the key themes, as reported by the study authors, were first categorised according to whether they addressed issues related to the 'acceptability' or 'feasibility' of interventions. Themes were then further coded into three subcategories: (1) uptake and adherence, (2) service experience and (3) professional competencies/training. New thematic categories were created, where necessary, for any data that did not fit into the three main groupings.

Quality assessment

Following the lead established by the GRADE Working Group⁴⁹ and the Cochrane Qualitative and Implementation Methods Group,⁵⁰ we used the CERQual (certainty of the qualitative evidence) approach⁵¹ to assess both the methodological limitations of individual studies and the coherence of our review findings. CERQual assessment offers a framework to evaluate the certainty of evidence, addressing questions beyond the effectiveness of interventions, such as acceptability. Methodological limitations were assessed with the Critical Appraisal Skills Programme (CASP) checklist.⁵² The elements of the CASP assessment, questions 1 to 9, were assessed and scored as either 'yes', 'no' or 'cannot say'. When a question was assessed as meeting the criteria describing a suitable methodological rigour, the question was scored as 'yes'; conversely, if the methodology did not meet the expected level of methodological rigour or the information was not apparent from the methods, the study was scored as 'no' or 'cannot say', respectively. A 'yes' received a numeric score of 1.0, a 'no' scored 0 and 'cannot say' scored 0.5. Therefore, the maximum score, namely if each of the nine questions was allocated a 'yes' for methodological rigour, would be 9.0.

The coherence of the review was assessed by identifying patterns across the data that were contributed to by each of the individual included studies, for example by combining findings across multiple settings or different subgroups. The certainty of the evidence in each individual study was rated as 'no concerns', 'minimal concerns', 'moderate concerns' or 'significant concerns' by considering the CASP assessment and ranked according to the methodological limitations and coherence of each finding.

Data analysis

A narrative synthesis approach was used to summarise the research findings of the studies included. This approach allows the creation of a description and map of findings from the studies included for interpretation, but also allows the identification of both common and emergent themes (a thematic analysis) within and between studies. This methodology provides a broader perspective on solutions and recommendations that are relevant to end-users.

Chapter 4 Results of the effectiveness review

Flow of the studies included

The searches identified 16,552 records, which were downloaded, imported into EndNote bibliographic software and de-duplicated to leave 10,212 unique records. In addition, 42 records were identified from International Pharmaceutical Abstracts. A total of 10,254 titles and/or abstracts were screened.

Approximately 10% of the titles and abstracts were pilot screened to achieve consistency and agreement between researchers. Full-text records were double screened at the following stage, and 328 were excluded for the reasons summarised in *Figure 1*.

Studies included

Overall, we included 105 papers, comprising 96 reports⁵³⁻¹⁴⁷ of RCTs (95 unique trials) and nine non-randomised trials.¹⁴⁸⁻¹⁵⁶ A table of the studies excluded, with rationale for their exclusion, can be found in *Appendix 3*.

Characteristics of the randomised controlled trials included

Of the RCTs, the vast majority of trials were conducted in the USA ($n = 62^{58-60,64,66,68-76,78,79,81,82,84,85,87,89-91,93-95,97-102,104-107,109,110,112,115-117,120-133,135,137,140-142,146}$), followed by countries in Europe [Germany ($n = 4^{55,88,92,136}$), Denmark ($n = 3^{63,77,103,134}$), the Netherlands ($n = 2^{138,139}$), Croatia ($n = 1^{80}$), Kosovo ($n = 1^{143}$), Portugal ($n = 1^{83}$), Romania ($n = 1^{61}$) and Sweden ($n = 1^{119}$)], countries in the Middle East [Iran ($n = 4^{56,57,111,118}$), Iraq/Iraqi

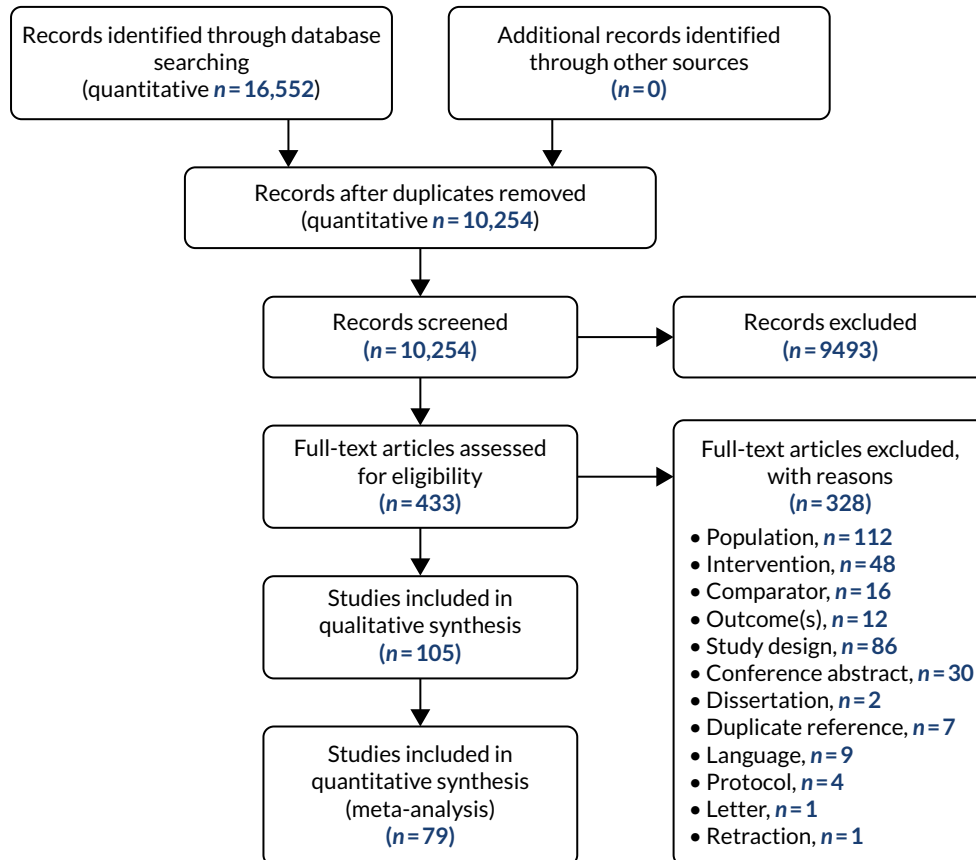


FIGURE 1 The PRISMA flow diagram indicating the flow of studies through the review process.

Kurdistan ($n = 3^{62,144}$), Turkey/Syria ($n = 3^{53,54,65}$), Egypt ($n = 1^{108}$) and Israel ($n = 1^{147}$) and countries in Africa [Uganda ($n = 2^{113,114}$), Burundi ($n = 1^{145}$) and the Democratic Republic of the Congo ($n = 1^{86}$)]. One study took place in South Korea⁶⁷ and another took place remotely in Germany⁹⁶ while its participants were located in Iraq. No studies were conducted in the UK. *Appendix 3* details the comparisons in each study, as well as their characteristics.

In terms of the types of trauma that participants were exposed to, the vast majority of participants' exposure related to their status as veterans ($n = 47$ studies^{56,58-60,64,65,67,71-74,78,80-85,88,91,94,95,97,99,102,104,105,107,110-112,115,118,120-124,126,128-130,135,137,140,142,147}), followed by refugees ($n = 17^{53-55,63,87,89,90,108,113,114,116,119,133,134,136,138,139}$), those who experienced childhood sexual abuse ($n = 14^{66,68-70,75-77,92,98,103,106,117,127,131,132,146}$), those who experienced war-related trauma ($n = 10^{57,61,62,86,96,109,143-145}$), those who experienced mixed trauma ($n = 3^{79,93,141}$) and those who experienced domestic violence ($n = 3^{100,101,125}$).

Of the 95 trials included, all trial arms with active interventions were categorised for analysis. For psychological interventions this included trauma-focused CBT ($n = 41^{55,60-63,66,71,79,81,83,84,86,87,89,90,92-94,96,100,101,105-107,109,113,114,117,119,124,126,128,136,140,143,144}$), EMDR ($n = 11^{53,54,64,74,76,88,91,130,138,139}$), mindfulness ($n = 7^{57,95,115,120,121,142}$), non-trauma-focused CBT ($n = 6^{62,78,131,132,137}$), DBT ($n = 4^{69,70}$), other psychotherapy ($n = 12^{93,103,106,114,120,124,125,128,145,146}$), exposure only ($n = 3^{60,119,130}$) and IPT ($n = 2,^{98,108} n = 2$ for each non-trauma-focused non-CBT^{64,111} and stabilisation,^{138,139} and $n = 1$ for both biofeedback¹⁰² and other psychological interventions).¹⁴² Classen *et al.*⁶⁸ conducted a trial in two interventions (trauma-focused therapy and psychotherapy) but presented combined results, so these were not included in the categorisation. The pharmacological interventions compared in the studies included were categorised as antidepressant ($n = 15,^{59,65,67,73,82,112,116,118,133,141,147}$ of which 10 were SSRIs^{65,67,82,112,116,118,133,141,147}), antipsychotic ($n = 6^{58,85,99,110,127,135}$) and anticonvulsant ($n = 2^{72,104}$), as well as prazosin ($n = 3^{84,122,123}$) and rivastigmine ($n = 1^{56}$). There were also a number of combined treatments: antidepressant and trauma-focused CBT ($n = 6,^{63,97,116,134}$ of which there were three SSRI and trauma-focused CBT interventions^{63,116,134}), SSRI and other psychotherapy ($n = 2^{63,80}$), antidepressant and other psychotherapy ($n = 1^{80}$), benzodiazepine and trauma-focused CBT ($n = 1^{129}$) and d-cycloserine and trauma-focused CBT ($n = 1^{129}$).

Psychological interventions were then grouped into superordinate classifications (as described in the methods), which were single-component trauma-focused ($n = 41^{53-55,60-62,64,74,76,79,81,83,86,87,89-91,93,94,96,106,107,109,113,114,117,119,124,126,128,136,138,139,144,145}$), single-component non-trauma-focused ($n = 27^{57,62,64,78,95,98,106,108,111,114,115,120,121,124,125,128,131,132,137-139,142,146}$), multicomponent trauma-focused ($n = 17^{60,66,69-71,84,88,92,100,101,105,130,140,143-145}$) and multicomponent non-trauma-focused ($n = 4^{70,93,103}$).

Characteristics of the non-randomised controlled trials included

A total of nine non-RCTs were included in the review; eight compared psychological interventions with a control group^{148-153,155,156} and one compared a pharmacological intervention with placebo¹⁵⁴ (see *Appendix 6*). Studies were conducted in a range of regions [Canada ($n = 2^{152,156}$), Croatia ($n = 1^{154}$), Germany ($n = 1^{149}$), Iran ($n = 1^{153}$), Israel ($n = 1^{150}$), Palestine ($n = 1^{155}$), Sweden ($n = 1^{151}$) and the USA ($n = 1^{148}$)], presenting a diverse selection of health-care systems that may differ from that in the UK. Studies were published between 1999^{152,153,156} and 2016,¹⁵⁰ with one-third being published in 1999.

The population subgroups included in the non-RCTs were veterans ($n = 3^{148,150,154}$), childhood sexual abuse ($n = 3^{151,152,156}$), war affected ($n = 2^{153,155}$) and refugees ($n = 1^{149}$). When reported, the mean age of participants ranged from 30 to 60 years old. Across studies, there was largely equal representation of majority female^{149,151,152,156} and majority male populations.^{150,154,155} Further detail about the characteristics of populations of the studies included can be found in *Appendix 7*.

The majority of studies were compared with an inactive control (no intervention, waitlist or placebo), with the exception of two direct comparison studies,^{150,154} and effect sizes were not calculated for these.

Another study included treatment as usual, which was considered to be an alternative active psychological intervention and so was narratively synthesised as a direct comparison.¹⁴⁸ Intervention details are outlined in *Appendix 4*.

Quality of the studies included

Randomised controlled trials

The quality of the RCTs included was assessed using the Cochrane Collaboration's risk-of-bias tool, as described in *Chapter 2, Randomised controlled studies of clinical effectiveness*. The grading of each study across six domains can be found in *Appendix 8*.

Overall, reporting was quite variable, with a large proportion of responses being graded as 'unclear'. Five of the six domains were largely assessed as being at an unclear or high risk of bias. This indicated that studies reported insufficient detail to make a clear decision about the risk of bias across these domains or, in most cases, that the study designs did not appropriately account for sources of bias. The exception to this was the domain of 'other bias', which was graded as a low risk of bias for over 80% of studies.

A small proportion of trials were rated as being at a high risk of selection bias. The majority of studies were unclear in reporting on selection bias (*Figure 2*). However, less than 20% were considered as at a low risk of bias based on allocation concealment and less than 50% were at a low risk based on random sequence generation.

Over half of the trials were rated as being at high risk of performance bias because the blinding of participants and personnel was inadequate or infeasible. The latter was especially true in the case of most psychological interventions, in which the nature of the allocated intervention could not easily be disguised.

Detection bias was generally considered as low risk or unclear for the majority of trials, with a slightly larger proportion being rated as unclear than low risk. This was indicative of the outcome assessment being blinded effectively or reported unclearly. Approximately 10% of studies were considered as being at high risk of detection bias.

In terms of attrition bias, gradings of low risk, high risk or unclear bias were almost equally prevalent across studies. This suggested that the majority of studies experienced high dropout and did not handle it appropriately or did not report sufficiently on the number of participants and withdrawals.

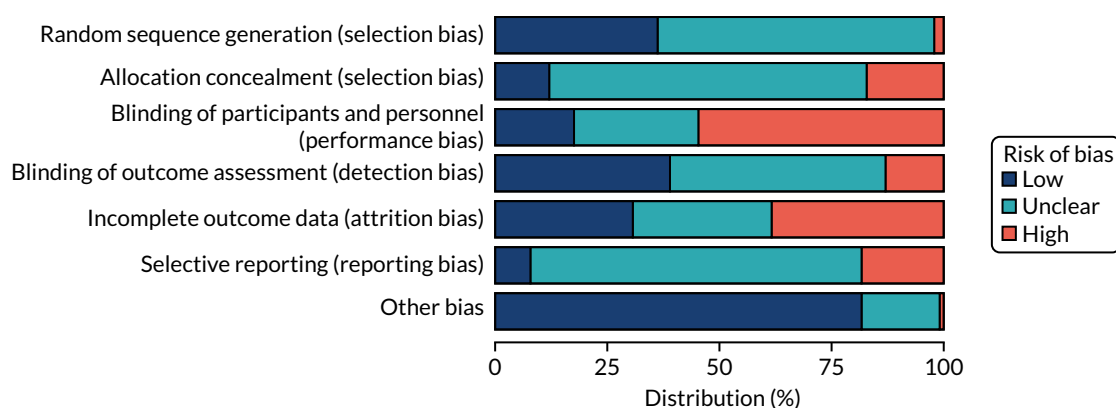


FIGURE 2 Proportional distribution of the risk-of-bias grades across the RCTs included per domain of bias.

Selective reporting was assessed via the reporting bias domain, for which a large majority of studies were graded as being unclear, typically owing to a lack of preregistration (see *Figure 2*). Close to 10% were considered as low risk in this domain of bias, and nearly 20% were considered as high risk.

Finally, there was generally a low risk of bias from other sources across the large majority of studies. The remainder of studies were graded as having an unclear risk of bias from sources not covered within the other domains. Just one study was graded as high risk from other sources of bias.¹⁰⁰

Non-randomised controlled trials

The quality of the nine non-randomised trials included was assessed using the NICE (2012)⁴² tool as described in *Chapter 2, Methods, Non-randomised controlled intervention studies*; the grading is presented in *Table 1*. Overall, methods were reported adequately to make summary judgements on studies. Notable exceptions were the availability of information to grade contamination (domain 2.6; present in only three studies^{148,152,156}) and information regarding the similarity of other interventions across study arms (domain 2.7; clearly reported in four studies^{148,149,151,156}).

Generally, population bias domains were well reported, with minimal or some potential sources of bias.

Allocation bias domains presented the largest subset of quality assessment and were also the most poorly reported. Investigator blinding (domain 2.4) was the highest risk domain, with a high risk of bias across all studies that reported sufficient detail to make a judgement.^{148,150-152,154,156}

Outcome domains were also well reported, with most studies attaining a '+' grading indicating some potential sources of bias, but not high risk.

Domains regarding analyses were mostly well reported, with baseline similarities between study arms (domain 4.1) and estimates of effect being given or calculable (domain 4.4), mostly showing low or some sources of bias.

Finally, summary grades of the overall risk of bias were mostly indicative of designs attempting to address sources of bias, with some potential risks. External validity showed minimal risk of bias; just one study was graded as high risk.¹⁵³ By contrast, internal validity was not considered low risk in any study; three trials were judged to be high risk^{150,151,156} and one did not report sufficient detail.¹⁵⁴

Meta-analyses of clinical effectiveness

Of the 104 RCTs and non-RCTs included in the systematic review, 79 included effectiveness data that could be meta-analysed.^{53-56,58,59,62,64-67,69,71-74,76,78,79,81,82,84-92,94-96,98-101,104-113,115,118,121-123,125-127,131,132,135,137-140,142-147}

All of these studies were RCTs. We conducted a series of meta-analyses to investigate the effectiveness of psychological and pharmacological interventions on the primary outcome and, when the data permitted, a number of secondary outcomes. In summary, the comparisons that were meta-analysed were:

- psychological interventions versus control for all populations combined
- psychological interventions versus control in veteran populations
- psychological interventions versus control in war-affected populations
- psychological interventions versus control in childhood sexual abuse populations
- psychological interventions versus control in refugee populations
- psychological interventions versus control in domestic violence populations
- pharmacological interventions versus placebo in veteran and childhood sexual abuse populations.

TABLE 1 Risk-of-bias gradings for the non-randomised controlled studies included

Authors (year)	Population bias			Allocation					
	1.1: Is the source population or source area well described?	1.2: Is the eligible population or area representative of the source population or area?	1.3: Do the selected participants or areas represent the eligible population or area?	2.1: Allocation to intervention (or comparison). How was selection bias minimised?	2.2: Were interventions (and comparisons) well described and appropriate?	2.4: Were participants or investigators blind to exposure and comparison?	2.6: Was contamination acceptably low?	2.7: Were other interventions similar in both groups?	2.8: Were all participants accounted for at study conclusion?
King <i>et al.</i> (2013) ¹⁴⁸	++	++	+	+	++	-	++	++	++
Levi <i>et al.</i> (2016) ¹⁵⁰	++	++	+	-	++	-	NR	NR	+
Morgan and Cummings (1999) ¹⁵²	+	+	+	+		-	++	NR	++
Saxe and Johnson (1999) ¹⁵⁶	+	+	++	+	+	-	++	-	+
Pivac <i>et al.</i> (2004) ¹⁵⁴	+	+	NR	NR	+	-	NR	NR	NR
Lundqvist <i>et al.</i> (2006) ¹⁵¹	+	+	+	-	-	-	NR	-	+
Salo <i>et al.</i> (2008) ¹⁵⁵	++	+	++	-	+	NR	NR	NR	-
Narimani <i>et al.</i> (2008) ¹⁵³	-	+	++	+	++	NR	NR	NR	-
Kruse <i>et al.</i> (2009) ¹⁴⁹	++	+	++	+	++	NR	NR	+	-

continued

TABLE 1 Risk-of-bias gradings for the non-randomised controlled studies included (continued)

Authors (year)	Allocation	Outcomes		Analyses			Summary	
	2.10: Did the intervention or control comparison reflect usual UK practice?	3.1: Were outcome measures reliable?	3.3: Were all important outcomes assessed?	4.1: Were exposure and comparison groups similar at baseline? If not, were these adjusted?	4.2: Was intention-to-treat analysis conducted?	4.4: Were the estimates of effect size given or calculable?	5.1: Are the study results internally valid (i.e. unbiased)?	5.2: Are the findings generalisable to the source population (i.e. externally valid)?
King <i>et al.</i> (2013) ¹⁴⁸	NA	+	+	++	+	++	+	+
Levi <i>et al.</i> (2016) ¹⁵⁰	NA	+	+	++	+	++	-	+
Morgan and Cummings (1999) ¹⁵²	NA	+	-	+	+	+	+	+
Saxe and Johnson (1999) ¹⁵⁶	NA	+	-	++	-	++	-	+
Pivac <i>et al.</i> (2004) ¹⁵⁴	NA	+	+	+	NR	-	NR	+
Lundqvist <i>et al.</i> (2006) ¹⁵¹	NA	+	-	+	-	+	-	+
Salo <i>et al.</i> (2008) ¹⁵⁵	++	++	++	-	-	++	+	++
Narimani <i>et al.</i> (2008) ¹⁵³	++	+	+	NR	NR	-	+	-
Kruse <i>et al.</i> (2009) ¹⁴⁹	++	++	+	++	-	++	+	++

When the data permitted, the following outcomes were meta-analysed:

- PTSD symptoms
- CPTSD symptoms
 - emotional dysregulation
 - interpersonal problems
 - negative self-concept
- depression symptoms
- anxiety symptoms
- quality of life
- sleep quality.

All populations and trauma exposure combined

Post-traumatic stress disorder total symptoms

A summary of meta-analyses of the effectiveness of psychological interventions across all populations for PTSD symptoms is shown in *Appendix 9, Table 34*. Overall, when all eligible trials were combined (39 trials, $n = 2506$)^{53-55,62,66,69,74,76,78,81,86,88,89,91,92,94-96,98,100,101,106-109,121,126,131,132,140,142-146,157-159} across all populations, psychological interventions were associated with a large and significant post-treatment effect in favour of a reduction in PTSD total symptoms (*Figure 3*).

Of the six trials ($n = 259$)^{71,84,87,113,137-139,160} that compared psychological interventions with an active control, the post-treatment effect size was smaller and in favour of a reduction in total PTSD symptoms, but not significantly (SMD -0.35 , 95% CI -0.72 to 0.03 ; $I^2 = 47.0\%$). Ten trials ($n = 738$)^{78,81,92,95,98,121,132} measured outcomes after < 6 months and showed that psychological interventions were associated with a medium and significant effect in favour of a reduction in PTSD total symptoms (SMD -0.38 , 95% CI -0.68 to -0.08 ; $I^2 = 79.4\%$).

When treatment effects were meta-analysed by intervention type, we showed that IPT was associated with the largest post-treatment effect on total PTSD symptoms (SMD -1.41 , 95% CI -1.97 to -0.85 ; $I^2 = 0\%$). This result is based on two small studies ($n = 66$)^{98,108} and associated with a high degree of uncertainty, as indicated by the wide CIs for the individual and combined point estimates (see *Appendix 10, Figure 27*).

There was strong evidence from 21 trials ($n = 1283$)^{55,62,66,81,86,92,94-96,100,101,106,107,109,126,140,143,144,158,159} that trauma-focused CBT is effective for reducing PTSD total symptoms (see *Appendix 10, Figure 28*). Four trials ($n = 206$)^{81,87,92,113} that tested trauma-focused CBT measured outcomes at follow-up after < 6 months and were associated with a large and significant treatment effect (SMD -0.64 , 95% CI -1.10 to -0.18 ; $I^2 = 44.9\%$). However, we did not find evidence of the effectiveness of trauma-focused CBT versus active controls.

Evidence from seven trials ($n = 244$)^{53,54,74,76,88,91,157} showed that EMDR was similarly effective at reducing PTSD symptoms post treatment (see *Appendix 10, Figure 29*). Two trials ($n = 71$)^{138,139} compared EMDR with an active control. Post-treatment effects were in favour of a small reduction in PTSD total symptoms, but this result was non-significant (SMD -0.15 , 95% CI -0.62 to 0.32 ; $I^2 = 0\%$).

Mindfulness (three trials, $n = 183$)^{95,121,142} was associated with a small non-significant effect in favour of symptom reduction when compared with control post treatment (see *Appendix 10, Figure 30*). In two trials^{95,121} that measured outcomes at follow-up after < 6 months, mindfulness was not effective for PTSD symptoms (SMD -0.08 , 95% CI -1.56 to -0.32 ; $I^2 = 59\%$).

RESULTS OF THE EFFECTIVENESS REVIEW

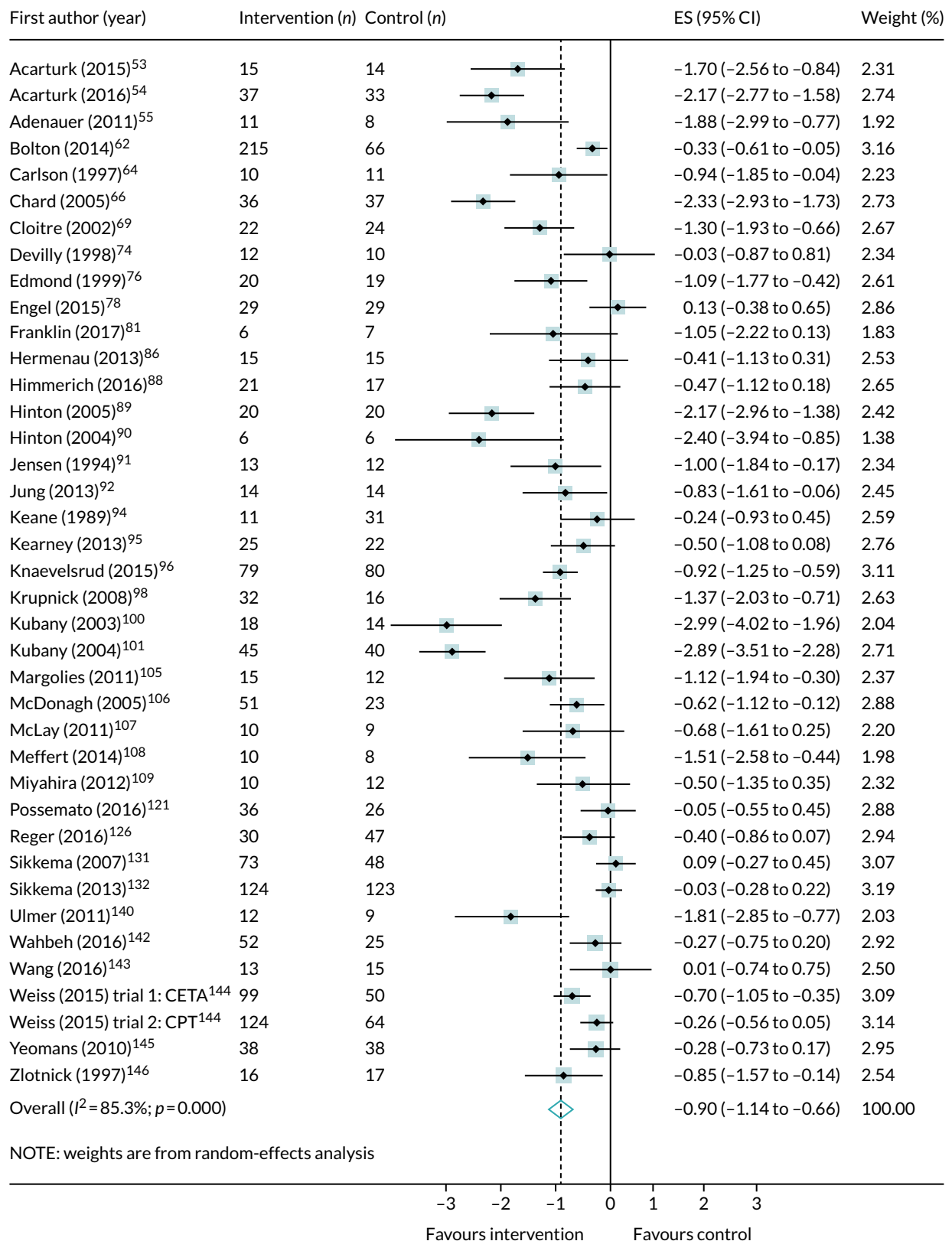


FIGURE 3 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all psychological interventions with control. CETA, common elements treatment approach; CPT, cognitive processing therapy.

Non-trauma-focused CBT (three trials, $n = 548$)^{62,78,131,132} was associated with small non-significant effects in favour of symptom reduction when compared with control post treatment (see Appendix 10, Figure 31). Treatment effects were also non-significant for non-trauma-focused CBT for PTSD outcomes in two trials^{78,132} that measured outcomes after < 6 months (SMD -0.02 , 95% CI -0.25 to 0.20 ; $I^2 = 0\%$).

When interventions from 22 trials ($n = 1191$)^{53-55,62,66,74,76,81,86,89,91,92,94,96,100,101,106,107,109,126,144,157,158} were grouped using composite intervention categories, we showed that single-component and trauma-focused interventions based on a single theoretical approach were associated with a large and significant treatment effect in favour of a reduction in PTSD symptoms (see Appendix 10, Figure 32). A large effect was also observed in a meta-analysis of five trials ($n = 276$)^{54,78,81,95,98,132} that measured outcomes at follow-up after < 6 months (SMD -0.94 , 95% CI -1.56 to -0.32 ; $I^2 = 77.6\%$).

Seven trials ($n = 440$)^{69,88,140,143-145,159} delivered multicomponent and trauma-focused interventions (DBT, EMDR, trauma-focused CBT and other psychotherapeutic approaches) and were associated with a large and significant effect in favour of a reduction in PTSD symptoms (see Appendix 10, Figure 32).

There was evidence (11 trials, $n = 936$)^{62,78,95,98,106,108,121,131,132,142,146} that single-component non-trauma-focused interventions (CBT, mindfulness, counselling, IPT and other psychotherapeutic approaches) were associated with a significant and moderate treatment effect in favour of a reduction in PTSD symptoms post treatment (see Appendix 10, Figure 34). In five trials ($n = 462$)^{78,95,98,121,132} that measured outcomes after < 6 months, the treatment effect for single-component non-trauma-focused interventions was small and non-significant (SMD -0.05 , 95% CI -0.23 to 0.14 ; $I^2 = 0\%$). When compared with an active control (two trials, $n = 62$),^{137,160} single-component non-trauma-focused interventions were associated with a non-significant large treatment effect in favour of a reduction in PTSD symptoms (SMD -0.64 , 95% CI -1.82 to 0.53 ; $I^2 = 76.9\%$).

Figure 4 shows the results of a meta-analysis that compared phase-based psychological interventions with control. Only six studies ($n = 190$)^{69,88,98,107,108,140} were coded as phased based for PTSD outcomes. The results show that a variety of trauma- and non-trauma-focused interventions (DBT, EMDR, IPT and trauma-focused CBT) are associated with a large and significant improvement in PTSD symptoms when delivered as part of a phase-based approach with a stabilisation component.

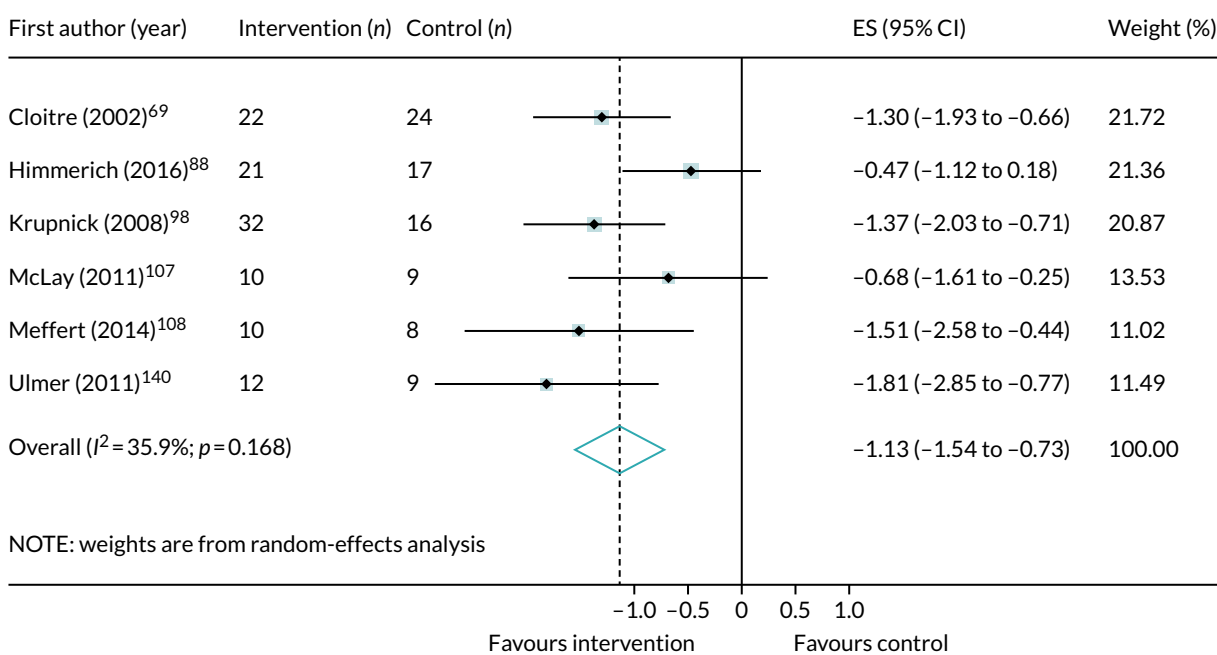


FIGURE 4 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing phase-based psychological interventions with control.

Complex post-traumatic stress disorder symptoms

A summary of meta-analyses of the clinical effectiveness of psychological interventions across all populations for CPTSD symptoms is shown in *Appendix 9, Table 35*.

Emotional dysregulation

Seven studies ($n = 289$)^{69,79,86,98,106,108,142} included data about symptoms of emotional dysregulation that could be meta-analysed across populations and trauma exposure. *Figure 5* shows the results of a meta-analysis that compared all psychological interventions with control as regards a reduction in symptoms of emotional dysregulation at the end of treatment. The results favoured the interventions but did not reach statistical significance.

Of these seven trials, three compared trauma-focused CBT with control.^{79,86,106} At the end of treatment, trauma-focused CBT was associated with a small effect in favour of a reduction in symptoms of emotional dysregulation, but this result did not reach statistical significance (see *Appendix 10, Figure 35*). Two small studies ($n = 51$)⁷⁹ that compared trauma-focused CBT with control measured outcomes after < 6 months and were associated with a medium but non-significant treatment effect (SMD -0.42 , 95% CI -1.53 to 0.69 ; $I^2 = 72.3\%$).

Four studies ($n = 163$)^{98,106,108,142} compared single-component and non-trauma-focused interventions with control. At the end of treatment, the meta-analysis showed that single-component and non-trauma interventions were not significantly associated with a reduction in symptoms of emotional dysregulation (see *Appendix 10, Figure 36*).

The largest treatment effect for emotional dysregulation was associated with three studies ($n = 112$)^{69,98,108} that tested interventions that can be characterised as phased based. However, while the large treatment effect favoured a reduction in symptoms of emotional dysregulation, it was statistically non-significant (*Figure 6*).

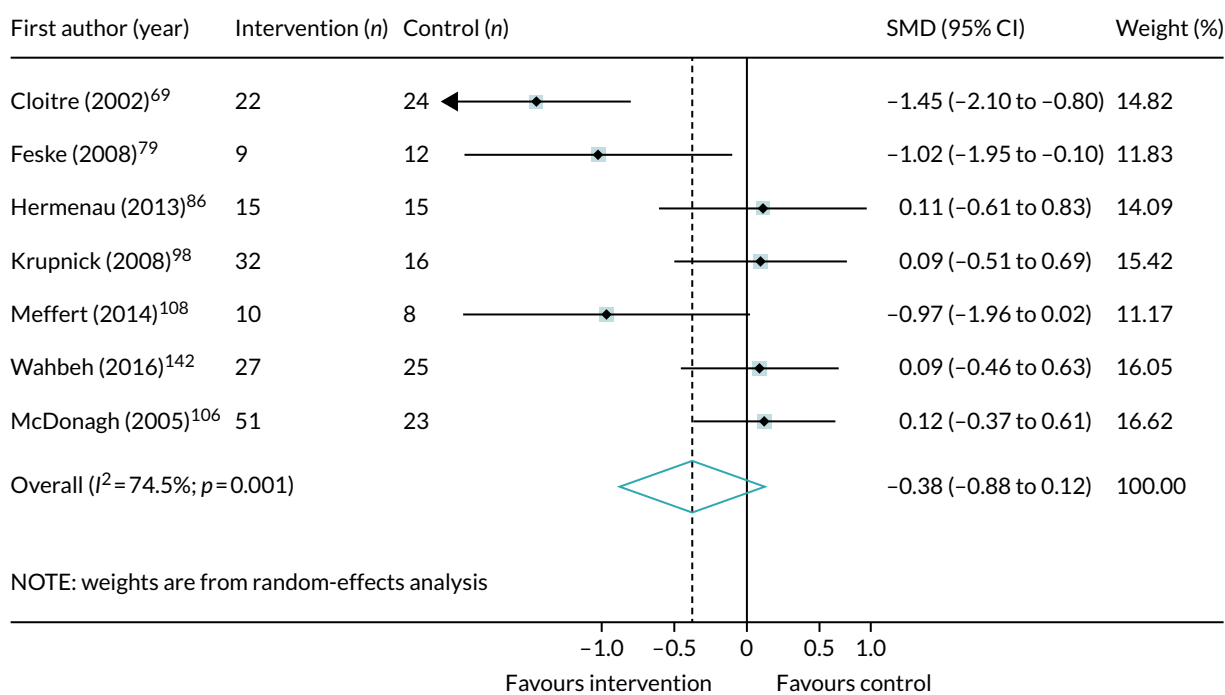


FIGURE 5 Meta-analysis of post-treatment SMD for emotional dysregulation, comparing all psychological interventions with control.

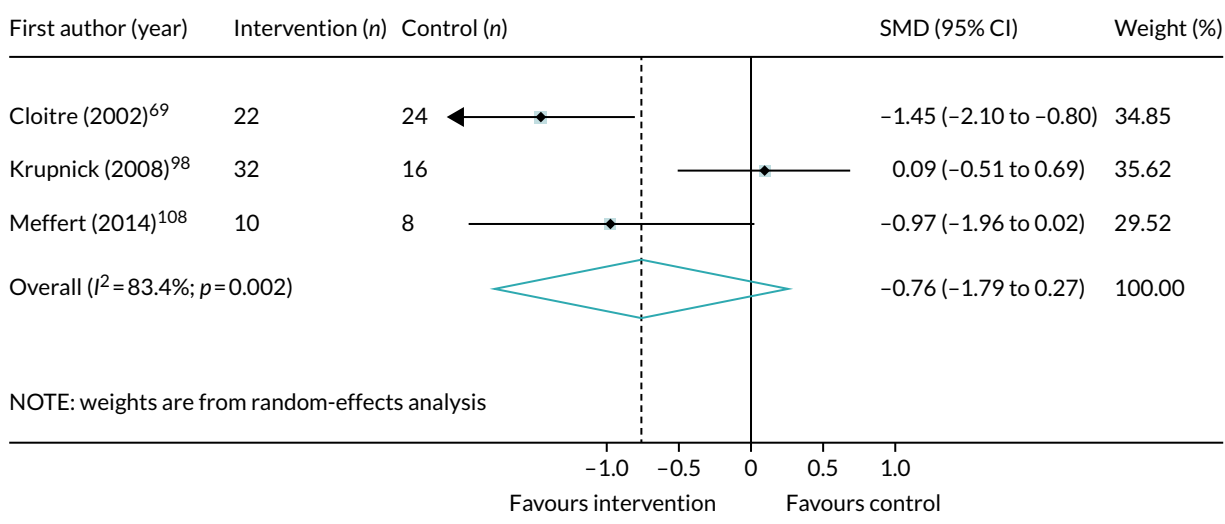


FIGURE 6 Meta-analysis of post-treatment SMD for emotional dysregulation, comparing phase-based psychological interventions with control.

Negative self-concept

Five studies ($n = 215$)^{92,100,101,125,142} included data about symptoms of negative self-concept that could be meta-analysed. Figure 7 shows the results of a meta-analysis that compared all psychological interventions with control as regards a reduction in symptoms of negative self-concept at the end of treatment. When combined, psychological interventions were associated with a large treatment effect in favour of a reduction in symptoms of negative self-concept, albeit with a high degree of uncertainty and heterogeneity.

Figure 37 (see Appendix 10) shows that, when only the trauma-focused CBT studies were meta-analysed (three trials, $n = 145$),^{92,100,101} the effect size was very large and significant but with high degree of uncertainty about the combined point estimate and high levels of heterogeneity (SMD 2.22, 95% CI 0.75 to 3.70; $I^2 = 90.4\%$).

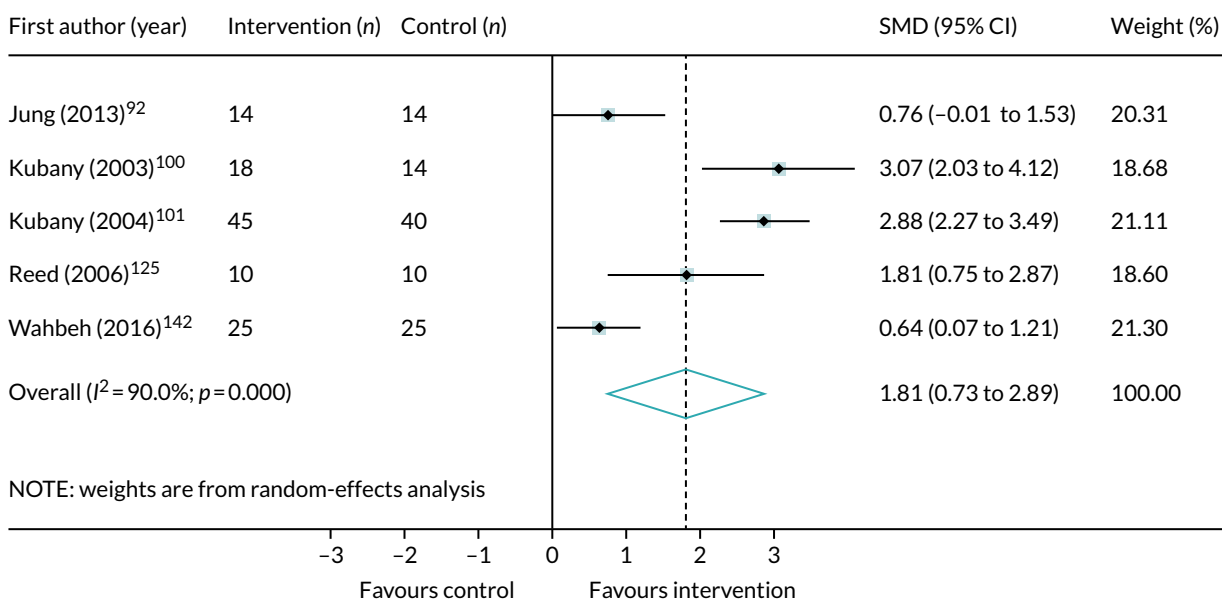


FIGURE 7 Meta-analysis of post-treatment SMD for negative self-concept, comparing all psychological interventions with control (positive SMD equals improvement in symptoms).

A more homogeneous and significantly large treatment effect was associated with the two studies ($n = 117$)^{100,101} that were characterised as comparing multicomponent and trauma-focused interventions with control (SMD 2.93, 95% CI 2.40 to 3.45; $I^2 = 0\%$; see *Appendix 10, Figure 38*).

Single-component non-trauma-focused interventions (two studies; $n = 70$)^{125,142} were also associated with large and significant effects in favour of improvement in negative self-concept, but the overall point estimate had a high degree of uncertainty (SMD 1.14, 95% CI 0.01 to 2.27; $I^2 = 72.6\%$; see *Appendix 10, Figure 39*).

Interpersonal problems

Only two studies ($n = 94$),^{69,98} both testing phase-based interventions, were identified that included outcome data for interpersonal problems that could be meta-analysed. The overall treatment effect was large and in favour of a reduction in symptoms associated with interpersonal problems, but did not reach significance (SMD -0.59, 95% CI -1.28 to 0.11; $I^2 = 61.9\%$; see *Appendix 10, Figure 40*).

Depression symptoms

A summary of meta-analyses of the clinical effectiveness of psychological interventions across all populations for depression symptoms is shown in *Appendix 9, Table 36. Figure 8* shows the results of the meta-analysis of the 31 studies ($n = 1866$)^{53-55,62,69,74,76,81,92,95,96,98,100,101,106,108,109,111,121,125,137,140,142,144,157-159} that compared all psychological interventions with control post treatment for depression symptoms. The results show that interventions were associated with a large effect in favour of a reduction in depression symptoms. When all psychological interventions were compared with control at follow-up after < 6 months, there was a medium and still significant effect in favour of a reduction in depression symptoms (SMD -0.51, 95% CI -0.80 to -0.22; $I^2 = 48\%$; nine trials, $n = 410$).^{54,78,81,87,92,95,98,111,121}

When interventions were meta-analysed by type, studies that tested trauma-focused CBT were the most numerous. Fifteen studies ($n = 1115$)^{62,81,92,96,100,101,106,109,126,140,143,144,159} compared trauma-focused CBT with control post treatment. *Figure 41* (see *Appendix 10*) shows that trauma-focused CBT was associated with a large and significant effect in favour of a reduction in depression symptoms. There was also a positive effect in the three studies ($n = 104$)^{81,87,92} that compared post-treatment outcomes at follow-up after < 6 months, although the point estimate was associated with considerable uncertainty (SMD -0.72, 95% CI -1.43 to -0.01; $I^2 = 56.6\%$).

Large and significant treatment effects in favour of a reduction of depression symptoms were also similarly observed in a meta-analysis (five trials, $n = 182$)^{53,54,74,76,157} that compared EMDR with control post treatment (see *Appendix 10, Figure 42*). In the two studies ($n = 72$)^{138,139} that compared EMDR with an active control, at the end of treatment the effect on depression symptoms favoured the intervention, but did not reach significance (SMD -0.32, 95% CI -1.23 to 0.59; $I^2 = 47.8\%$).

There was also some evidence from two small studies ($n = 66$)^{98,108} that IPT compared with control was effective at reducing symptoms of depression (see *Appendix 10, Figure 43*).

Three studies ($n = 186$),^{95,121,142} all of which included veteran populations, compared mindfulness with control post treatment. Mindfulness interventions were associated with a medium effect size in favour of a reduction in depression symptoms (see *Appendix 10, Figure 44*). In the two studies^{95,121} that measured outcomes at follow-up after < 6 months, mindfulness was also associated with a medium and significant treatment effect (SMD -0.41, 95% CI -0.79 to -0.02; $I^2 = 0\%$).

Non-trauma-focused interventions^{78,137} were not effective in reducing depression symptoms (see *Appendix 10, Figure 45*).

Using composite intervention categories, we showed that single-component and trauma-focused interventions (17 studies; $n = 1034$)^{53-55,62,74,76,81,92,96,100,101,106,109,126,144,157,158} based on a single theoretical

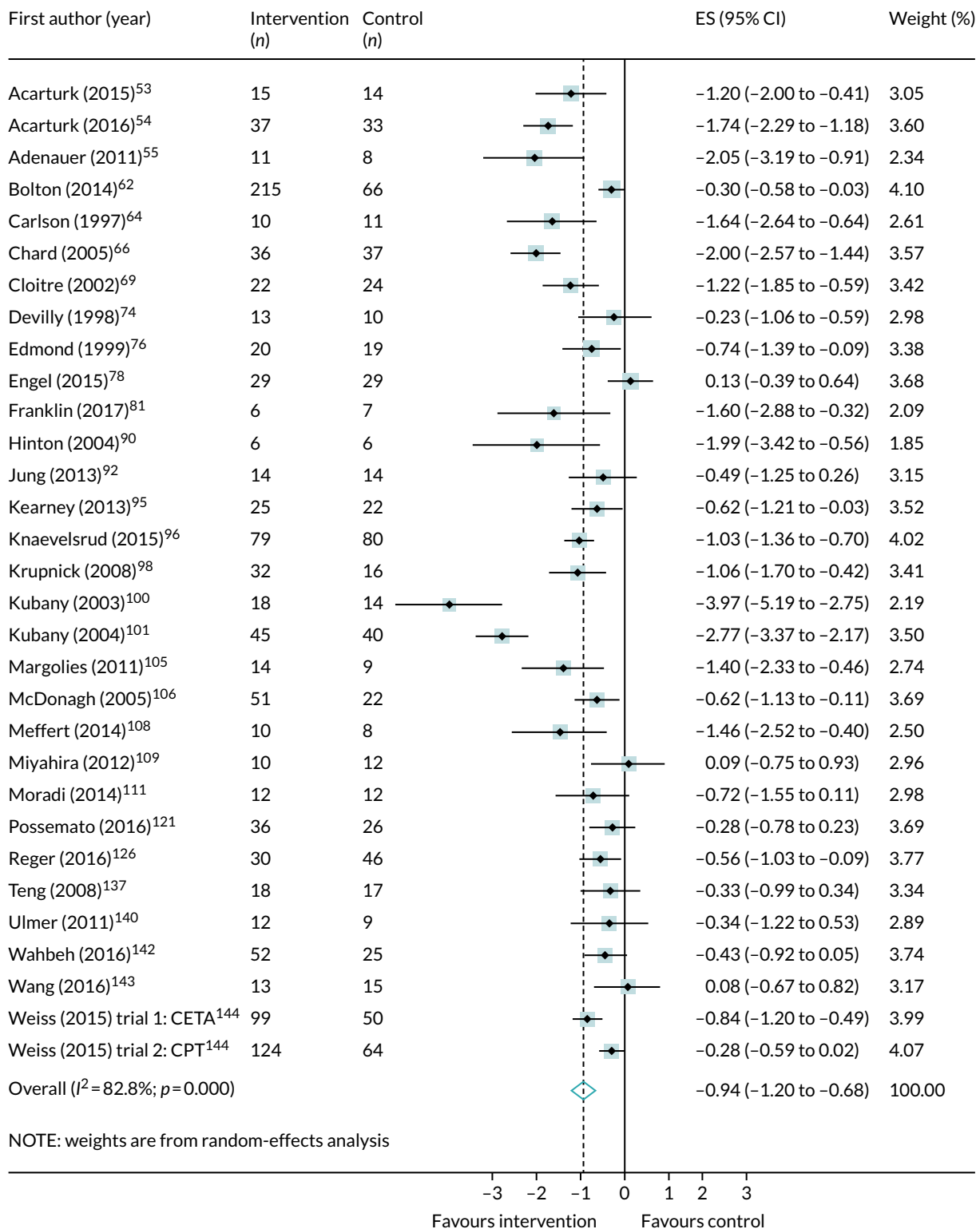


FIGURE 8 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all psychological interventions with control. CETA, common elements treatment approach; CPT, cognitive treatment therapy.

approach were associated with a large and significant treatment effect in favour of a reduction in depression symptoms (see Appendix 10, Figure 46). A large and significant effect was also observed in the four studies ($n = 174$)^{53,81,87,92} that compared outcomes at follow-up after < 6 months (SMD -0.85, 95% -1.42 to -0.29; $I^2 = 62.5\%$).

Six studies ($n = 340$)^{69,140,143,144,159} compared multicomponent and trauma-focused interventions with control and were associated with a similarly large and significant effect in favour of a reduction in depression symptoms (see *Appendix 10, Figure 47*).

A smaller but still significant and favourable treatment effect was observed in the 10 studies ($n = 594$)^{62,78,95,98,106,108,111,121,137,142} that compared single-component and non-trauma-focused interventions with control post treatment (see *Appendix 10, Figure 48*). There was a small and non-significant effect in the five studies ($n = 236$)^{78,95,98,111,121} that measured outcomes at follow-up after < 6 months (SMD -0.30 , 95% -0.56 to 0.04 ; $I^2 = 0\%$).

Figure 9 shows that, post treatment, compared with control, phase-based interventions were associated with a large and significant treatment effect in favour of a reduction in depression symptoms, although this result is based on just four small studies.^{69,98,108,140}

Anxiety symptoms

A summary of meta-analyses of the clinical effectiveness of psychological interventions across all populations for anxiety symptoms is shown in *Appendix 9, Table 37*. *Figure 10* shows the result of a meta-analysis of 13 studies ($n = 1136$)^{62,69,74,76,81,91,96,126,143,144,157} that compared all psychological interventions with control post treatment. Interventions were associated with a large and significant treatment effect in favour of a reduction in anxiety symptoms.

The majority of the studies (eight studies; $n = 7$)^{62,81,96,106,126,143,144} that included data about anxiety symptoms tested trauma-focused CBT. When compared with control post treatment, meta-analysis showed that trauma-focused CBT was associated with a large and significant effect in favour of a reduction in anxiety symptoms (*Figure 11*).

The largest effects in favour of a reduction in anxiety symptoms were observed in a meta-analysis of four studies ($n = 102$)^{74,76,91,157} that compared EMDR with control post treatment (see *Appendix 10, Figure 49*).

There were no data that could be meta-analysed that compared mindfulness or non-trauma-focused CBT with either control or an active control.

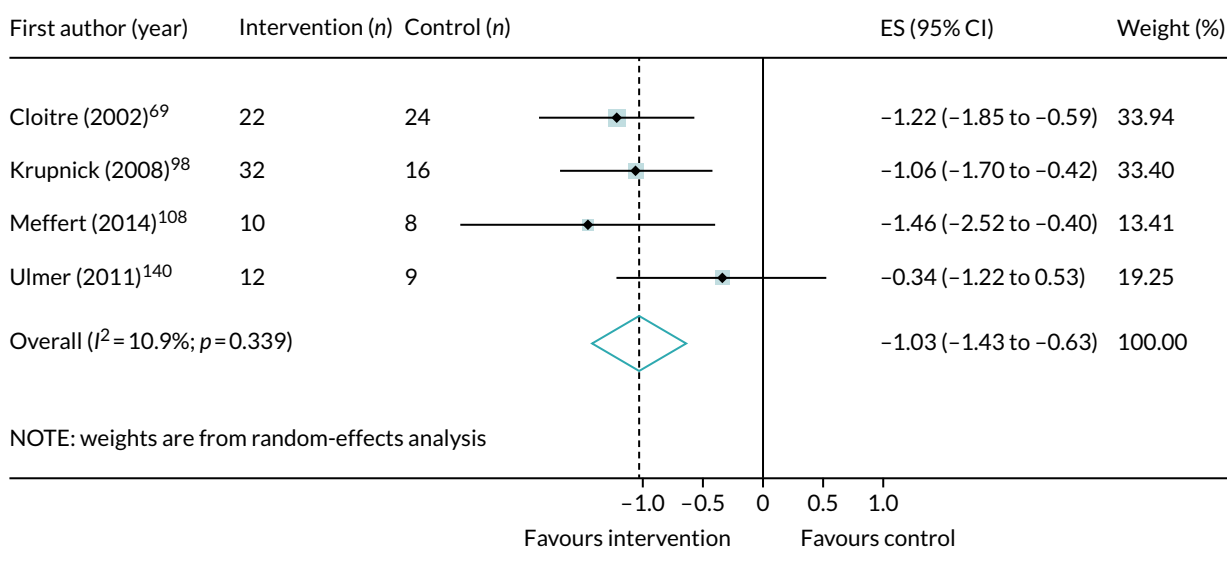


FIGURE 9 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing phase-based interventions with control.

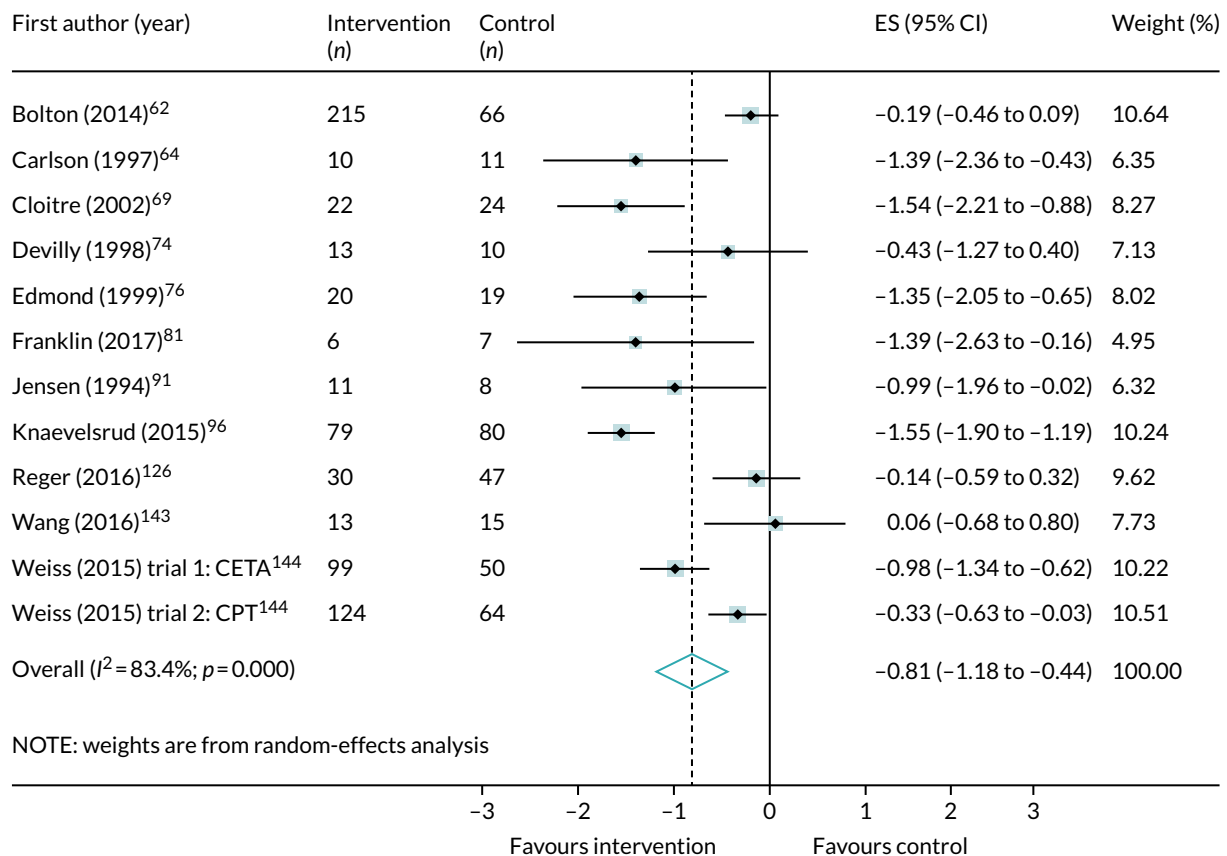


FIGURE 10 Meta-analysis of post-treatment effect size (ES) for anxiety symptoms, comparing all psychological interventions with control. CETA, common elements treatment approach; CPT, cognitive treatment therapy.

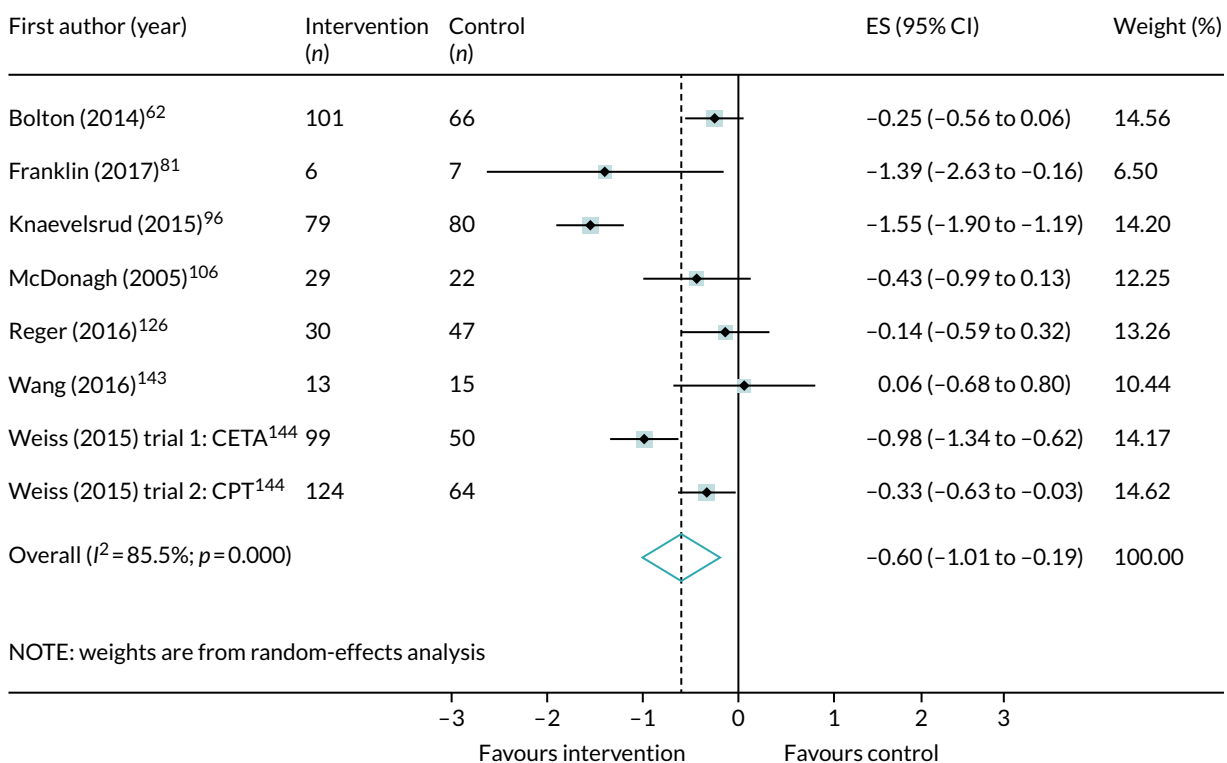


FIGURE 11 Meta-analysis of post-treatment effect size (ES) for anxiety symptoms, comparing trauma-focused CBT with control. CETA, common elements treatment approach; CPT, cognitive treatment therapy.

Using composite intervention categories, we showed in a meta-analysis that single-component and trauma-focused interventions (10 studies; $n = 757$)^{62,74,76,81,91,96,106,126,144,157} were associated with a large and significant treatment effect in favour of a reduction in anxiety symptoms (see *Appendix 10, Figure 50*).

Compared with control, multicomponent and trauma-focused interventions were associated with the largest treatment effect in favour of a reduction of anxiety symptoms (SMD -0.85 , 95% CI -1.60 to -0.10 ; $I^2 = 80.4\%$).^{69,143,144} This meta-analysis included studies that tested a phase-based intervention and trauma-focused CBT (see *Appendix 10, Figure 51*).

Only two studies ($n = 225$)^{62,106} compared single-component and non-trauma-focused interventions with control post treatment: one tested a counselling intervention and one tested non-trauma-focused CBT. Although the treatment effect favoured a reduction in anxiety symptoms, the effect was small and did not reach significance (see *Appendix 10, Figure 52*).

Quality of life

A summary of meta-analyses of the clinical effectiveness of psychological interventions across all populations for quality of life is shown in *Appendix 9, Table 38*. We identified five trials ($n = 307$)^{95,96,106,109,143} that included quality-of-life data that could be meta-analysed. *Figure 12* shows the result of a meta-analysis that compared all psychological interventions with control post treatment.

Four of these five studies ($n = 260$)^{96,106,109,143} compared trauma-focused CBT with control post treatment. Although interventions favoured a small improvement in quality of life, the effect size did not reach significance (SMD 0.23 , 95% CI -0.33 to 0.79 ; $I^2 = 73.9\%$; see *Appendix 10, Figure 53*).

Sleep quality

A summary of meta-analyses of the clinical effectiveness of psychological interventions across all populations for sleep quality is shown in *Appendix 9, Table 39*. Only three studies ($n = 111$)^{140,142,159} included data about sleep quality that could be meta-analysed. When compared with control post treatment, all psychological interventions were associated with a large and significant effect on sleep

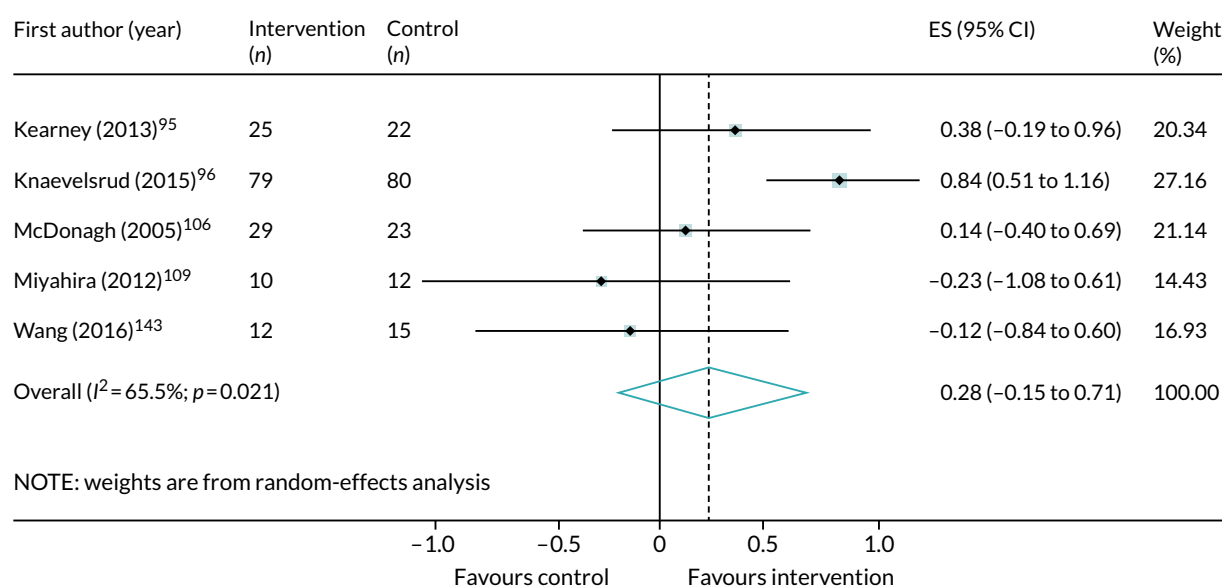


FIGURE 12 Meta-analysis of post-treatment effect size (ES) for quality of life, comparing all psychological interventions with control (positive ES favours intervention).

quality (SMD -1.00 , 95% CI -1.49 to -0.51 ; $I^2 = 28.8\%$; see *Appendix 10, Figure 54*). A larger and significant treatment effect in favour of improved sleep quality was observed in a meta-analysis of just two small studies^{140,159} that compared trauma-focused CBT with control post treatment (SMD -1.30 , 95% CI -1.87 to -0.73 ; $I^2 = 0\%$; see *Appendix 10, Figure 55*).

Psychological interventions versus control

A summary of all of the clinical effectiveness meta-analyses undertaken within each trauma exposure can be found in *Appendix 9*.

Veterans

A summary of meta-analyses of the clinical effectiveness of psychological interventions in veterans for PTSD, depression and anxiety symptoms is shown in *Appendix 9, Table 40*. Twenty-three trials were identified that included data about veteran populations. Five trials were not included in the meta-analysis: three compared head-to-head interventions,^{120,124,128} one compared trauma-focused CBT with exposure alone⁶⁰ and one did not include extractable data.⁸³

Post-traumatic stress disorder symptoms

Figure 13 shows the result of a meta-analysis (14 trials, $n = 502$)^{74,78,81,88,91,94,95,107,121,126,140,142,157,159} that compared all psychological interventions with control post treatment. The medium treatment effect favours a significant reduction in PTSD symptoms.

Four trials ($n = 180$)^{78,95,121} measured PTSD outcomes at follow-up after < 6 months and, while psychological interventions were associated with a small treatment effect in favour of interventions, this did not reach significance (SMD -0.20 , 95% -0.72 to 0.33 ; $I^2 = 63.1\%$).

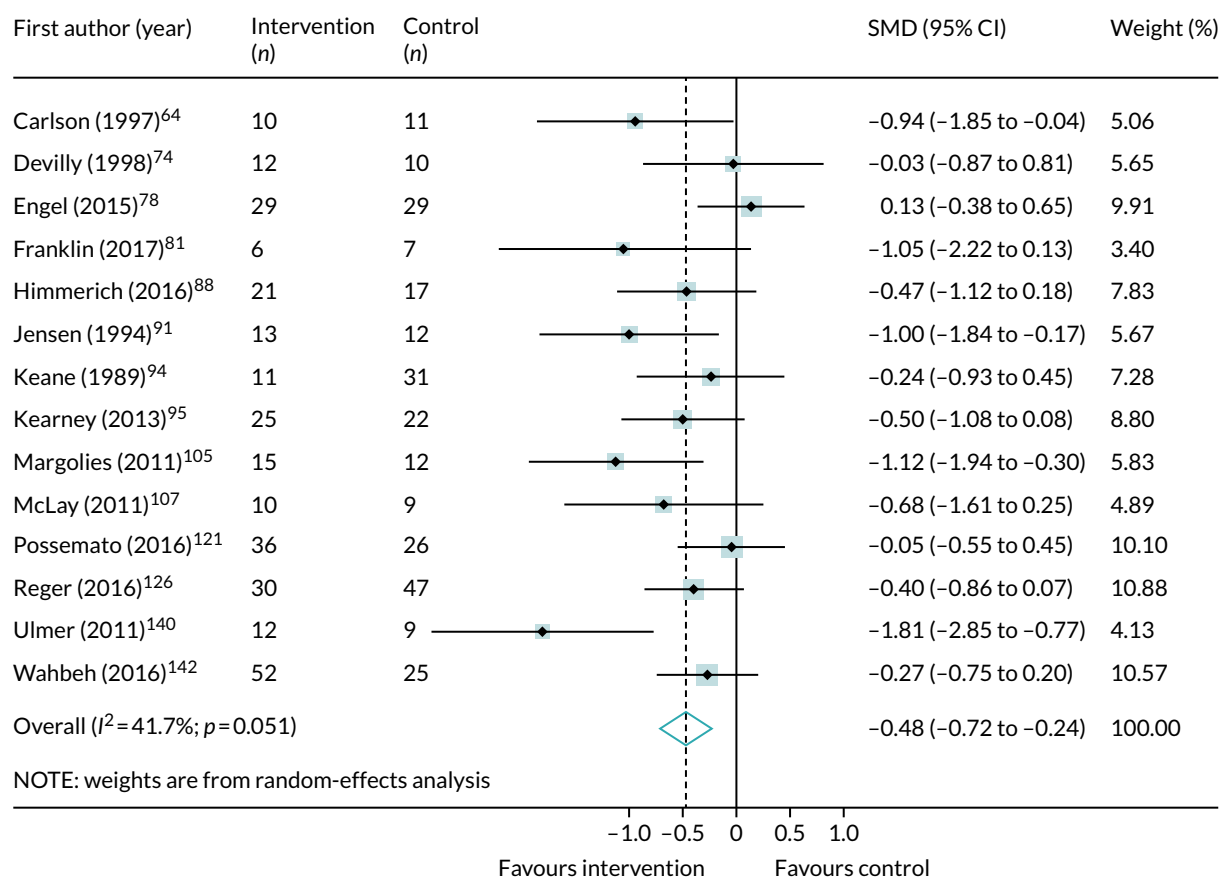


FIGURE 13 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing all psychological interventions with control in veteran populations.

Six trials ($n = 106$)^{81,94,100,107,126,159} compared trauma-focused CBT with control post treatment. Trauma-focused CBT was associated with a large and significant treatment effect in favour of a reduction in PTSD total symptoms (SMD -0.77 , 95% CI -1.20 to -0.33 ; $I^2 = 44.6\%$; see *Appendix 10, Figure 56*).

A meta-analysis of four trials ($n = 106$)^{74,88,91,157} showed that EMDR was associated with a smaller but still significant treatment effect when compared with control post treatment (see *Appendix 10, Figure 57*).

Studies that included veterans^{95,121,142} provided all of the data in the previous meta-analysis that compared mindfulness with control post treatment and at follow-up after < 6 months (see *Appendix 10, Figure 58*).

No studies that included veterans compared non-trauma-focused CBT with either a control or an active control group.

Figure 59 (see *Appendix 10*) shows the results of a meta-analysis (seven trials, $n = 219$)^{74,81,91,94,107,157} that compared single-component and trauma-focused interventions with control post treatment. This shows that single-component and trauma-focused interventions were associated with a medium and significant effect in favour of a reduction in PTSD symptoms. The size of the effect was about half that observed in the equivalent analysis for all populations and trauma exposures pooled.

The largest effect was observed in a meta-analysis of three small studies ($n = 86$)^{88,140,159} that compared multicomponent and trauma-focused interventions with control post treatment (see *Appendix 10, Figure 60*).

Single-component and non-trauma-focused interventions were not associated with a significant treatment effect in favour of a reduction in PTSD symptoms post treatment in veterans (see *Appendix 10, Figure 61*).^{78,95,121,142}

Four trials compared psychological interventions with active control (sleep and nightmare management, placebo and psychoeducation).^{71,84,137,160} It was unclear if psychological interventions as a whole (SMD -0.44 , 95% CI -0.98 to 0.10 ; $I^2 = 64\%$; four trials, $n = 188$) or trauma-focused CBT (SMD -0.26 , 95% CI -0.88 to 0.35 ; $I^2 = 51.1\%$; two trials, $n = 126$) were effective for PTSD symptoms.

Depression

Figure 14 shows the results of a meta-analysis (11 trials; 445)^{74,78,81,95,111,121,126,137,140,142,157,159} that compared all psychological interventions with control post treatment. The size of the treatment effect is smaller than the effect observed in the equivalent analysis that pooled PTSD outcomes across all populations and trauma exposures. In five studies ($n = 201$)^{78,81,95,111,121} that measured outcomes at follow-up after < 6 months, all psychological interventions were associated with a medium effect in favour of a reduction in depression symptoms, but this effect was not significant (SMD -0.38 , 95% CI -0.78 to 0.01 ; $I^2 = 42.3\%$).

When only those studies that compared trauma-focused CBT with control post treatment were considered, the meta-analysis (three trials, $n = 112$)^{81,126,159} showed that interventions were associated with a large and significant treatment effect in favour of a reduction of depression symptoms (see *Appendix 10, Figure 62*). There was, however, no evidence of a significant difference between trauma-focused CBT and active control (SMD -0.04 , 95% CI -0.55 to 0.48 ; $I^2 = 38.7\%$; two trials, $n = 128$).^{71,84}

Compared with control post treatment, EMDR was similarly associated with large effects in favour of a reduction in depression symptoms, but the overall point estimate was non-significant and associated with considerable uncertainty (see *Appendix 10, Figure 63*).^{74,157}

The pooled population meta-analysis that compared mindfulness with control post treatment and after < 6 months included only studies with veterans and is shown in *Appendix 10, Figure 64*.^{95,121,142}

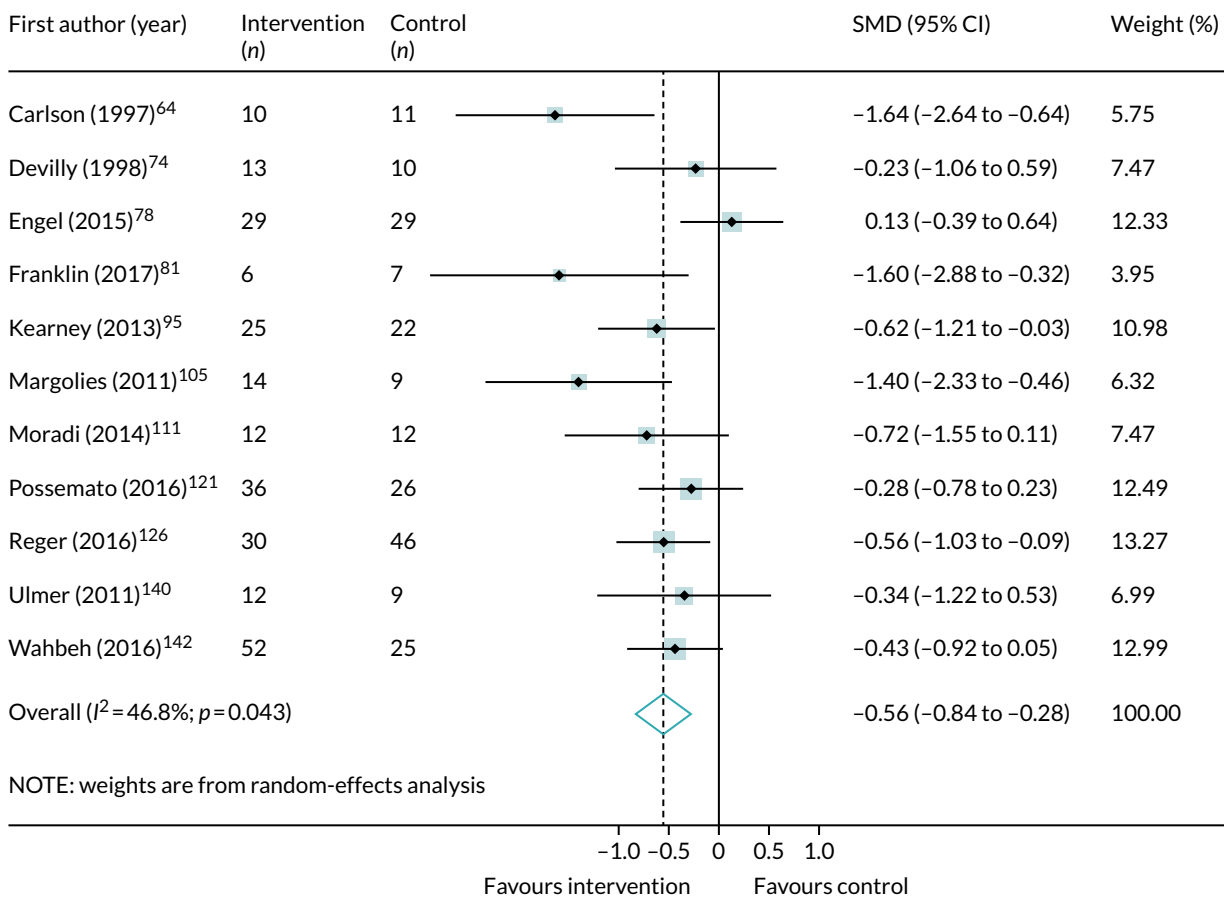


FIGURE 14 Meta-analysis of post-treatment SMD for total depression symptoms, comparing all psychological interventions with control in veteran populations.

No studies that included veteran populations compared non-trauma-focused CBT with control for depression symptoms.

Single-component and trauma-focused interventions were associated with large and significant effects in favour of a reduction in depression symptoms (see *Appendix 10, Figure 65*).^{74,81,126,157}

There was less evidence in favour of multicomponent and trauma-focused interventions, which were not significantly associated with a reduction in depression symptoms in a meta-analysis that included only two small trials (see *Appendix 10, Figure 66*).^{140,159}

By contrast, a meta-analysis that included five studies ($n = 268$)^{78,95,111,121,142} that compared single-component and non-trauma-focused interventions showed that interventions were associated with a medium but significant effect in favour of a reduction in depression symptoms (see *Appendix 10, Figure 67*). Four of these studies ($n = 188$)^{78,95,111,121} measured outcomes after < 6 months, but the effect was not significant (SMD -0.27, 95% CI -0.56 to 0.02; $I^2 = 0\%$).

Anxiety

There was less evidence for using psychological interventions for managing anxiety symptoms than other symptoms in veteran populations. We identified five studies ($n = 153$)^{74,81,91,126,157} that showed, in a meta-analysis, that overall, when pooled together, psychological interventions compared with control were associated with a large and significant effect in favour of a reduction in anxiety symptoms (*Figure 15*).

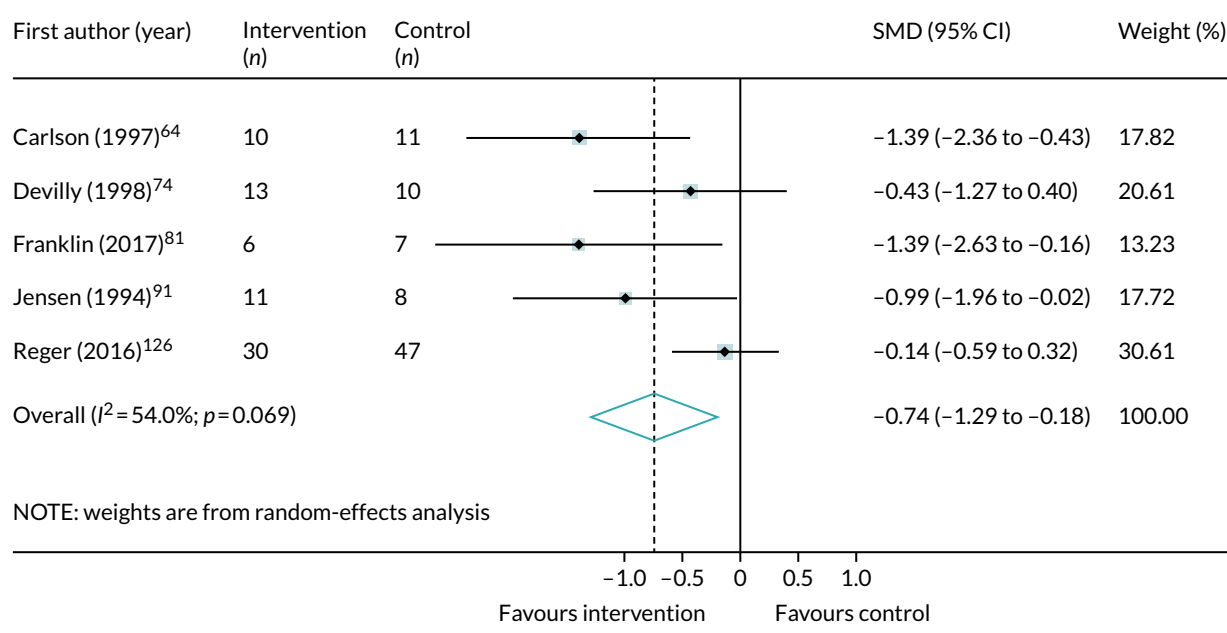


FIGURE 15 Meta-analysis of post-treatment SMD for total anxiety symptoms, comparing all psychological interventions with control in veteran populations.

Only two studies ($n = 90$)^{81,126} compared trauma-focused CBT with control post treatment in veterans. Meta-analysis showed that interventions favoured a reduction in anxiety symptoms, but this effect was not significant and was associated with a high degree of uncertainty (see *Appendix 10, Figure 68*).

By contrast, EMDR compared with control was associated in a meta-analysis (three trials, $n = 63$)^{74,91,157} with a large treatment effect in favour of a reduction in anxiety symptoms post treatment (see *Appendix 10, Figure 69*). The size of this effect was marginally smaller than that observed in the meta-analysis that pooled all populations and that included more studies.

War-affected populations

A summary of meta-analyses of the clinical effectiveness of psychological interventions across war-affected populations for PTSD, depression and anxiety symptoms is shown in *Appendix 9, Table 41*. Ten studies that included war-affected populations were identified; eight were included in the meta-analyses. Azad Marzabadi and Hashemi Zadeh⁵⁷ did not report outcomes that were sufficiently similar to other studies (i.e. they only reported on the WHO Quality of Life questionnaire) and Bichescu *et al.*⁶¹ compared head-to-head interventions; therefore, these were not meta-analysed.

Post-traumatic stress disorder total symptoms

Figure 16 shows the results of a meta-analysis that compared all psychological interventions (eight trials, $n = 933$)^{62,86,96,109,143-145} with control post treatment. The results show that psychological interventions were associated with a medium effect size in favour of a reduction in total PTSD symptoms. The size of this effect was comparable to that observed for veteran populations.

The majority of the studies (seven trials, $n = 743$)^{62,86,96,109,143,144} in war-affected populations compared trauma-focused CBT with control post treatment. *Figure 70* (see *Appendix 10*) shows that trauma-focused interventions were associated with a medium and significant effect in favour of reducing PTSD symptoms in war-affected populations.

A very similar result was found when single-component and trauma-focused interventions were compared in a meta-analysis (five trials, $n = 566$)^{62,86,96,109,144} with control post treatment (SMD -0.51 , 95% CI -0.80 to -0.23 ; $I^2 = 55.9\%$).

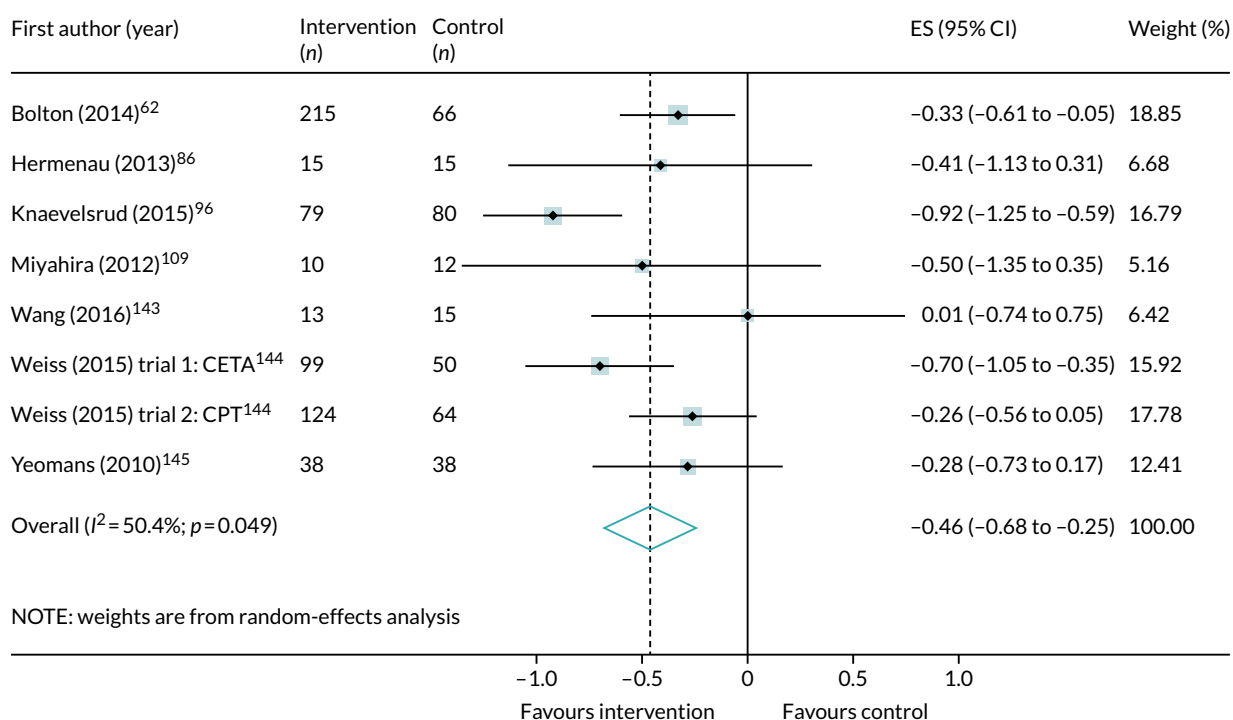


FIGURE 16 Meta-analysis of post-treatment effect size (ES) for total PTSD symptoms, comparing all psychological interventions with control in war-affected populations. CETA, common elements treatment approach; CPT, cognitive treatment therapy.

Three studies delivered therapies as part of a multicomponent and trauma-focused intervention.^{143–145} When meta-analysed, these three studies ($n = 253$) showed that multicomponent and trauma-focused interventions were associated with a medium effect size in favour of a reduction in PTSD symptoms post treatment, but the overall point estimate was more uncertain than in the other meta-analyses in this population subgroup (see *Appendix 10, Figure 71*).

Depression symptoms

Six trials ($n = 827$)^{62,96,109,143,144} were identified that included data that could be meta-analysed for depression symptoms in the war-affected subgroup. All of these studies compared trauma-focused CBT with control post treatment. When meta-analysed together, *Figure 17* shows that trauma-focused CBT is associated with a medium and significant effect size in favour of a reduction in depression symptoms.

When trauma-focused CBT was delivered as part of a single-component intervention and compared with control, the meta-analysis (four trials, $n = 536$)^{62,96,109,144} shows that the intervention was associated with a similarly medium and significant effect size in favour of a reduction in depression symptoms (see *Appendix 10, Figure 72*). However, in the two studies that tested trauma-focused CBT as part of a multicomponent intervention, the meta-analysis ($n = 177$)^{143,144} shows that the treatment effect favoured a reduction in depression symptoms but did not reach significance (see *Appendix 10, Figure 73*).

Anxiety symptoms

Five trials ($n = 691$)^{62,96,143,144} were identified that included data that could be meta-analysed for depression symptoms in the war-affected subgroup. All of these studies compared trauma-focused CBT with control post treatment. When meta-analysed together, *Figure 18* shows that trauma-focused CBT is associated with a large and significant effect size in favour of a reduction in anxiety symptoms.

RESULTS OF THE EFFECTIVENESS REVIEW

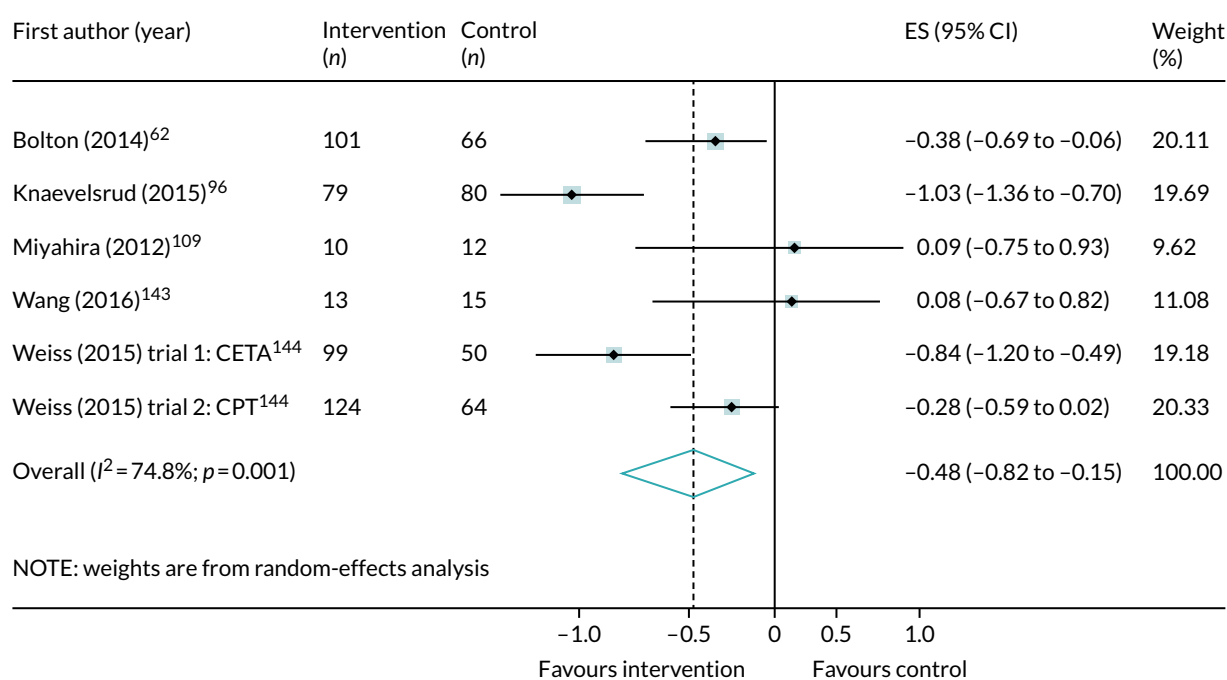


FIGURE 17 Meta-analysis of post-treatment effect size (ES) for total depression symptoms, comparing all trauma-focused CBT interventions with control in war-affected populations. CETA, common elements treatment approach; CPT, cognitive treatment therapy.

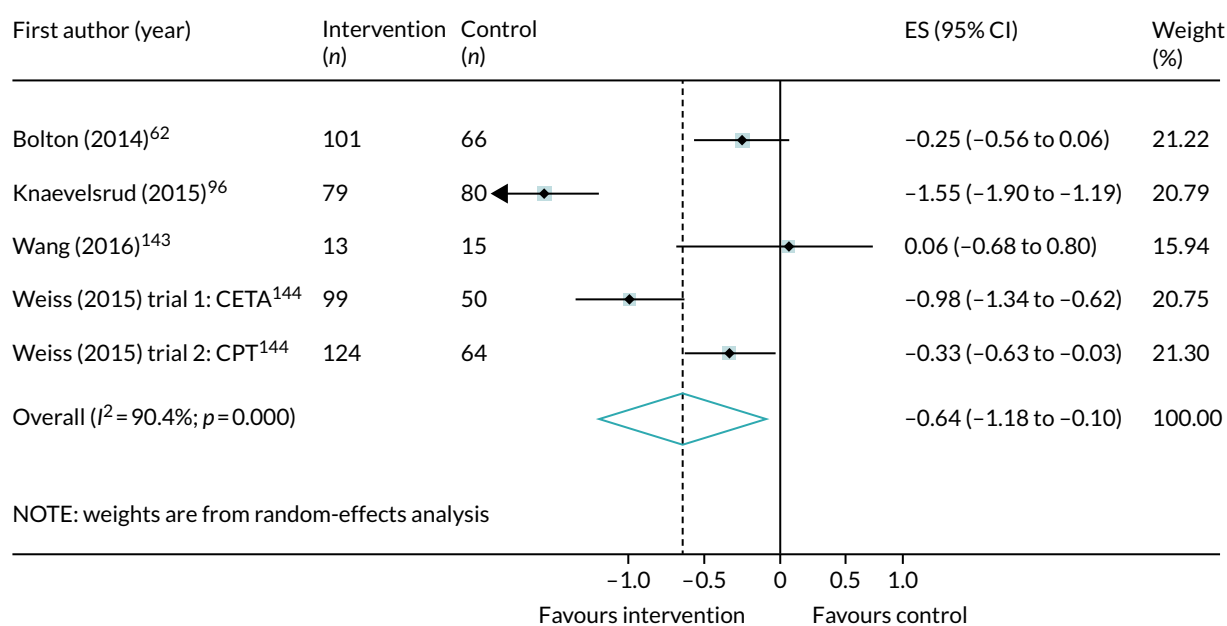


FIGURE 18 Meta-analysis of post-treatment effect size (ES) for total anxiety symptoms, comparing trauma-focused CBT with control in war-affected populations. CETA, common elements treatment approach; CPT, cognitive treatment therapy.

When trauma-focused CBT was delivered as part of a single-component intervention and compared with control, the meta-analysis (three trials, $n = 514$)^{62,96,144} shows that the intervention was associated with a large effect size in favour of a reduction in anxiety symptoms, but this effect did not reach significance (see Appendix 10, Figure 74). Similarly, in the two studies^{143,144} that tested trauma-focused CBT as part of a multicomponent intervention, the meta-analysis ($n = 177$) shows that the treatment effect favoured a reduction in depression symptoms but did not reach significance and was associated with considerable uncertainty (see Appendix 10, Figure 75).

Childhood sexual abuse

A summary of meta-analyses of the clinical effectiveness of psychological interventions across populations exposed to childhood sexual abuse for PTSD, depression and anxiety symptoms is shown in *Appendix 9, Table 42*. Thirteen of these studies included data that could be meta-analysed in the childhood sexual abuse subgroup; nine studies ($n = 687$)^{66,69,76,92,98,106,131,132,146} were included in the meta-analyses. Those excluded from the meta-analyses were Cloitre *et al.*,⁶⁹ which was a deconstruction trial; Lau and Kristensen,¹⁰³ which compared analytic with systemic group therapy; Classen *et al.*,⁶⁸ which combined data from trauma-focused CBT and present-centred therapy groups, making it difficult to separate out and interpret the intervention effects; and Owens *et al.*,¹¹⁷ which only reported loss of PTSD diagnosis (an outcome not reported in any other study in this population).

Post-traumatic stress disorder total symptoms

Figure 19 shows the results of a meta-analysis (nine trials, $n = 687$)^{66,69,76,92,98,106,131,132,146} that compared all psychological interventions with control post treatment. The treatment effect was large and significant and about twice the size of the comparable result in the meta-analysis that assessed the effectiveness of all psychological interventions across all populations. Three studies ($n = 323$)^{92,98,132} measured outcomes at follow-up after < 6 months. The meta-analysis of these three studies showed that the treatment effect still favoured a reduction in PTSD symptoms, but it did not reach significance (SMD -0.27, 95% CI -0.71 to 0.17; $I^2 = 53.6%$).

Three studies ($n = 153$)^{66,92,106} compared trauma-focused CBT with control post treatment. The meta-analysis shows that trauma-focused CBT was the most effective intervention in this subgroup. *Figure 76* (see *Appendix 10*) shows that this intervention was associated with a large effect in favour of a reduction in PTSD symptoms, but the wide CIs suggest that this result is particularly uncertain.

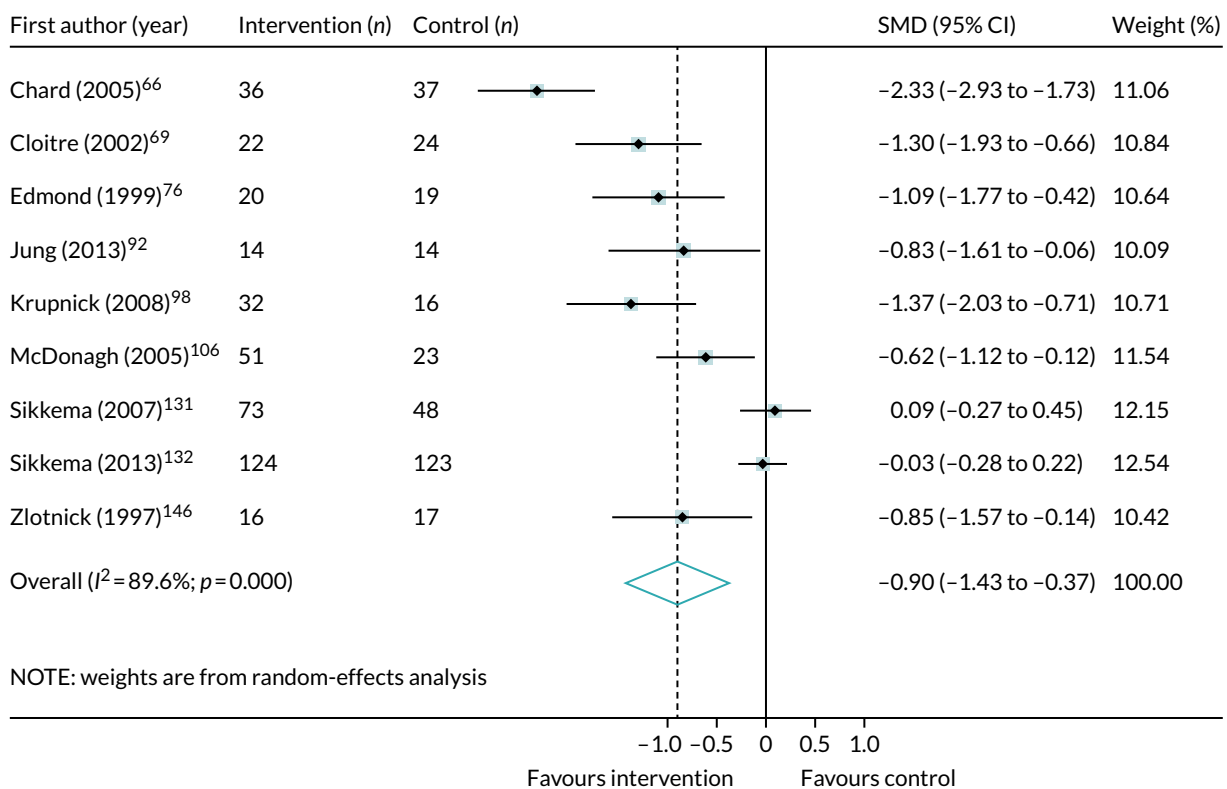


FIGURE 19 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing all psychological interventions with control in childhood sexual abuse populations.

By contrast, non-trauma-focused CBT, meta-analysed in two studies ($n = 368$),^{131,132} did not favour the intervention when compared with control post treatment (see Appendix 10, Figure 77).

When studies (three trials, $n = 119$)^{66,76,92,106} were grouped using the composite categories, we showed that single-component and trauma-focused interventions were associated with a large and significant effect in favour of a reduction in PTSD symptoms (see Appendix 10, Figure 78).

Larger and significant effects in favour of a reduction in PTSD symptoms were observed in the meta-analysis that compared multicomponent and trauma-focused interventions with control post treatment, but the treatment estimate was associated with considerable uncertainty (SMD -1.82 , 95% CI -2.83 to -0.81 ; $I^2 = 81.3\%$; two trials, $n = 122$). Single-component and non-trauma-focused interventions (five trials, $n = 494$)^{98,106,131,132,146} were shown, in a meta-analysis, to be associated with a medium and significant effect that favoured a reduction in PTSD symptoms (see Appendix 10, Figure 79). This analysis included a phase-based study of IPT that was associated with a large and significant effect.⁹⁸ Two of these trials measured outcomes at follow-up after < 6 months and a meta-analysis shows that there was no significant difference between interventions and control (SMD -0.08 , 95% CI -0.31 to 0.15 ; $I^2 = 0\%$).^{98,132}

Depression

Figure 20 shows the result of a meta-analysis (six trials, $n = 307$)^{69,76,92,98,106} that compared all psychological interventions with control post treatment. Psychological interventions were associated with a large and significant effect in favour of a reduction in depression symptoms.

Two of these six trials measured outcomes at follow-up after < 6 months; the treatment effect still favoured interventions and was significant (SMD -0.52 , 95% CI -0.99 to -0.04 ; $I^2 = 0\%$).^{92,98}

Figure 80 (see Appendix 10) shows that trauma-focused CBT, when compared with control post treatment, is associated with a large but non-significant effect size in favour of a reduction in depression symptoms. This analysis was based on three small studies ($n = 152$) and there is considerable uncertainty regarding the overall point estimate.

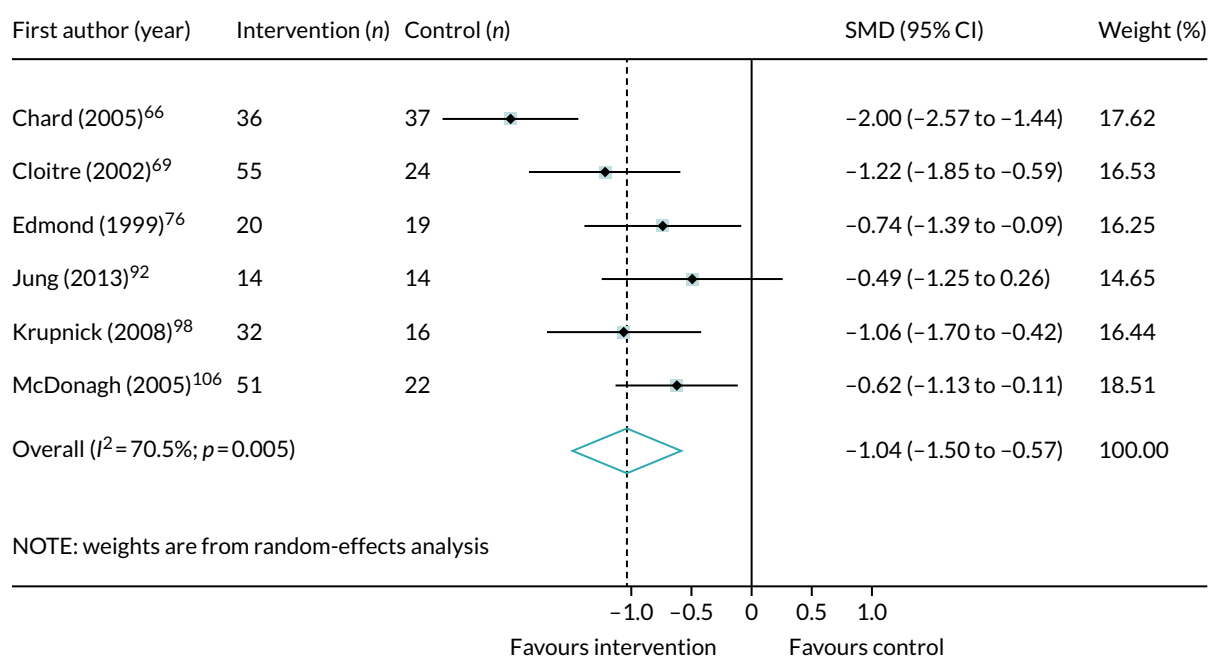


FIGURE 20 Meta-analysis of post-treatment SMD for depression symptoms, comparing all psychological interventions with control in childhood sexual abuse populations.

There was some tentative evidence from a meta-analysis of three studies ($n = 118$)^{76,92,106} that single-component and trauma-focused interventions were similarly associated with a large and significant effect size (see *Appendix 10, Figure 81*).

Single-component and non-trauma-focused interventions were associated with a medium and significant effect in favour of a reduction in depression symptoms in this subgroup (see *Appendix 10, Figure 82*). This analysis was based on three small studies ($n = 118$).^{76,92,106}

Larger and significant effects in favour of a reduction in depression symptoms were observed in the meta-analysis that compared multicomponent and trauma-focused interventions with control post treatment, but the treatment estimate was associated with considerable uncertainty (SMD -1.63 , 95% CI -2.40 to -0.85 ; $I^2 = 69.7\%$; two trials, $n = 122$).

Anxiety symptoms

Only two studies ($n = 90$)^{76,106} included anxiety outcome data that could be meta-analysed. *Figure 83* (see *Appendix 10*) shows that single-component and trauma-focused interventions (one testing EMDR, one testing trauma-focused CBT) are associated with a large effect in favour of a reduction in anxiety symptoms, but the effect did not reach significance.

Refugee populations

A summary of meta-analyses of the clinical effectiveness of psychological interventions across refugee populations for PTSD, depression and anxiety symptoms is shown in *Appendix 9, Table 43*. Twelve studies that included refugee populations were identified; however, few meta-analyses were possible. The following trials did not appear in any meta-analyses:

- Neuner *et al.*¹¹⁴ compared trauma-focused CBT, supportive counselling and psychoeducation and there was no comparison with a control group.
- Paunovic and Ost¹¹⁹ compared trauma-focused CBT with an exposure-only intervention.
- In Stenmark *et al.*,¹³⁶ trauma-focused CBT data were not extractable.

Post-traumatic stress disorder symptoms

Figure 21 shows the results of a meta-analysis (six trials, $n = 188$)^{53-55,89,108,136,158} that compared all psychological interventions with control post treatment. Interventions were associated with a very large and significant effect size in favour of a reduction in PTSD symptoms. Three studies ($n = 235$)^{54,87,113} measured outcomes at follow-up after < 6 months and, in the meta-analysis, the treatment effect was large and significant at follow-up (SMD -0.66 , 95% CI -1.22 to -0.09 ; $I^2 = 72.7\%$).

Three small studies ($n = 71$)^{55,89,158} compared trauma-focused CBT with control post treatment and were associated in a meta-analysis with a very large and significant treatment effect in favour of a reduction in PTSD symptoms (see *Appendix 10, Figure 83*). Two larger studies ($n = 165$)^{87,113} that compared trauma-focused CBT with control measured outcomes at follow-up after < 6 months. The meta-analysis of these two studies showed that the treatment effect favoured interventions but did not reach significance (SMD -0.40 , 95% CI -0.87 to 0.06 ; $I^2 = 86.3\%$).

There was some evidence, based on two small trials ($n = 99$)^{53,54} that EMDR, when compared with control post treatment, was effective at reducing total PTSD symptoms (see *Appendix 10, Figure 85*).

A large and significant effect in favour of a reduction in total PTSD symptoms was observed in a meta-analysis (five trials, $n = 170$)^{53-55,89,158} that compared single-component and trauma-focused interventions with control post treatment (see *Appendix 10, Figure 86*). Two studies ($n = 133$)^{54,87} measured outcomes at follow-up after < 6 months and, in a meta-analysis, the treatment effect favoured the interventions but did not reach significance (SMD -0.67 , 95% CI -1.65 to 0.32 ; $I^2 = 86.3\%$).

RESULTS OF THE EFFECTIVENESS REVIEW

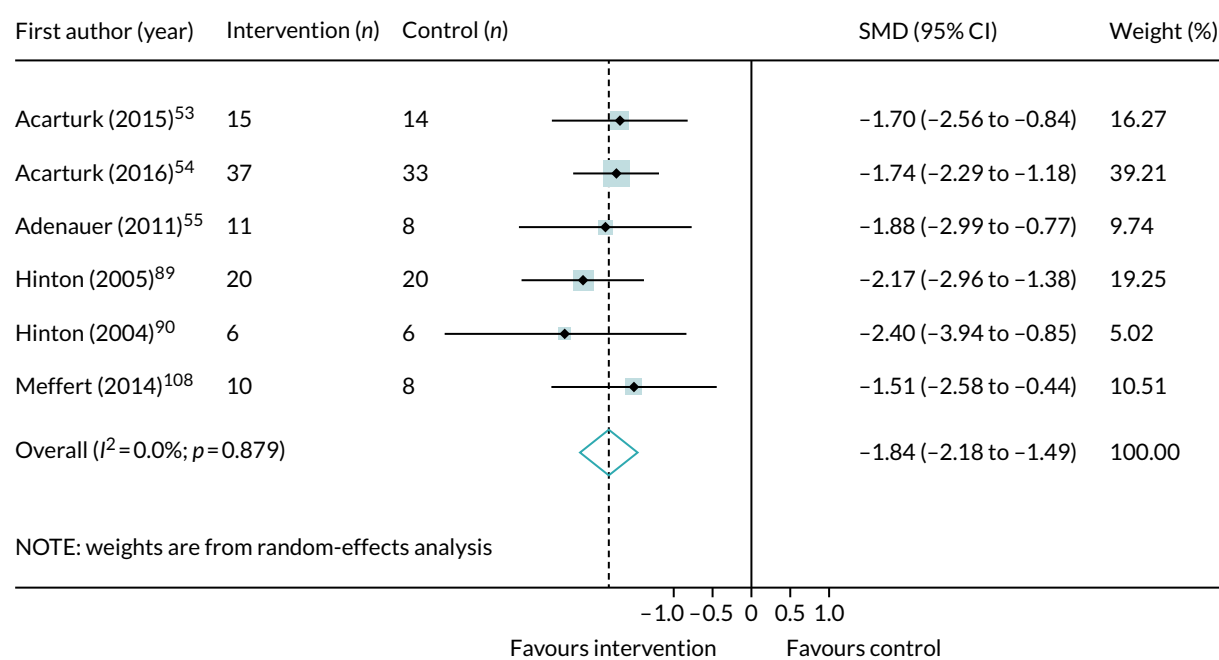


FIGURE 21 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing all psychological interventions with control in refugee populations.

In addition to the comparisons with control, two studies ($n = 71$)^{138,139} compared EMDR with stabilisation only. There was insufficient evidence to conclude that EMDR was more effective post treatment (SMD -0.15, 95% CI -0.62 to 0.32; $I^2 = 0\%$) and at follow-up after < 6 months (SMD -0.15, 95% CI -0.80 to 0.49; $I^2 = 22.4\%$).

Depression symptoms

Figure 22 shows the results of a meta-analysis (five trials, $n = 148$)^{53-55,108,158} that compared all psychological interventions with control post treatment. There is evidence that psychological interventions are effective in reducing symptoms of depression in refugee populations.

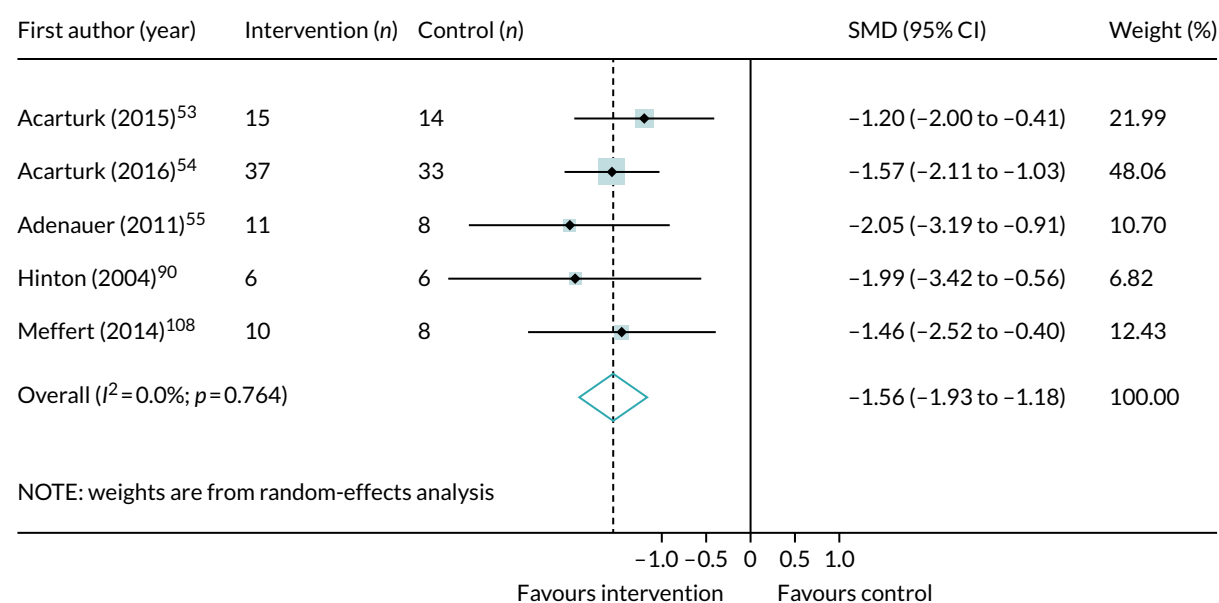


FIGURE 22 Meta-analysis of post-treatment SMD for depression symptoms, comparing all psychological interventions with control in refugee populations.

There was only modest evidence from a meta-analysis of two small trials ($n = 31$)^{55,158} that trauma-focused CBT when compared with control is associated with large and significant treatment effects in favour of a reduction in depression symptoms; the wide CIs suggest this result is uncertain (see *Appendix 10, Figure 87*). Two other trials ($n = 133$)^{54,87} measured outcomes at follow-up after < 6 months and a meta-analysis shows that the treatment effect favoured interventions but did not reach significance (SMD -0.73 , 95% CI -1.57 to 0.10 ; $I^2 = 81.3\%$).

Evidence to support the use of EMDR for managing depression in this population was also based only on data from two small trials ($n = 99$)^{53,54}. When compared with control post treatment, EMDR was associated with a large and significant treatment effect in favour of a reduction in depression symptoms (see *Appendix 10, Figure 88*).

Taken together, single-component and trauma-focused interventions that included trauma-focused CBT and EMDR were effective at reducing depression in refugee populations. A meta-analysis (four trials, $n = 130$)^{53-55,158} showed that, overall, these interventions are associated with a large and significant treatment effect (see *Appendix 10, Figure 89*).

Two studies also compared EMDR with stabilisation only.^{138,139} There was insufficient evidence to conclude that EMDR was more effective post treatment (SMD -0.32 , 95% CI -1.23 to 0.59 ; $I^2 = 47.8\%$; two trials, $n = 72$) or at follow-up after < 6 months (SMD -0.01 , 95% CI -0.47 to 0.45 ; $I^2 = 0\%$; two trials, $n = 73$).

Anxiety symptoms

Only data from two studies that compared EMDR with stabilisation included data on anxiety symptoms that could be extracted.^{138,139} There was no evidence that EMDR was effective in reducing anxiety symptoms in refugee populations post treatment (SMD -0.36 , 95% CI -0.82 to 0.11 ; $I^2 = 0\%$; two trials, $n = 73$) or at follow-up after < 6 months (SMD -0.43 , 95% CI -1.21 to 0.35 ; $I^2 = 35.1\%$; two trials, $n = 73$).

Domestic violence

A summary of meta-analyses of the clinical effectiveness of psychological interventions across populations exposed to domestic violence for PTSD, depression and anxiety symptoms is shown in *Appendix 9, Table 44*.

Post-traumatic stress disorder symptoms

Three trials were identified that measured PTSD symptoms in populations affected by domestic violence. Two of the three trials were included in the meta-analyses that compared trauma-focused CBT with control post treatment and interventions were associated with a large and significant treatment effect (SMD -2.92 , 95% CI -3.45 to -2.39 ; $I^2 = 0\%$; two trials, $n = 117$).^{100,101}

The other trial in this subgroup compared forgiveness therapy with an alternative treatment including anger validation, assertiveness and interpersonal skills training and could not be meta-analysed.¹²⁵

Depression symptoms

The same two trials that compared trauma-focused CBT with control also reported post-treatment outcomes for depression. A meta-analysis showed that interventions were associated with a large and significant treatment effect, but there is a high degree of uncertainty about the overall point estimate (SMD -3.24 , 95% CI -4.40 to -2.09 ; $I^2 = 66.6\%$; two trials, $n = 117$).¹²⁵

Pharmacological interventions versus placebo

Nineteen trials were identified that compared pharmacological interventions with placebo. Rezaei Ardani *et al.*⁵⁶ tested rivastigmine augmentation and this study was not included in the meta-analyses because there were no other comparable interventions to combine it with. Two other studies were excluded from the meta-analyses because they compared head-to-head interventions, with no placebo

group.^{65,67} All the trials ($n = 16$)^{58,59,72,73,82,84,85,99,104,110,112,118,122,123,135,147} included in the meta-analyses, except one trial in childhood sexual abuse, were in veteran populations.

Total post-traumatic stress disorder symptoms

A summary of meta-analyses of the clinical effectiveness of pharmacological interventions for PTSD symptoms is shown in *Appendix 9, Table 45*. A meta-analysis of six trials ($n = 338$)^{59,73,82,112,118,147} compared antidepressants with placebo post treatment. The results show that there was a medium treatment effect in favour of antidepressants, but this did not reach significance (see *Appendix 10, Figure 90*).

Four trials ($n = 293$)^{82,112,118,147} were included in a meta-analysis that compared SSRIs with placebo. *Figure 91* (see *Appendix 10*) shows that SSRIs were associated with a large effect in favour of a reduction in total PTSD symptoms, but this did not reach significance.

Data about the effectiveness of antipsychotics were meta-analysed in five trials ($n = 365$)^{58,85,99,110,135}. Antipsychotics were associated with a medium and significant treatment effect in favour of a reduction in total PTSD symptoms post treatment (see *Appendix 10, Figure 92*).

Only two trials that compared anticonvulsants with placebo were meta-analysed and there was little evidence that these classes of drugs were effective at reducing total PTSD symptoms (see *Appendix 10, Figure 93*).^{72,104}

Three trials ($n = 110$) compared prazosin with placebo and a meta-analysis showed that this sympatholytic medication is associated with a medium treatment effect post treatment in favour of reducing total PTSD symptoms (see *Appendix 10, Figure 94*).^{84,122,123}

Depression symptoms

A summary of meta-analyses of the clinical effectiveness of pharmacological interventions for depression symptoms is shown in *Appendix 9, Table 46*. Antidepressant medication was compared with placebo post treatment in a meta-analysis that included three trials ($n = 220$).^{59,73,82} The results were inconclusive, with no evidence that these classes of drugs were effective in reducing depression symptoms in veteran populations (see *Appendix 10, Figure 95*).

There was some evidence drawn from two trials ($n = 266$)^{99,135} that antipsychotic medication compared with placebo post treatment favoured the intervention, but the treatment effect did not reach significance (see *Appendix 10, Figure 96*).

There was very little evidence that anticonvulsants compared with placebo post treatment were effective in reducing depression symptoms. A meta-analysis of two trials ($n = 106$)^{72,104} showed that the treatment effect marginally favoured the placebo group (see *Appendix 10, Figure 97*).

In a meta-analysis of two trials ($n = 76$)^{84,123} that compared prazosin with placebo post treatment, the treatment effect favoured prazosin but did not reach significance.

There were insufficient data to assess the effectiveness of SSRIs. Only one study that compared SSRIs with placebo reported a depression outcome.⁸² Among the other studies that tested SSRIs, one study did not report depression outcomes separately and instead presented combined depression and anxiety data using the Hospital Anxiety and Depression Scale total,¹¹² and two other trials did not report any depression outcome data.^{118,147}

Anxiety symptoms

No meta-analyses were possible for anxiety outcomes.

Psychosis symptoms

A summary of meta-analyses of the clinical effectiveness of pharmacological interventions for psychosis symptoms is shown in *Appendix 9, Table 47*. All of the trials included in the meta-analyses that compared antipsychotic medication with placebo tested risperidone. Three trials were identified that included post-treatment outcome data related to symptoms of psychosis; all used the Positive and Negative Syndrome Scale (PANSS).^{58,85,99}

There was no good evidence that antipsychotic medication reduces symptoms of psychosis in veteran and childhood sexual abuse populations.

In a meta-analysis of three trials ($n = 329$),^{58,85,99} risperidone was associated with a reduction in positive psychotic symptoms on the PANSS, but the treatment effect did not reach significance and the overall point estimate was very uncertain (see *Appendix 10, Figure 98*).

In a meta-analysis of one small and one medium-sized trial, the treatment effect did not favour risperidone for either negative or total scores on the PANSS, although the effects were not significant (see *Appendix 10, Figures 99 and 100*).^{85,99} In the same meta-analysis, there was some evidence that risperidone favoured an improvement on the general psychopathology scale of the PANSS, but the effect did not reach significance (see *Appendix 10, Figure 101*).

Sleep quality

A summary of meta-analyses of the clinical effectiveness of pharmacological interventions for sleep quality is shown in *Appendix 8, Figure 26*. Prazosin was the only pharmacological intervention with sufficient data to conduct meta-analyses; it was more effective than placebo (mean difference -2.53 , 95% CI -3.82 to 1.23 ; $I^2 = 0\%$; three trials, $n = 109$).^{84,122,123}

Meta-analysis of attrition

Of the RCTs included, 46 studies representing 47 trials in psychological interventions reported attrition data.^{53,55,62,64,66,69,71,76,78,79,81,83,84,86-92,94-96,98,100,105-109,111,115,121,125,126,128,131,132,135-140,144,145} Thirteen RCTs reported attrition data for pharmacological interventions.^{56,58,72,73,82,84,85,99,104,110,118,127,141} We conducted meta-analyses to investigate the odds of attrition from psychological and pharmacological interventions. Owing to a subset of trials reporting zero attrition, ORs were not calculable for eight trials;^{88-91,94,111,125,138} therefore, these were excluded from the analyses presented. The comparisons meta-analysed for odds of attrition from psychological interventions were considered two ways:

1. psychological interventions versus control for all populations combined, reported by intervention category
2. all psychological interventions versus control, reported by trauma experience.

All pharmacological interventions included in this analysis were in veteran populations, with the exception of one study in individuals with a history of childhood sexual abuse;¹²⁷ therefore, veterans-only pharmacological intervention attrition meta-analyses were undertaken (see *Veterans*).

Intervention categories

Trauma-focused cognitive-behavioural therapy

Twenty-one studies ($n = 1557$)^{55,62,66,79,81,83,86,87,92,96,100,105-107,109,126,128,136,140,144} reported attrition figures in trauma-focused CBT across all populations, and indicated participation in a trauma-focused CBT intervention was significantly associated with a reduction in the odds of dropout compared with controls (*Figure 23*).

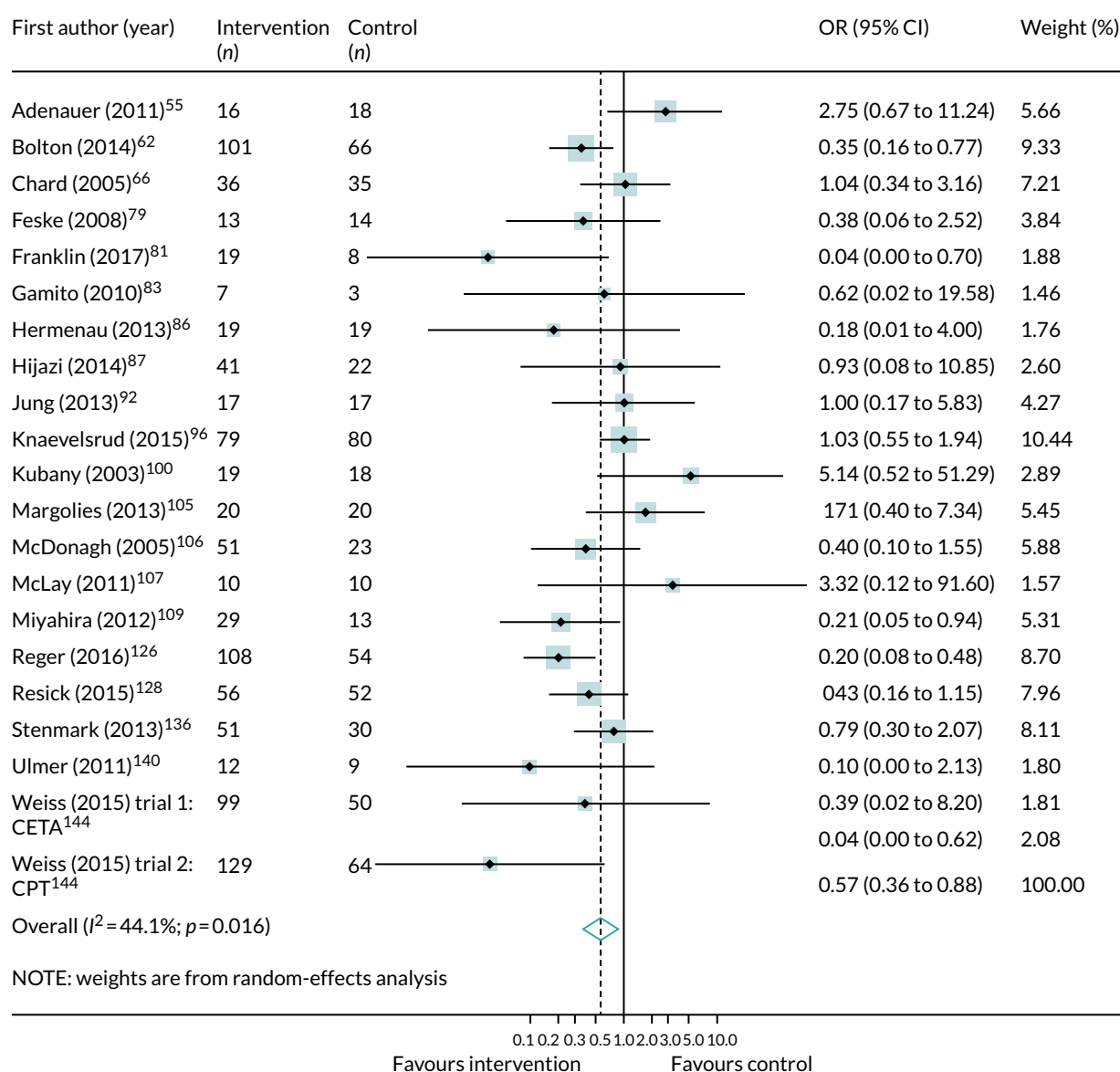


FIGURE 23 Meta-analysis of ORs of attrition for trauma-focused CBT interventions compared with control. CETA, common elements treatment approach; CPT, cognitive treatment therapy.

Four trials stood out owing to ORs that favoured increased attrition from the intervention; these had smaller sample sizes (< 20 participants per arm) and did not have a common trauma population (including veterans,^{105,107} domestic violence populations¹⁰⁰ and refugees⁵⁵).

Eye movement desensitisation and reprocessing

Few controlled EMDR trials reported attrition data (three trials, $n = 179$).^{53,64,76} All favoured increased odds of attrition in the intervention group, with a non-significant pooled estimate suggesting uncertainty (OR 1.79, 95% CI 0.79 to 4.07; $I^2 = 0.0\%$). Trials included within this analysis were each from different populations (refugees,⁵³ veterans⁶⁴ and those with a history of childhood sexual abuse⁷⁶).

Mindfulness

There were also few mindfulness trials reporting attrition (three trials, $n = 141$).^{57,95,121} The pooled estimate suggested that the odds of attrition of individuals in mindfulness interventions were one-third those of individuals on a waitlist, but this finding did not reach significance (OR 0.29, 95% CI 0.05 to 1.74; $n = 141$). There was also moderate heterogeneity in the sample with the CI including 1, suggesting mindfulness interventions could also have greater odds of attrition than waitlists.

Non-trauma-focused cognitive-behavioural therapy

There were insufficient data comparing non-trauma-focused CBT with an inactive control to perform analyses.

Trauma populations

Meta-analyses were carried out according to each intervention category within populations in which there were multiple studies present. The results for each of these can be found in *Appendix 10*. The following sections give the results of attrition from any psychological intervention within each population and highlight notable contrasts due to the sparsity of data in grouped meta-analyses.

Veterans

Twelve trials ($n = 616$)^{66,78,81,83,95,105-107,109,121,128,157} were included in this meta-analysis, which compared psychological intervention with a control (see *Appendix 10, Figure 102*). Veterans receiving any psychological intervention had less than half the odds of attrition as those on a waitlist (OR 0.49, 95% CI 0.26 to 0.92; $I^2 = 41.8\%$), a statistically significant result. This suggests that it is likely that psychological therapies experience favourable dropout in comparison with waitlists or non-interventions in veteran populations.

Four trials ($n = 225$) compared psychological interventions with an active control^{71,84,115,137} and also showed reduced attrition among veterans receiving psychological intervention (OR 0.34, 95% CI 0.17 to 0.68; $I^2 = 0.0\%$; see *Appendix 10, Figure 103*).

Pharmacological interventions

A sufficient number of pharmacological trials in veterans reported attrition to analyse the odds of dropout in antidepressant intervention, including three studies of SSRIs^{82,118,141} (OR 0.56, 95% CI 0.29 to 1.07; $I^2 = 24.9\%$; four studies, $n = 345$; see *Appendix 10, Figure 104*)^{73,82,118,141} and antipsychotics (OR 0.46, 95% CI 0.14 to 1.56; $I^2 = 56.5\%$; four studies, $n = 414$; see *Appendix 10, Figure 105*).^{58,85,99,110} Two studies reported attrition for the use of anticonvulsants^{72,104} (see *Appendix 10, Figure 106*).

Although all had an OR that favoured reduced attrition in the intervention group, none was significant.

Childhood sexual abuse

Based on five trials ($n = 414$)^{69,92,98,131,140} individuals with experience of childhood sexual abuse and receiving psychological therapy had almost one-quarter the odds of dropout as inactive controls (OR 0.24, 95% CI 0.08 to 0.75; $I^2 = 26.5\%$; see *Appendix 10, Figure 107*). Three of the five studies in the analysis were also phased based.^{69,98,140}

One trial reported attrition data for a pharmacological intervention, comparing antipsychotics with placebo; therefore, an OR was not calculated for these data.¹²⁷

Refugee populations

Evidence for attrition in refugee populations was mixed. Five studies ($n = 298$)^{53,55,87,108,136} were associated with psychological intervention having greater odds of attrition than controls, a finding that was not significant (OR 1.21, 95% CI 0.69 to 2.12; $I^2 = 0.0\%$; see *Appendix 10, Figure 108*). Across trials, odds were not consistent in favouring increased or decreased odds of attrition, resulting in a wide CI for the pooled estimate.

Domestic violence

There were only two studies on psychological interventions for individuals exposed to domestic violence.^{62,100} Both investigated individual therapies and they had opposing directions of effect for attrition (see *Appendix 10, Figure 109*).

War-affected populations

Six trials of psychological interventions gave a pooled OR that suggested reduced attrition for psychological intervention (when compared with inactive controls) in war-related trauma populations (OR 0.66, 95% CI

0.27 to 1.60; $I^2 = 36.7\%$; $n = 695$).^{57,86,96,144,145} However, the CI includes 1, while an equivalent number of trials favour both reduced and increased odds of attrition. There is large uncertainty as regards the direction of effect, despite low to moderate heterogeneity (see *Appendix 10, Figure 110*).

Meta-regression analyses: predictors of treatment effectiveness

We conducted meta-regression analyses for any validated trauma outcome measure (using SMDs) and in all populations.

Model 1: predictors of treatment effectiveness by population type

Table 2 shows the results of the univariable analyses. Interventions delivered in studies that included veterans were less likely to be effective than interventions delivered in studies in other populations. In addition, interventions delivered in studies that included people who had experienced domestic violence were more effective than studies that included other populations. However, there were few studies of people exposed to domestic violence and therefore it is unclear if further studies will consistently show greater effectiveness for people who have experienced domestic violence.

In multivariable analyses both remained statistically significant: studies of veterans [coefficient 0.41, standard error (SE) 0.20; $p = 0.049$] and studies of people experiencing domestic violence (coefficient -2.01 , SE 0.51; $p < 0.001$). The multivariable model was statistically significant [$F_{2,42} = 11.51$; $p < 0.001$] and explained some of the heterogeneity (adjusted $R^2 = 38.96\%$); however, a substantial proportion of heterogeneity remained unexplained (I^2 residual = 79%).

Model 2: predictors of treatment effectiveness by intervention components

When covariates for intervention content were assessed, only imaginal exposure was found to have a statistically significant association with effectiveness, but psychoeducation had a borderline statistically significant effect (Table 3). Therefore, both covariates were included in the multivariable analysis; psychoeducation was no longer statistically significant (coefficient -0.39 , SE 0.23; $p = 0.1$) and imaginal exposure was borderline statistically significant (coefficient -0.44 , SE 0.24; $p = 0.07$). The multivariable model as a whole was statistically significant ($F_{2,42} = 3.88$; $p = 0.03$) and explained some of the heterogeneity (adjusted $R^2 = 15.78\%$), but a substantial proportion of heterogeneity remained unexplained (I^2 residual = 81.19%).

Model 3: treatment effectiveness by delivery method

Studies that tested individually delivered interventions reported improved outcomes compared with studies that tested interventions delivered in a group (Table 4). Since almost all interventions were delivered face to face, it was not possible to confirm if there was a difference in effectiveness compared with other modalities. There was no evidence that the duration of intervention had an impact on effectiveness.

TABLE 2 Predictors of effectiveness of psychological interventions by population type (univariable analyses)

Populations	Coefficient (standard error)	p-value
Veterans	0.56 (0.23)	0.02
Childhood sexual abuse	-0.04 (0.30)	0.89
Refugees	-0.36 (0.28)	0.21
Domestic violence	-2.19 (0.52)	< 0.001
War affected	0.25 (0.45)	0.59

TABLE 3 Univariable predictors of treatment effectiveness by intervention component

Components	Coefficient (SE)	p-value
Support	-0.12 (0.33)	0.71
Psychoeducation	-0.47 (0.23)	0.052
Relaxation	-0.06 (0.27)	0.83
Mindfulness	-0.13 (0.36)	0.73
Cognitive	-0.03 (0.25)	0.91
In vivo exposure	-0.04 (0.45)	0.92
Virtual reality exposure	0.36 (0.49)	0.47
Imaginal exposure	-0.51 (0.24)	0.04
Phased based	-0.36 (0.37)	0.33

TABLE 4 Predictors of treatment effectiveness by delivery method

Delivery method	Coefficient (SE)	p-value
Face to face vs. other	-0.47 (0.39)	0.74
Individual vs. group	-0.67 (0.28)	0.02
< 12 weeks vs. 12 weeks	0.12 (0.32)	0.70
> 12 weeks vs. 12 weeks	0.20 (0.44)	0.66

Only studies that used individually delivered psychological interventions were statistically significantly associated with greater effectiveness compared with group-delivered psychological interventions explaining a small proportion of the heterogeneity (adjusted $R^2 = 12.72\%$; I^2 residual = 81.54%). No multivariable analyses were conducted.

Components network meta-analyses

We fitted four models to assess the impact of different combinations of interventions on reducing trauma. Owing to the instability of models when assessing different trauma scales combined, we conducted all analyses on the CAPS (the most frequently reported trauma scale). *Figure 24* shows all of the combinations of intervention components extracted from the studies included. The thickness of the lines for each node are weighted by the number of studies (i.e. the thicker the line, the more studies comparing a particular combination of components with an active control or a waitlist).

Model selection

Models 1, 2 and 4 did not fit the data well, reflected by the very high total residual deviance found for each of these models. Model 3 had an acceptable goodness of fit (total residual deviance = 36.33) and the DIC was substantially lower than in other models. Therefore, further analyses were conducted using model 3 (*Table 5*).

RESULTS OF THE EFFECTIVENESS REVIEW

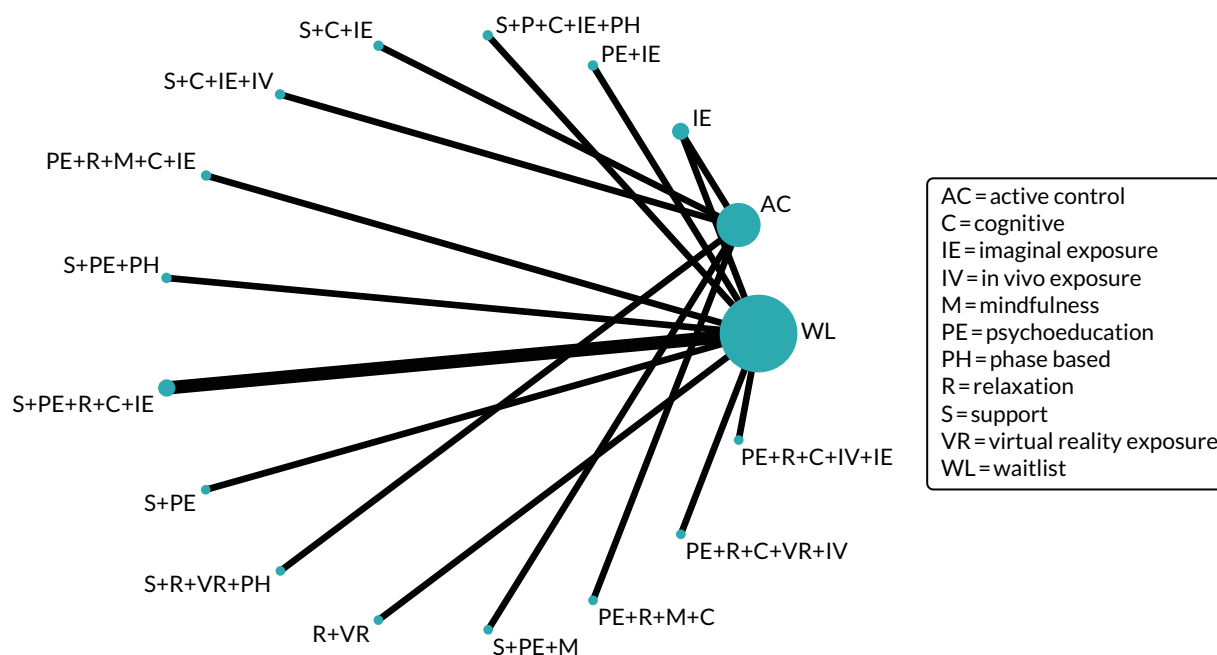


FIGURE 24 Network plot for all combinations of components extracted from the studies included.

TABLE 5 Comparing the goodness of fit for different component network meta-analysis models

Model	Posterior mean deviance	DIC	Total residual deviance	τ
Model 1: waitlist, active control, trauma-focused CBT, EMDR, mindfulness, DBT, IPT	25.72	252.99	70.03	0.043
Model 2: waitlist, placebo, support, psychoeducation, relaxation, cognitive restructuring, in vivo exposure, imaginal exposure, virtual reality exposure, mindfulness, phased based	28.60	267.93	70.57	0.042
Model 3: waitlist, placebo, support, psychoeducation, relaxation, cognitive restructuring, in vivo exposure, imaginal exposure, virtual reality exposure, phased based, support + psychoeducation, psychoeducation + relaxation, psychoeducation + cognitive restructuring, psychoeducation + imaginal exposure, relaxation + mindfulness, relaxation + cognitive restructuring, relaxation + imaginal exposure	30.94	235.45	36.33	0.13
Model 4: full interaction model	30.56	264.89	66.09	0.04

Findings from the intervention component network meta-analysis (model 3)

The intervention components with evidence of effectiveness and sufficiently precise credible intervals were mindfulness, cognitive restructuring, phase-based approaches, relaxation + imaginal exposure and relaxation + cognitive restructuring (Table 6).

TABLE 6 Mean difference for outcomes by intervention component

Intervention component	Mean difference vs. waitlist (95% CI)
Active control	-0.07 (-61.71 to 62.21)
Placebo	-27.6 (-57.76 to 2.60)
Support	16.78 (-13.07 to 47.08)
Psychoeducation	-0.24 (-30.23 to 29.76)
Relaxation	24.32 (-12.12 to 60.56)
Mindfulness	-32.22 (-53.18 to -10.52)
Cognitive restructuring	-39.24 (-54.05 to -23.88)
Virtual reality exposure	-8.6 (-42.08 to 25.84)
Imaginal exposure	-1.18 (-32.16 to 29.76)
Phased based	-26.95 (-41.59 to -11.96)
In vivo exposure	14.45 (-32.74 to 61.39)
Support + psychoeducation	21.3 (-10.29 to 52.64)
Psychoeducation + relaxation	32.09 (-6.64 to 70.77)
Psychoeducation + cognitive restructuring	10.56 (-8.07 to 29.29)
Psychoeducation + imaginal exposure	18.28 (-13.0 to 49.48)
Relaxation + mindfulness	28.03 (-17.44 to 73.86)
Relaxation + cognitive restructuring	-28.29 (-47.56 to -8.79)
Relaxation + imaginal exposure	-45.34 (-70.86 to -19.52)
Mindfulness + cognitive restructuring	28.41 (-16.96 to 74.14)
Cognitive restructuring + in vivo exposure	14.31 (-32.8 to 61.41)
In vivo exposure + imaginal exposure	15.42 (-18.72 to 49.73)

Acceptability sensitivity analyses

Estimates of attrition in intervention and control groups are likely to be effected by both the acceptability of the intervention and attrition bias. To try to disentangle these factors, we conducted sensitivity analyses including only studies judged to be at a low risk of attrition bias. *Table 7* shows the OR of attrition for psychological interventions compared with controls, as presented in *Trauma populations* earlier, and the OR of attrition for psychological interventions compared with controls for only those trials graded as at a low risk of attrition bias.

Overall, studies with a low risk of attrition bias were associated with reduced odds of dropout from psychological interventions in comparison with controls in all populations combined (14 trials).^{55,62,64,78,87,92,98,121,126,131,132,140,144} This trend was seen across trauma experiences (when data were available), although differences between interventions and controls were not always statistically significant. The exception was refugee populations, in which people assigned to psychological interventions were more likely to drop out than those in controls.

Trauma populations that demonstrated a reduced likelihood of dropout in psychological interventions saw a further decrease in the likelihood of dropout when considering only those trials with a low risk of attrition bias. These populations were veterans (three trials),^{64,78,121} childhood sexual abuse populations (four trials)^{92,98,131,140} and war-affected populations (two trials),¹⁴⁴ but none was statistically significant. In the case of veterans and childhood sexual abuse populations, the reduced odds of dropout were

TABLE 7 Odds ratios of attrition per population shown across all studies and across only those trials rated as being at a low risk of attrition bias

Population	OR (95% CI)	
	All studies	Low risk of attrition bias
All	0.56 (0.40 to 0.80)	0.39 (0.21 to 0.73)
Veterans	0.49 (0.26 to 0.92)	0.44 (0.06 to 3.54)
Childhood sexual abuse	0.24 (0.08 to 0.75)	0.18 (0.03 to 1.00)
Refugee	1.21 (0.69 to 2.12)	2.10 (0.62 to 7.14)
Domestic violence	Insufficient data	Insufficient data
War affected	0.66 (0.27 to 1.60)	0.11 (0.01 to 1.27)
Mixed	Insufficient data	Insufficient data

statistically significant when considering trials of all risk-of-bias gradings. Therefore, the lack of statistical significance is most likely explained by the reduced statistical power resulting from including only a subset of the data.

In refugee populations, the odds of dropout from psychological interventions were greater than from controls and increased when considering only those trials with a low risk of attrition bias (based on two trials);^{55,87} however, neither of the pooled ORs was statistically significant.

Adverse events for pharmacological interventions

All of the data relating to adverse events and pharmacological interventions were collated (Table 8). All reporting of further information regarding reasons for withdrawal and adverse events were from veteran populations. Withdrawal owing to adverse events was common across studies, but with relatively small numbers. Practical issues resulting in withdrawal were more frequently reported; there was insufficient detail to infer acceptability from this.

TABLE 8 Pharmacological intervention withdrawals and adverse events as reported

Intervention category	Authors (year), population	Reasons for withdrawal	Adverse events
Antidepressants (including SSRIs)	Becker <i>et al.</i> (2007), ⁵⁹ veterans	Bupropion and control overall: allergic reaction ($n = 1$), transportation difficulties ($n = 1$), no further interest ($n = 1$), lost to contact ($n = 2$)	Overall: allergic reaction ($n = 1$)
	Chung <i>et al.</i> (2004), ⁶⁷ veterans	Mirtazapine: lack of efficacy ($n = 3$), personal reasons ($n = 3$), side effects ($n = 1$) Sertraline: lack of efficacy ($n = 5$), personal reasons ($n = 1$)	NR
	Davis <i>et al.</i> (2004), ⁷³ veterans	Nefazodone: adverse effects ($n = 5$), medication ineffective ($n = 2$), lost to follow-up ($n = 4$), non-compliance ($n = 1$) Placebo: adverse effects ($n = 1$), medication ineffective ($n = 2$), lost to follow-up ($n = 1$), no reason given ($n = 2$)	Nefazodone: drowsiness, dizziness, agitation, gastrointestinal distress, fatigue, orthostatic hypotension, headaches Placebo: insomnia, irritability

TABLE 8 Pharmacological intervention withdrawals and adverse events as reported (continued)

Intervention category	Authors (year), population	Reasons for withdrawal	Adverse events
	Panahi <i>et al.</i> (2011), ¹¹⁸ veterans	Sertraline: adverse events (n = 2), protocol violation (n = 1) Placebo: adverse event (n = 1), protocol violation (n = 2), other (of own accord) (n = 2)	Sertraline: headache (31%), insomnia (31%), nausea (31%), restlessness (25%), diarrhoea (22%), dry mouth (19%), drowsiness (16%), asthenia (16%), decreased appetite (16%), constipation (16%), decreased libido (13%) Placebo: headache (20%), insomnia (13%), nausea (17%), restlessness (17%), diarrhoea (13%), dry mouth (17%), drowsiness (7%), asthenia (7%), decreased appetite (10%), constipation (10%), decreased libido (7%)
	Zohar <i>et al.</i> (2002), ¹⁴⁷ veterans	NR	Sertraline: nausea (35%), headache (26%), drowsiness (26%), asthenia (17%), increased appetite (13%), dry mouth (13%), decreased appetite (13%) Placebo: nausea (21%), headache (16%), drowsiness (16%), asthenia (15%), increased appetite (10%), dry mouth (10%), decreased appetite (5%)
Antipsychotics	Bartzokis <i>et al.</i> (2005), ⁵⁸ veterans	Risperidone: adverse effects (n = 11), unrelated medical condition (n = 1), alcohol abuse (n = 1), discontinuing medication (n = 1), lost to follow-up (n = 5) Placebo: adverse effects (n = 6), alcohol abuse (n = 1), lost to follow-up (n = 3)	NR
	Monnelly <i>et al.</i> (2003), ¹¹⁰ veterans	Risperidone: episode of urinary retention (n = 1)	Risperidone: mild adverse event (n = 4) Placebo: mild adverse event (n = 2), moderate adverse event (n = 1)
	Stein <i>et al.</i> (2002), ¹³⁵ veterans	Olanzapine: (early protocol terminations) somnolence (n = 2), unspecified (n = 1) Placebo: lack of efficacy (n = 1)	Olanzapine: weight gain change of +13.2 lb (SD 5.9 lb) Placebo: -3 lb (SD 6.5 lb)
Anticonvulsants	Davis <i>et al.</i> (2008), ⁷² veterans	Divalproex: adverse events (n = 3), serious but unrelated adverse event (n = 1), failure to return (n = 2), lost to follow-up (n = 4) Placebo: adverse event (n = 1), lack of efficacy (n = 1), lost to follow-up (n = 4)	NR
	Lindley <i>et al.</i> (2007), ¹⁰⁴ veterans	Topiramate: adverse events (n = 6), clinician withdrew because of adverse event (n = 2), significant worsening of symptoms (n = 1), left residential treatment (n = 1), discharged by clinical staff owing to behaviour (n = 1) Placebo: adverse event (n = 1), clinician withdrew because of adverse event (n = 1), left residential treatment (n = 12), discharged by clinical staff owing to behaviour (n = 1)	Topiramate: reported in 17 patients Placebo: reported in 16 patients

continued

TABLE 8 Pharmacological intervention withdrawals and adverse events as reported (continued)

Intervention category	Authors (year), population	Reasons for withdrawal	Adverse events
Prazosin	Raskind <i>et al.</i> (2013), ¹²³ veterans	Prazosin: adverse event ($n = 1$), opted for open-label prazosin ($n = 1$), too busy ($n = 1$), lost contact ($n = 1$) Placebo: opted for open-label prazosin ($n = 1$), too busy ($n = 2$), lost contact ($n = 3$)	Prazosin: hospitalisation for suicidal ideation ($n = 1$), suicide attempt with non-lethal overdose of oxycodone/acetaminophen ($n = 1$); syncope (3%), light-headedness (25%), nasal congestion (22%), palpitations (6%), drowsiness (3%), muscle weakness (3%), headaches (3%) Placebo: light-headedness (20%), nasal congestion (11%), lack of energy (3%), palpitations (3%), drowsiness (9%), depression (6%), headaches (23%)

SD, standard deviation.

Non-randomised studies of clinical effectiveness

Post-traumatic stress disorder symptoms

Six of the nine non-randomised studies reported PTSD outcomes.^{148-150,152,155,156} Effect sizes were calculated for four of these studies (representing five interventions), as they used inactive control comparators (Table 9).^{149,152,155,156}

TABLE 9 Non-randomised trial intervention characteristics and effects on PTSD outcomes

Authors (year)	Population	Intervention (category)	Control	Scale	Post-treatment effect, SMD (95% CI)	<i>n</i>
Kruse <i>et al.</i> (2009) ¹⁴⁹	Refugees	Trauma-focused psychotherapy (non-trauma-focused CBT)	Treatment as usual	HTQ	-2.54 (-3.21 to -1.88)	64
Morgan and Cummings (1999) ¹⁵²	Childhood sexual abuse	Group therapy (multicomponent trauma-focused intervention)	No intervention	DSM-III subscales	-0.18 (-0.62 to 0.26)	80
Salo <i>et al.</i> (2008) ¹⁵⁵	War affected	Individual therapy (trauma-focused CBT)	Waitlist	HTQ: re-experiencing	0.00 (-0.50 to 0.50)	95
				HTQ: avoidance	-1.22 (-1.75 to -0.69)	95
				HTQ: hyperarousal	-1.50 (-2.04 to -0.95)	95
				HTQ: re-experiencing	0.32 (-0.18 to 0.81)	96
				HTQ: avoidance	2.66 (2.04 to 3.28)	96
Saxe and Johnson (1999) ¹⁵⁶	Childhood sexual abuse	'Victim to survivor' group therapy (trauma-focused CBT)	No intervention	IES intrusion subscale	-0.09 (-0.58 to 0.41)	63
				IES avoidance subscale	-1.01 (-1.53 to -0.48)	63

HTQ, Harvard Trauma Questionnaire; IES, Impact of Events Scale.

Trauma-focused interventions

Two studies in trauma-focused CBT saw a significant reduction in PTSD avoidance symptoms.^{155,156} One study investigated 'victim to survivor' group therapy in a childhood sexual abuse population¹⁵⁶ (SMD -1.01, 95% CI -1.53 to -0.48; $n = 63$) and the other investigated individual therapy in a war-affected population¹⁵⁵ (SMD -1.22, 95% CI -1.75 to -0.69; $n = 95$). Individual therapy in a war-affected population also showed a large and significant effect in reducing PTSD hyperarousal symptoms (SMD -1.50, 95% CI -2.04 to -0.95; $n = 95$), but was equivalent to the waitlist at reducing PTSD re-experiencing symptoms.¹⁵⁵

One study examined a multicomponent trauma-focused intervention delivered in a group format to a childhood sexual abuse population.¹⁵² A small reduction in PTSD symptoms was found, but this was not significant.

Non-trauma-focused interventions

Non-trauma-focused CBT was investigated in one study in a refugee population and showed a large and significant effect favouring group intervention for reducing PTSD symptoms (SMD -2.54, 95% CI -3.21 to -1.88; $n = 64$).¹⁴⁹

Multicomponent non-trauma-focused therapy was investigated in just one study of war-affected individuals¹⁵⁵ and showed significant effects favouring controls for PTSD hyperarousal (SMD 0.74, 95% CI 0.24 to 1.25; $n = 96$) and avoidance symptoms (SMD 2.66, 95% CI 2.04 to 3.28; $n = 96$). A small, insignificant effect on PTSD re-experiencing symptoms also favoured the control group.

Head-to-head comparisons

Two^{148,150} of the non-randomised studies reporting PTSD outcomes were head-to-head comparisons conducted in veteran populations.

One comparison of trauma-focused CBT versus psychodynamic psychotherapy reported a significant reduction in PTSD symptoms (clinician- and patient-rated), with no significant difference between interventions.¹⁵⁰

A comparison of mindfulness-based cognitive therapy with a mixed comparator of active interventions reported a significant reduction in PTSD symptoms for those undergoing mindfulness-based cognitive therapy, but not the mixed comparator.¹⁴⁸

Depression

Five non-randomised studies^{150-153,156} reported depression outcomes. Of these, four studies^{150-152,156} used inactive comparators. Effect sizes were calculated for three studies (constituting four interventions); outcome reporting prohibited this for one study,¹⁵³ so it is described as published (*Table 10*).

Trauma-focused interventions

All studies for which SMDs were calculated were trauma-focused interventions, delivered in a group format, to childhood sexual abuse populations.

Two studies reported depression outcomes for three trauma-focused CBT interventions. In one study,¹⁵¹ a short-term therapy demonstrated an insignificant and small effect of increasing depression (compared with control); the same study found an insignificant and small effect of group therapy reducing depression. Another study¹⁵⁶ of trauma-focused CBT in group therapy showed a large and significant effect for decreasing depression symptoms on two scales: the Beck Depression Inventory (-1.53, 95% CI -2.09 to -0.97; $n = 63$) and the Center for Epidemiologic Studies Depression Scale (-1.19, 95% CI -1.73 to -0.65; $n = 63$).

TABLE 10 Non-randomised trial intervention characteristics and effects on depression outcomes

Authors (year)	Population	Intervention	Control	Scale	Post-treatment effect, SMD (95% CI)	n
Lundqvist <i>et al.</i> (2006) ¹⁵¹	Childhood sexual abuse	Group therapy (trauma-focused CBT)	Waitlist	SCL-90: depression	-0.31 (-1.00 to 0.38)	52
		Short-term therapy (trauma-focused CBT)		SCL-90: depression	0.11 (-0.66 to 0.89)	28
Morgan and Cummings (1999) ¹⁵²	Childhood sexual abuse	Group therapy (multicomponent trauma-focused intervention)	No intervention	BDI	-0.43 (-0.88 to 0.01)	80
Saxe and Johnson (1999) ¹⁵⁶	Childhood sexual abuse	'Victim to survivor' group therapy (trauma-focused CBT)	Waitlist	BDI	-1.53 (-2.09 to -0.97)	63
				CES-D	-1.19 (-1.73 to -0.65)	63

BDI, Beck Depression Inventory; CES-D, Center for Epidemiologic Studies Depression Scale; SCL-90, Symptom Checklist 90.

Based on one study,¹⁵² multicomponent trauma-focused group therapy was associated with a moderate treatment effect in favour of a reduction of depression and this was of borderline significance (SMD -0.43, 95% CI -0.88 to 0.01; $n = 80$).

In one study,¹⁵³ a SMD was not calculated owing to outcome reporting. This compared both EMDR and trauma-focused CBT with a control in a war-affected population. The reported results stated that both interventions significantly reduced depression symptoms with no significant difference between EMDR and CBT, suggesting effectiveness.

Head-to-head comparisons

One study¹⁵⁰ reported a direct comparison of trauma-focused CBT with psychodynamic therapy in veterans. A significant reduction in depression symptoms was reported following treatment, with equivalent effectiveness between therapies.

Anxiety

One¹⁵¹ of the nine non-randomised studies included in this review reported anxiety outcomes for two interventions. The findings are presented in *Table 11*.

TABLE 11 Non-randomised trial intervention characteristics and effects on anxiety outcomes

Authors (year)	Population	Intervention	Control	Scale	Post-treatment effect, SMD (95% CI)	n
Lundqvist <i>et al.</i> (2006) ¹⁵¹	Childhood sexual abuse	Group therapy (trauma-focused CBT)	Waitlist	SCL-90 anxiety	-0.16 (-0.85 to 0.53)	52
		Short-term therapy (trauma-focused CBT)		SCL-90 anxiety	0.16 (-0.62 to 0.93)	28

SCL-90, Symptom Checklist 90.

Trauma-focused interventions

Two trauma-focused CBT interventions were both compared with control in a childhood sexual abuse population.¹⁵¹ Group therapy was associated with a small reduction in anxiety symptoms, while short-term therapy was associated with a small increase compared with control. Neither finding was significant.

Quality of life

None of the non-randomised studies included reported quality-of-life outcomes.

Sleep quality

None of the non-randomised studies included reported sleep quality outcomes.

Attrition

Six^{148-151,155,156} of the non-randomised trials included reported attrition data for eight comparisons. All were compared with a control group, with the exception of one active control trial¹⁴⁸ and one head-to-head comparison.¹⁵⁰ ORs were calculated for all controlled trials and are presented in *Table 12*.

Only one trial,¹⁵⁵ investigating two interventions, reached significance. There was a reduced likelihood of dropout in both the trauma-focused CBT and the multicomponent non-trauma-focused intervention compared with control in a war-affected population.

Three trauma-focused CBT interventions in a childhood sexual abuse population had reduced odds of attrition among those receiving the intervention, but large CIs resulting in uncertain estimates.^{151,156} A non-trauma-focused CBT intervention in a refugee population showed increased odds of dropout among those receiving the intervention compared with those in the control; this finding also had wide CIs and was not significant.¹⁴⁹

TABLE 12 Odds ratios of attrition for each trial reporting data

Authors (year)	Trauma population	Intervention category vs. control	OR of attrition (95% CI)	n
Kruse <i>et al.</i> (2009) ¹⁴⁹	Refugees	Non-trauma-focused CBT	2.06 (0.19 to 23.83)	70
Lundqvist <i>et al.</i> (2006) ¹⁵¹	Childhood sexual abuse	(Group) trauma-focused CBT	0.58 (0.03 to 12.08)	55
		(Short-term) trauma-focused CBT	0.20 (0.01 to 4.01)	32
Salo <i>et al.</i> (2008) ¹⁵⁵	War affected	Trauma-focused CBT	0.02 (0.00 to 0.36)	106
		Multicomponent non-trauma-focused intervention	0.00 (0.00 to 0.08)	106
Saxe and Johnson (1999) ¹⁵⁶	Childhood sexual abuse	Trauma-focused CBT	0.51 (0.16 to 1.61)	108

Chapter 5 Results of the qualitative acceptability review

Studies included

In total, 1609 titles and abstracts were screened and 1560 were excluded. In addition, 49 full-text papers were screened and 41 were excluded, with the reasons summarised in *Figure 25*. We included nine papers, constituting eight unique studies, that were found to use qualitative methods or a mixed-methods approach with a strong qualitative component. Qualitative components included data collection using interviews (unstructured or semistructured) and focus groups, and the data were analysed following a qualitative methodology, with methods such as thematic analysis, ethnography or a phenomenological approach.

Of the studies selected for inclusion in the qualitative review, the majority were from North America ($n = 7$); two studies were performed in Canada but most of the research was performed in the USA ($n = 5$). The other studies were performed in Bangladesh ($n = 1$) and the UK ($n = 1$).

In terms of the types of trauma that participants were exposed to, four studies involved participants exposed to intimate partner violence,¹⁶¹⁻¹⁶⁴ of which two are linked.^{163,164} Two studies involved veterans,^{165,166} two studies involves participants exposed to childhood sexual abuse^{167,168} and one study involved asylum seekers.¹⁶⁹

The intervention classifications include group mindfulness-based stress reduction (MBSR; $n = 3$ ¹⁶³⁻¹⁶⁵), motivational interviewing ($n = 1$ ¹⁶²), prolonged exposure ($n = 1$ ¹⁶⁶), mental health counselling ($n = 1$ ¹⁶¹), group healing or group treatments ($n = 2$ ^{167,168}) and trauma-focused CBT ($n = 2$ ^{166,169}), which, in one case, was a combined treatment with prolonged exposure ($n = 1$ ¹⁶⁶). *Table 13* provides details of all of the studies included.

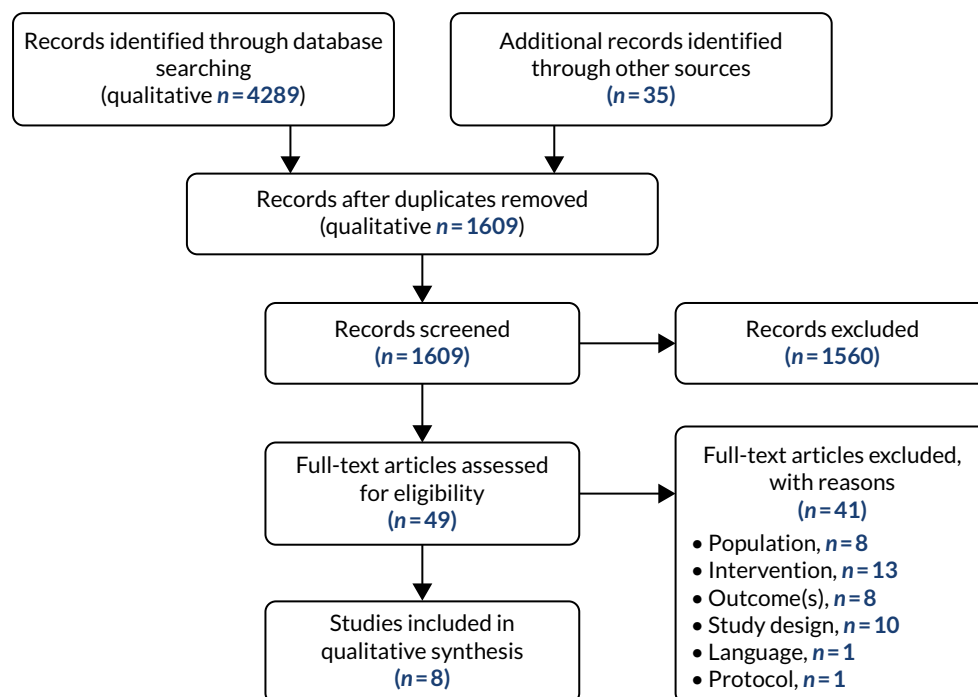


FIGURE 25 The PRISMA diagram of the flow of records through the review process.

TABLE 13 Risk-of-bias assessment of the qualitative studies included using the CASP tool

Research question	Authors (year)								
	Hundt <i>et al.</i> (2017) ¹⁶⁶	Martinez <i>et al.</i> (2015) ¹⁶⁵	^a Bermudez <i>et al.</i> (2013) ¹⁶³	^a Dutton <i>et al.</i> (2013) ¹⁶⁴	Hughes and Rasmussen (2010) ¹⁶²	Naved <i>et al.</i> (2009) ¹⁶¹	Palmer <i>et al.</i> (2007) ¹⁶⁷	Parker <i>et al.</i> (2007) ¹⁶⁸	Vincent <i>et al.</i> (2013) ¹⁶⁹
1. Was there a clear statement of the aims of the research?	Y	Y	Y	Y	Y	Y	Y	Y	Y
2. Was a qualitative methodology appropriate?	Y	Y	Y	Y	Y	Y	Y	Y	Y
3. Was the research design appropriate to address the aims of the research?	Y	Y	Y	Y	Y	C	Y	Y	Y
4. Was the recruitment strategy appropriate to the aims of the research?	Y	Y	Y	Y	N	N	C	Y	Y
5. Were the data collected in a way that addressed the research issue?	Y	Y	Y	Y	Y	Y	Y	Y	Y
6. Has the relationship between researcher and participants been adequately considered?	C	C	C	Y	Y	Y	Y	Y	C
7. Have ethical issues been taken into consideration?	Y	Y	Y	C	Y	Y	C	Y	Y
8. Was the data analysis sufficiently rigorous?	Y	Y	Y	Y	C	C	Y	Y	C
9. Is there a clear statement of findings?	Y	Y	Y	Y	Y	Y	Y	Y	Y
10. How valuable is the research?	Score 8.5	Score 8.5	Score 8.5	Score 8.5	Score 7.5	Score 7.5	Score 8.0	Score 9.0	Score 8.0

C, cannot say; N, no; Y, yes.
^a Linked studies.

Quality of the studies included: Critical Appraisal Skills Programme assessment

Methodological limitations were assessed with the CASP qualitative checklist to facilitate the assessment of both study design and implementation, as described in the GRADE-CERQual recommendations.⁵¹ The studies included were assessed for methodological limitations using a modified version of the CASP in which the individual elements for the quality assessment (see *Table 13* for the CASP checklist) were used in conjunction with a scoring system. A full score of 9.0 for the CASP assessment allowed a CERQual score of 'no concerns' as regards the methodological limitations of the studies included, as well as the relevance and coherence of data with regard to integration across the review themes.

The majority of the studies were allocated less than the maximum score of 9.0, as information was not clearly apparent in the methods of the paper. This contributed to a CERQual assessment of 'minimal concerns' for the integration of research findings for this review. When no score was given, the CERQual score was registered as 'significant concerns'; the only instance of this was attributed to selection bias for the participant selection, as many studies experienced difficulties in recruiting participants and, as such, studies enrolled a small number of participants or a convenience sample.

Table 13 presents the findings of the CASP assessment and the tables in *Appendix 9* provides additional information on the study details and their methodological assessments.

Narrative synthesis

All of the studies included offered in-depth accounts of service user experiences of psychological interventions either delivered in health- or social-care or settings or by voluntary agencies. Population subgroups included veterans, people with a history of childhood sexual abuse, people with a history of domestic violence and asylum seekers. Using acceptability and feasibility as organising meta-themes, we identified three core subthemes across these populations:

1. therapeutic context
2. skills strengthening
3. self-efficacy and reward.

Therapeutic context

Group-based therapies

This theme captured data that spoke to service users' perspectives on the merits of engaging in therapeutic interventions in groups and how feasibly these group-based approaches aligned with the therapeutic orientation and goals of the intervention. For non-trauma-focused interventions such as mindfulness, there was an understanding that delivering interventions in groups was potentially a safe and advantageous way to connect with others who have had similar traumatic experiences without fear of re-traumatisation. This was especially true of women with a history of domestic violence: 'Having had common traumas made it easy to relate to other participants. I was able to revisit traumatic situations without judgement.'¹⁶³

However, this perspective was not universally shared, with a contrary finding among veterans, whose overall perception of mindfulness was positive but was layered with misgivings about taking part in groups. For some participants, groups were less acceptable because their PTSD symptom profile made them feel 'uncomfortable in groups', with the risk that interactions with other group members were counterproductive to the therapeutic goals of achieving serenity and non-judgemental self-awareness: 'I had such issues with certain people and one of them couldn't sit still. I would turn around and he kept staring at me. I was not comfortable.'¹⁶⁵

Women with a history of childhood sexual abuse also voiced similar concerns about the negative impact of taking part in groups as part of more trauma-focused interventions:

[I] found it hard to break through the barriers that I'd already set up ... a lot of trust issues with the group ... I was still just breaking the ice ... about my sexuality ... I saved it right up to the very last day.
Palmer et al.¹⁶⁷

The idea that group approaches were not always an acceptable platform to engage people with complex trauma histories was also linked to concerns that group-based activities that focused on trauma experiences risked re-traumatising participants: 'I would come out of [the process groups] exhausted, even if I didn't say anything ... just listening to other people's stories was very draining.'¹⁶⁷

Scheduling and setting

Another key feature of the therapeutic context that underpinned perceptions about the acceptability and feasibility of interventions was that scheduling and the setting of treatments were important determinants of participants' satisfaction and engagement with therapy. Veterans that were signed up to mindfulness noted that scheduling could be a practical barrier to attendance.¹⁶⁵ More critically, among women with a history of domestic violence, there were widely voiced concerns that waiting times and the length of treatment sessions for counselling could increase the risk of further abuse at home if they returned late.¹⁶¹ This highlighted the importance of providing treatment in a safe and caring environment that offered participants sanctuary and the security to engage in treatment, as reported by women with a history of domestic violence who were given classes in motivational interviewing at a shelter: 'You deserve the caring, and you deserve to be treated well.'¹⁶²

The need for additional wraparound care to help facilitate engagement with treatment was especially salient among women exposed to domestic violence who had children and felt frustrated that their family needs were not often met:

I was takto [irritated/annoyed] ... I was annoyed that I left my child in the corridor. They took me to another room ... The child was crying.

Naved et al.¹⁶¹

Skills strengthening

Participants' ratings about the acceptability of interventions were also associated with the extent to which they perceived interventions as strengthening their personal and interpersonal skills. This was especially true among participants who had experience of non-trauma-focused interventions such as mindfulness and motivational interviewing. MBSR was particularly earmarked by women with a history of domestic violence as conferring opportunities to use newly acquired skills in self-compassion and self-awareness to regulate their emotions and manage their stress more effectively, because they 'felt they had learned how to quiet their minds'.^{163,164}

Beyond the recognition that non-trauma-focused interventions can bring about positive steps towards self-actualisation through personal development, there were also signals that treatment acceptability hinged on the broader impact on participants' interpersonal skills. Women with a history of domestic violence voiced how taking part in motivational interviewing had enabled them to more effectively engage in other treatment services. In addition, for some participants, these interpersonal benefits spilled over into the domestic sphere, positively affecting the way that they interacted with partners and underpinning a newly derived confidence to engage in family life:

My confidence has gone up a great deal ... Even though I came in self-confident in some areas of my life, I think that when it comes to specifically how I relate with my husband in that area, it's boosted it up completely. I think that I'm capable.

Hughes and Rasmussen¹⁶²

Self-efficacy and reward

Related to the notion that interventions were more acceptable if they led to strengthening of personal and interpersonal skills was the finding that participants tended to favour interventions that made intuitive sense, rewarded persistence and were demonstrably effective. In this sense, the more self-efficacious participants felt about fulfilling the requirement of treatment sessions, the more likely they were to persist with treatment; this bi-directional relationship was also reinforced by visible signs of recovery. Dropout and attrition were more common among participants who engaged in interventions that they struggled to identify with and master, with mindfulness being singled out by veterans, among the non-trauma-focused interventions, as challenging:

I just didn't get it. I was so stupid when I first went to it the last time. I didn't even realise what I was supposed to be doing . . . I felt ignorant and embarrassed so that's why I quit.

Martinez et al.¹⁶⁵

By contrast, although trauma-focused interventions such as prolonged exposure and cognitive processing therapy could initially lead to a worsening of symptoms, veteran participants recognised that it was likely to be ultimately effective and 'worth it'.¹⁶⁶

In part, participants' willingness to stay the course in trauma-focused treatment stemmed from a 'commitment to finish', born from a realisation that their time had come to 'turn things around', to paraphrase a male veteran, a theme that was voiced by other veterans engaged in cognitive processing therapy:

Yes, I did [consider dropping out] because I was avoiding having to write out my traumatic experience but I knew I had to do it . . . I can't keep burying my head in the sand.

Hundt et al.¹⁶⁶

For others, participation in trauma-focused work was made feasible only through engagement with a supportive therapist. In this context, a positive therapeutic alliance conferred the means to stay focused on treatment goals:

I loved [therapist name]; she was great and she was patient and she helped keep me focused . . . that made it a little bit easier to show up.

Hundt et al.¹⁶⁶

The tone of participants' ratings about trauma-focused interventions differed depending on their circumstances, with asylum seekers, who feared deportation, more likely push themselves to take up treatment on the grounds that it will be effective:

I used to force myself to do it just because I feel that it's going to help me.

Vincent et al.¹⁶⁹

Despite ongoing fears of repatriation and a sense of creeping fatalism among asylum seekers, there were participants whose ability to see signs of progress encouraged them to continue to push themselves to take up therapy:

. . . I started maybe feeling a bit of difference. That's when I used to force myself 'You have to go. No, be strong, go and they are helping you', so I end up going.

Vincent et al.¹⁶⁹

Summary

In summary, the acceptability of interventions was associated with how congruent they were with participants' therapeutic needs and social contexts, and the means by which the interventions were able to provide participants with opportunities to engage in personal and interpersonal improvement and confer demonstrable improvements. The feasibility of interventions hinged on more instrumental features, such as the scheduling and timing of treatment sessions.

Chapter 6 Patient and public involvement and the research prioritisation exercise

Although the overarching focus and framework of the current review was prespecified by the commissioned brief, we recognise that patient and public involvement (PPI) in systematic reviews is a critical means to ensure that the research process and products are more accessible, relevant and meaningfully used through active involvement of service users (known as 'experts by experience') and key stakeholders.¹⁷⁰ However, there is a broad range of conceptual models of service user involvement in systematic reviews, from one-off consultation to ongoing collaboration, and early engagement with potential contributors at a conceptual level is likely to shape the content and style of user involvement.¹⁷¹

Our strategy was informed by an understanding that knowledge mobilisation is a dynamic and interactive process that is reliant on forming equitable transactional relationships with patients, the public and stakeholders.¹⁷² Our user engagement strategy was informed by an understanding that experts by experience can bring critical insights and perspectives that can add value to contextualising the findings of our review and contribute to enhancing the reach of dissemination activities, especially in relation to setting future research priorities.

Aims

Our PPI strategy had three broad aims:

1. to consult with experts by experience about the focus and design of the review
2. to contribute to identifying research priorities
3. to contribute to dissemination of the findings of the review, including the research priorities.

Aim 1: consultation on the overall aims and design of the review

Methods

To identify people with a history of complex traumatic events, we approached The Retreat hospital, York, or service user groups that were known to us through our clinical experience of working in the field. We have not named the groups involved in this consultation exercise to protect the identity of the service users.

Participants

Ten people (six women and four men) who had used inpatient and secondary care mental health services, all with a history of complex trauma, took part in the focus groups. Trauma histories included childhood sexual abuse, sexual assault as adults, self-harm and domestic violence. Some had experienced homelessness and had been offenders; comorbidities and symptom profiles included drug and alcohol addictions, suicidality and dissociated identities. All of the service users identified were all currently using or had recently used NHS mental health services and/or third-sector mental health services. None of the subjects was approached within an NHS setting or directly through NHS services.

Research governance approval to contact and identify eligible service users who had been patients at The Retreat was granted on 31 July 2017 by Dr Mark McFetridge, Chairperson of the Clinical Governance Group at The Retreat, York.

Format and timing of focus groups

Interviewing people who are currently using mental health services or who are still acutely affected by their symptoms is difficult owing to the sometimes chaotic nature of engagement with services, as well as the sensitivity and care needed to avoid causing harm to these subjects. An expert by experience (the Involvement Lead at The Retreat) and a specialist trauma psychotherapist (IS) carried out the interviews so that the risk of re-traumatisation was minimised. Following the interviews, all of the subjects had access to mental health nursing staff or support workers with whom they had an existing relationship.

Four focus groups were conducted between May and July 2018. Where possible, focus groups were carried out at times when the service users were already planning to meet so that the researchers could align the focus groups with an existing structured timetable, thereby minimising disturbance to the service users' schedule.

Topic guide

A structured topic guide was used to ensure that each focus group addressed similar issues pertinent to the review process. Participants were given copies of lay summaries of the project protocol that specified and explained the criteria for the population, interventions, comparisons and outcomes used to determine inclusion within and exclusion from the eligible studies. In addition, participants were given lay summaries of the descriptive results of the effectiveness review that characterised the number of studies included, the types of populations included and the characteristics of the interventions included. The following questions and prompts were used to elicit responses about the aims and focus of the review, with a view to generating feedback about the scope of the current review and future research priorities:

1. Which populations should be included in the study?
 - Do you feel this is an accurate representation of populations with a history of trauma?
 - What other groups do you think should be included?
 - Do you think this is the right balance of studies on each population?

2. What types of therapies should be included in the review?
 - Is this an accurate representation of the therapies available for people with a history of trauma?
 - Do you know of any therapies for trauma that have not been included here?
 - Do you think this is a good balance of therapies included in the systematic review?
 - Are there any additional psychological interventions that should be included?
 - Do you think any of the therapies included to date require further research?

3. Which medicines should be included in the review?
 - What other types of medicine are prescribed to individuals with complex trauma?
 - What do you think about the balance of studies on each type of medication included in the systematic review?

Results

Theme 1: under- or over-representation of populations of interest

There were a number of responses that clustered around discussions of certain population groups exposed to complex trauma being either under- or over-represented in the review: 'It's important to include all populations to get the scale of it'.

In general, participants suggested that female populations were seen as under-represented within population groups that might typically be associated with males, such as veterans: '... it's strange; it's [the review] so male dominated because most domestic abuse happens to women'.

Respondents suggested that groups such as people in drug and alcohol services and those that foster children should be included. In addition, participants who had experienced treatment in inpatient settings suggested that studies that evaluated treatments among inpatients were under-represented and pointed to the complexity of their symptoms as indicative of the need for a broader formulation of what complex trauma is: '... people associate trauma with war, but PTSD is not the same as complex trauma' and '... it can be a fine line between stress and trauma'.

Theme 2: mind and body separation

Participants highlighted that the review was possibly focused on a narrow range of symptoms associated with mental health alone, with too little focus on understanding the impact of complex trauma on physical functioning: 'why does it just include psychological therapies? There is a mind-body separation here'.

This awareness of a mind-body separation was reflected by participants acknowledging that the therapies included in the review were prescriptive and manualised psychological interventions, with a focus on mental health symptom management rather than more humanistic and integrative therapies, such as transactional analysis and Gestalt, which look to overcome such mind-body dualism: '... are trauma-focused CBT and exposure therapies really integrative therapies? ... humanistic therapies should be added as a category of their own'.

Similarly, participants noted that there is also scope to learn more about the effectiveness of therapies that address the somatic impact of complex trauma, such as alternative and complimentary therapies such as yoga and kinesiology: '... lots of trauma relates to the body'.

There was also a sense that future research should address the effectiveness of therapies for people who had limited access to existing evidence-based treatments owing to learning difficulties and language barriers.

Theme 3: further work on pharmacological therapies

Fewer studies about pharmacological interventions have been included in the current review and service users' own experiences were predominantly drawn from their experience of psychological interventions. However, there was an awareness that, in the current review, many of the studies that evaluated the effectiveness of medications were focused on medications used for severe and enduring mental health problems (such as personality disorder rather than PTSD) and it was not clear if there was sufficient understanding about the role of a broader range of medications in managing symptoms across the complex trauma experience.

Aims 2 and 3: setting research priorities and disseminating findings

Process

A stakeholder research prioritisation day was held on 9 July 2018 to present preliminary quantitative and qualitative findings. The goal was to identify research priorities and co-produce with stakeholders a ranked list of future research questions. Attendees were practitioners with interest and experience in complex trauma, voluntary and third-sector providers of services to people affected by complex trauma, and experts by experience.

The team from Beyond The Room (<http://beyondtheroom.net/>) facilitated online voting and online public engagement via social media. A Twitter account was set up (@UoY_INCiTE) and a hashtag for the project (#INCiTEstudy) was also active throughout the day, alongside the Beyond The Room social media account, to disseminate information being shared at the event and to invite non-participants on the day to engage in the voting.

Future research priorities were co-produced in a workshop format, following the presentation of results. Three break-out groups discussed their perspectives on the range of evidence presented and identified important unanswered questions. The role of the review team was to help facilitate development of research questions and offer guidance about appropriate methodologies that could be feasibly used to address the questions identified within the groups.

Research priorities were then collated online using MentiMeter (www.mentimeter.com), an online voting platform provided by the Beyond The Room team. This platform enabled online voting among participants in the room but also facilitated wider engagement with voting on research priorities from those not present but following the discussions on the INCiTE Twitter account. Each participant was awarded 100 points to allocate to the long-list of research questions.

Participants were encouraged to promote further engagement in the voting exercise by advertising the voting link with interested people in their networks. Voting was open for 1 week following the event and closed on 16 July 2018.

Results

On the day, there were 16 attendees (plus the review team) who were from:

- The Retreat, York
- Tees, Esk and Wear Valleys NHS Foundation Trust, Darlington
- Combat Stress, Surrey
- Home-Start, York
- IDAS (Independent Domestic Abuse Services), York
- University of Manchester, Manchester
- University of York, York.

The research priorities developed during the prioritisation event are listed in *Table 14*. A total of 68 people took part in the online vote. The proportional share of points awarded to each priority is also shown.

A majority of the points were awarded to just 4 of the 13 research priorities, accumulating over 10% each. A definitive trial of the effectiveness of interventions with a long-term follow-up and a peer researcher exercise to understand the lived experience of people with experience of complex trauma were the two most favoured priorities, with both having a similar percentage of vote share.

TABLE 14 Research priorities developed from research prioritisation exercise attendees and the share of the online vote

Research priority	Vote share (%)
Conduct a definitive trial of the effectiveness of interventions in complex trauma, with long-term follow-up (e.g. 24 months)	15.91
Understand the lived experience of people with experience of complex traumatic events: a peer researcher exercise	14.80
Conduct a qualitative study exploring the patient perspective on key outcomes, preferred therapies, acceptability and delivery format of interventions (e.g. group or individual)	12.48
Develop holistic and biopsychosocial assessment, prioritising a mind-body approach	10.46
Understand what the core outcomes for patients, families and health-care providers are (e.g. appropriate outcome domains and measures, including adverse outcomes)	7.55
Understand how best you engage populations with experience of complex traumatic events	6.43
Understand what the key outcomes that should be included in trials are	6.28
What are the key components of an effective multicomponent intervention? (e.g. support in engaging in work, debt management)	5.83
Test the feasibility of social prescribing for wraparound care for people with complex traumatic experiences	5.68
Understand what the core components and domains of interventions and integrated approaches are (e.g. individual vs. group plus individual therapy)	4.71
Understand how we can define good practice. Use a Delphi survey to capture perspectives on positive recovery stories and barriers to and facilitators of retaining patients in care	3.74
Understand how we best taper off psychological interventions	3.14
Understand what the optimal duration of treatment is	2.99

Chapter 7 Discussion

Summary of results across all populations with complex trauma for post-traumatic stress disorder

We included 104 studies in the effectiveness review and reported 37 comparisons using meta-analysis across 79 RCTs. There were a total of nine non-RCTs that included five comparisons for PTSD, four comparisons for depression and two comparisons for anxiety. The number of non-RCTs included in the review was much lower than anticipated and we identified a greater volume of trial evidence than was anticipated. This may have been because we adopted a strategy that favoured including studies based on trauma exposure rather than diagnostic criteria and thereby we were able to identify a much broader range of studies pertaining to complex trauma. However, the merit of including data from non-RCTs was diminished by the fact that these studies rarely reported the same intervention types or outcomes, making meta-analyses less possible. Overall, the quality of the available evidence was unclear, with the lowest risk observed in domains related to detection bias, random sequence generation and other risks of bias and the highest risk of bias observed in performance bias and attrition domains. The majority of studies were at high risk of performance bias, partially explained by the predominance of psychological interventions included in the review and the challenges of blinding their delivery. When pooled across all populations with complex trauma, psychological interventions were proven to be effective at reducing PTSD symptoms when compared with control post treatment. There was less evidence that this finding held when treatment effects were measured up to 6 months post treatment, with only trauma-focused CBT and single-component trauma-focused interventions showing positive effects over the longer term. There was no significant difference in the effectiveness of psychological interventions for PTSD symptoms when compared with active controls.

The bulk of the evidence across all populations for reducing PTSD symptoms favoured trauma-focused CBT when compared with control post treatment and at follow-up after up to 6 months. There was no evidence of the effectiveness of trauma-focused CBT versus active controls and this is a weakness of the set of trials analysed. IPT and EMDR were also superior to control post treatment but there was less evidence that mindfulness improves PTSD symptoms in the presence of complex trauma. Non-trauma-focused CBT was not effective at any time point. These findings were reflected in the meta-analysis that showed that single-component and trauma-focused interventions were more effective than control post treatment and at follow-up and outperformed multicomponent and trauma-focused interventions post treatment. Collectively, single-component non-trauma-focused interventions that included approaches beyond CBT were effective post treatment, but these approaches were the least best option for managing PTSD symptoms across all populations.

Few studies addressed the symptom cluster associated with CPTSD and, of those that did, the majority focused on emotional dysregulation. We found no evidence that either trauma- or non-trauma-focused psychological interventions were superior to control in improving emotional dysregulation or interpersonal problems post treatment. By contrast, psychological interventions post treatment were associated with large and positive effect sizes for improving negative self-concept, with multicomponent trauma-focused interventions outperforming all other approaches. There was some evidence that phase-based approaches that allow for stabilisation work to be done before exposure to trauma-focused interventions are the most promising candidate intervention for managing emotional dysregulation and interpersonal problems, although the superiority of these approaches over control was not statistically significant.

Summary of results for psychological interventions across populations for depression and anxiety

Collectively, psychological interventions were shown to be superior to control, but not to active control, both post treatment and at follow-up for managing associated symptoms of depression in all populations with complex trauma. There was strong evidence that trauma-focused CBT post treatment was a highly effective treatment for managing depression in people exposed to complex trauma, but there was less evidence that these effects are present at 6 months' follow-up. IPT and EMDR were similarly associated with large treatment effects for reducing depression when compared with control, but not active control, post treatment, but evidence in favour of these approaches was thin. Mindfulness was also superior to control post treatment; it was also effective at 6 months' follow-up, but evidence for this finding is inconclusive. While single-component non-trauma-focused interventions that included mindfulness-based approaches were effective in reducing depression symptoms post treatment, the most consistent and largest effects for depression post treatment and at 6 months' follow-up were observed in trials that tested single-component and trauma-focused interventions.

A similar set of results were returned in the meta-analyses that assessed the effectiveness of psychological interventions across all populations for reducing associated symptoms of anxiety. All analyses for this outcome were conducted post treatment. Trauma-focused CBT emerged as a leading candidate intervention for reducing anxiety symptoms in the presence of any type of complex trauma, with interventions associated with medium to large effect sizes. The largest effects were observed in trials that compared EMDR with control, albeit this finding was based on relatively few trials. In summary, trauma-focused approaches, when delivered as either a single-component or a multicomponent intervention, were superior to control for anxiety symptoms when effects were pooled across all populations.

We found no evidence that psychological interventions in general, and trauma-focused CBT in particular, were effective in improving quality of life across all populations. There was a modest amount of evidence in favour of trauma-focused CBT for managing sleep problems when results were pooled across all populations.

Summary of population subgroup analyses

Veterans

Among veterans, psychological trauma-focused CBT and EMDR emerged as the most effective individual psychological interventions for reducing PTSD symptoms post treatment. There was little evidence to show that mindfulness was an effective therapeutic strategy in this group and, overall, single-component non-trauma-focused interventions were not superior to control either post treatment or at follow-up. Multicomponent and trauma-focused interventions were the most effective approaches among veterans for managing PTSD symptoms.

Psychological interventions, in general, are effective for managing depression in veterans exposed to complex trauma. When effects were pooled across all interventions, the SMD post treatment represented a medium and positive effect in favour of reducing depression, but this effect was about half the size observed in the analysis across any type of trauma exposure. The most effective interventions for depression among veterans were trauma-focused CBT and EMDR, and these positive and large effects held when trauma-focused interventions were delivered as either a single-component or a multicomponent approach. Limited evidence from non-RCTs suggested that trauma-focused CBT and psychodynamic therapy had equivalent positive effects for depression in veterans. The least effective but still positive approaches for depression in veterans were mindfulness and single-component non-trauma-focused interventions, which yielded moderate treatment effects.

Similarly, psychological interventions were, on the whole, effective at reducing associated anxiety symptoms in veterans exposed to complex trauma post treatment. There was less evidence to draw on by comparison with studies that measured depression. However, EMDR and trauma-focused CBT were

superior to control post treatment and were associated with large and positive effects in favour of reducing anxiety.

Childhood sexual abuse

People exposed to childhood sexual abuse formed the next largest complex trauma subgroup. We showed that psychological interventions overall were associated with large and positive treatment effects for reducing PTSD in this subgroup post treatment only. As was the case with veterans, individual trauma-focused CBT was the most effective individual treatment for PTSD in people exposed to childhood sexual abuse. In addition, evidence gleaned from the non-RCTs showed that trauma-focused CBT was superior to control in reducing PTSD avoidance symptoms, suggesting that this approach was among the most effective in this group. Moreover, while single-component and trauma-focused interventions were collectively superior to control post treatment, it is clear that larger and positive effects were observed in trials that tested multicomponent and trauma-focused interventions in the childhood sexual abuse subgroup.

A similar pattern emerged for associated depression symptoms in this subgroup. When pooled together, psychological interventions in general were associated with large and positive effects for reducing depression post treatment; there was only modest evidence that these effects were positive at follow-up. Individual trauma-focused CBT and, collectively, single-component and trauma-focused interventions were superior to control for reducing depression post treatment. Consistent with the findings for veterans, the single-component and non-trauma-focused interventions were also superior to control post treatment for depression. Furthermore, the largest treatment effects for depression symptoms observed in the childhood sexual abuse subgroup were associated with multicomponent and trauma-focused interventions. With veteran and childhood sexual abuse being prototypical exposures for CPTSD, it might be that, among these populations, PTSD and associated depression symptoms are more effectively managed with multicomponent approaches that also include non-trauma-focused work. There was, however, no strong evidence in any direction for which types of psychological interventions might be most effective for reducing anxiety symptoms in this subgroup.

War-affected populations

War-affected populations comprised the next largest subgroup. All analyses in this subgroup were conducted post treatment. Although psychological interventions of any type were superior to control for PTSD symptoms, the sizes of the SMDs were small in comparison with all other subgroups except for veterans. Individual trauma-focused CBT interventions were the most efficacious for reducing PTSD symptoms in war-affected populations. In addition, evidence gleaned from the non-RCTs showed that trauma-focused CBT was superior to control in reducing PTSD avoidance symptoms, suggesting that this approach was among the most effective in this group. Single-component and trauma-focused interventions were marginally more effective than multicomponent and trauma-focused interventions, but both approaches yielded medium and positive treatment effects in favour of reducing PTSD symptoms. Evidence from non-RCTs suggested that multicomponent interventions were in fact inferior to control for PTSD symptoms, but this finding was not endorsed by the meta-analyses of trials.

Comparable medium and positive treatment effects were observed for individual trauma-focused CBT in this subgroup for associated depression symptoms. Single-component, but not multicomponent, trauma-focused interventions were superior to control post treatment for depression symptoms. There was less evidence to judge the effectiveness of psychological interventions for anxiety symptoms in war-affected populations. Individual trauma-focused CBT was the only class of intervention associated with significant and positive effects in favour of reducing anxiety.

Refugees

Few meta-analyses were possible among studies that included refugees. Any psychological intervention was vastly superior to control post treatment and also at follow-up for PTSD symptoms in refugees. In keeping with a recent review of treatments in refugees and asylum seekers,¹⁷³ we found that very

large and positive treatment effects for PTSD were observed in studies that compared trauma-focused CBT and EMDR with control post treatment, but these effects were not sustained at follow-up. A similar picture was shown when psychological interventions were compared with control for associated depression symptoms: trauma-focused CBT and EMDR emerged as being better than control post treatment, but these findings were based on scarce evidence and it is not possible to judge if these effects are maintained at follow-up. Based on limited evidence from non-RCTs, it is possible that non-trauma-focused interventions could be effective for PTSD in refugees, but this finding was not observed in the meta-analyses of the trials. There was insufficient evidence to determine if psychological interventions were effective for anxiety symptoms in refugees.

Domestic violence

There was very limited evidence to draw on to make firm conclusions about the effectiveness of psychological interventions in the subgroup of trials that included people exposed to domestic violence. Individual trauma-focused CBT was associated with very large and positive effects in favour of reducing PTSD and associated depression symptoms in this subgroup post treatment only. However, these findings were associated with high levels of uncertainty and based on few studies of variable quality.

Summary of results of pharmacological interventions

The pooled results for pharmacological interventions in veterans showed that only antipsychotic medication was effective in reducing PTSD symptoms post treatment. The SMD for antipsychotics was equivalent to that observed in a comparable analysis in veterans that compared psychological interventions as a whole with control, but less than half the size of that observed in the analysis that compared multicomponent and trauma-focused interventions with control. There was also a small amount of evidence to signal that blood pressure medicine (prazosin) can reduce PTSD symptoms in veterans. Curiously, in veterans, antipsychotic medication was not effective in reducing symptoms of psychosis.

These findings might suggest that, in veterans at least, pharmacological interventions alone are not as effective as using multicomponent and trauma-focused interventions for PTSD symptoms. Moreover, additional strategies might be warranted to more effectively manage symptoms of psychosis in veterans in the presence of complex trauma.

Heterogeneity

The I^2 statistic and chi-squared tests for the pooled results across all populations demonstrated substantial and significant heterogeneity at the 0.10 level for all classes of psychological interventions for PTSD symptoms. A similar picture was seen in the forest plots for the pooled results across all populations for associated symptoms of depression and anxiety. Although this might be mainly attributed to clinical diversity among the populations, it is also known that there is a link between meta-analysis size and heterogeneity levels and the high levels detected in our review might also thus be a function of the size of the review.

We explored these high levels of heterogeneity by undertaking subgroup analyses of the effectiveness of interventions by population. For the primary outcome, the pooled results for psychological interventions as a whole were associated with much less heterogeneity in the veteran and war-affected subgroups, with I^2 results (between 42 and 50%) suggesting lower levels of between-study variability, but chi-squared results were still significant suggesting inconsistency between study results.

However, the pooled results for PTSD symptoms by intervention type among the veteran and war-affected subgroups returned considerably lower levels of heterogeneity. It might be that subgrouping by population and then by intervention appears to explain much of the heterogeneity in veteran and war-affected groups but not in others (e.g. childhood sexual abuse groups). This trend was not duplicated in the childhood

sexual abuse subgroup, in which the pooled results across all psychological interventions and for specific classes of psychological interventions were still associated with high and significant levels of heterogeneity, making it more difficult to be confident about the true size and direction of effects in this subgroup. There was negligible and non-significant levels of heterogeneity for the pooled results for PTSD for all and any class of psychological intervention in the refugee and domestic violence subgroups. We might suggest that the lower and nil levels of heterogeneity returned in the subgroup analyses can partly be explained by less clinical variability and fewer trials within each subgroup. However, it is worth noting that, among the veteran, war-affected and childhood sexual abuse subgroups, heterogeneity was still more apparent in the pooled results that compared composite intervention categories with control. This was especially true for the pooled results that compared multicomponent and trauma-focused interventions with control and it might be that, in these analyses, heterogeneity was partly driven by variability among intervention components as well as by any residual clinical diversity.

In addition, we can conclude on the basis of the meta-regression results that population type partly moderated the effectiveness of psychological interventions for PTSD symptoms, with interventions doing less well in veterans and war-affected populations and significantly better in those exposed to domestic violence. In this sense, clinical diversity accounted for a modest amount of the heterogeneity observed in the pooled results across all populations, but there was still significant levels of residual heterogeneity that remained unexplained. Similarly, while the meta-regression was able to model the moderating effects of intervention content on the effectiveness for PTSD symptoms, results were fairly inconclusive, with the multivariable model that included only imaginal exposure and psychoeducation accounting for a fraction of heterogeneity and between-study inconsistencies.

Component network meta-analysis

We further explored the treatment effects of different components of the composite complex interventions included by using component network meta-analysis. The results of the component network meta-analysis showed that the components of standard trauma-focused CBT – cognitive restructuring, imaginal exposure and relaxation – appear to be effective for PTSD symptoms. This is consistent with the results of the population subgroup analyses. There were strong interaction effects between relaxation, cognitive restructuring and imaginal exposure in part because most of these components were used together.

Mindfulness was treated as a component and, in that sense, it was an approach identified in studies that primarily tested a mindfulness intervention as well as in studies in which mindfulness was a component of a broader CBT intervention. However, there were limitations to categorising mindfulness interventions owing to the variability of reporting, especially when mindfulness was but one of several components as part of a broader CBT package. There is scope here for future work to tease apart differences in the effectiveness of mindfulness when delivered as a stand-alone therapy and mindfulness as part of a composite psychological intervention.

The analyses of phase-based approaches presented even greater challenges. The phase-based approaches included in this review comprised combinations of multicomponent trauma-focused CBT, DBT, EMDR and IPT. Pragmatically, these approaches were categorised for the network meta-analysis in terms of the components included, for example imaginal exposure or mindfulness. However, we also coded these interventions as phased based if the components were phased in such a way that allowed for stabilisation before working on the trauma. It is unclear if the phasing itself constitutes an intervention or if it is a higher order theoretical construct, but phasing of these components, as well as the intervention content, appears to be one of the factors having an impact on effectiveness. There is a need for future work on phase-based approaches to reach a consensus on how phasing is conceptualised in the presence of composite interventions.

Attrition

Across all populations, trauma-focused CBT was associated with reduced odds of attrition compared with control. There was less evidence to draw firm conclusions about the attrition rate for other interventions, although there was some suggestion that across all populations EMDR incurred a greater attrition rate than control. When attrition was analysed across population subgroups, we found that veterans who received any type of psychological intervention were half as likely to drop out than those on a waitlist or in the active control. In studies that tested psychological interventions in people exposed to childhood sexual abuse, the attrition rate for any psychological intervention was one-quarter of that observed in the control groups. There was a mixed picture among studies that included refugees, with some evidence that there were greater rates of attrition among those given a psychological intervention than in the control, suggesting that it is a challenge for displaced populations to adhere to psychological treatment protocols. Why this might be is not clear and future work could focus on the acceptability and feasibility of psychological interventions in this group. There was insufficient evidence to determine the odds of attrition in war-affected and domestic abuse populations.

Acceptability and feasibility of interventions: qualitative findings

The narrative synthesis of the subset of qualitative studies identified three core themes related to patient ratings about the acceptability and feasibility of interventions: therapeutic context, skills strengthening, and self-efficacy and reward. These themes cut across patient perceptions about both trauma- and non-trauma-focused therapies. Specifically, where and how interventions were delivered were seen to be important factors that determined acceptability and feasibility. Group delivery could be advantageous in some contexts, for example for the delivery of non-trauma-focused interventions such as mindfulness, but there were risks of vicarious re-traumatisation for those attending group-based therapies with a focus on trauma reprocessing. Perceptions about the acceptability of different therapeutic approaches were split between instrumental perceptions about the capacity for interventions to confer life skills and perceptions about how likely interventions were to aid symptomatic recovery. For those primarily engaged with non-trauma-focused interventions, there was a sense of these approaches equipping them with practical skills that made using other health- and social-care services more feasible. By contrast, among those who had experience of trauma-focused interventions, their willingness to persist with treatment was linked with their belief that they were going to feel better and the emergence of vital signs that were indeed feeling better.

Comparison with other reviews and guidance

We have shown that existing psychological treatments for PTSD are effective for people with a history of complex traumatic events. The strongest evidence was in favour of trauma-focused therapies such as trauma-focused CBT and EMDR delivered either as stand-alone therapies or as part of single-component and trauma-focused interventions. This finding mirrors that of a Cochrane review for psychological therapies for the treatment of chronic PTSD and is consistent with the NICE guideline that recommends the use of trauma-focused psychological treatment for PTSD for ≥ 3 months.^{20,174} While there was less good evidence in favour of non-trauma-focused interventions, we did show that IPT and mindfulness were effective, to varying degrees, across all populations for PTSD symptoms and to a lesser extent for depression too. This breaks with the NICE guideline, which suggests that non-trauma-focused interventions should not be routinely offered to people with chronic PTSD for > 3 months. We were not able to identify sufficient evidence about adverse events associated with psychological treatments to make judgements about the safety of these approaches in people with complex trauma. However, we showed that dropout was lower in people offered psychological interventions and this might suggest that existing trauma-focused interventions are at least acceptable and feasible, as well as effective, in the presence of complex trauma.

Consistent with the International Society for Traumatic Stress Studies (ISTSS) expert consensus guidelines for CPTSD, we also showed that phase-based interventions that drew on a variety of trauma-focused (CBT, EMDR) and non-trauma-focused (DBT, IPT) approaches and included stabilisation and skills strengthening were effective across all populations for PTSD symptoms.¹⁷⁵ However, unlike the ISTSS expert guidelines, our review includes only evidence from RCTs and we were able to also show that phasing of interventions moderated effectiveness, making our findings more robust and trustworthy.

Current NICE guidance suggests that, when several problems need to be addressed, especially in the presence of multiple traumatic events or when presented with comorbid problems, trauma-focused interventions should perhaps be extended and wrapped around a broader care plan. However, we showed that unmodified and existing trauma-focused treatments delivered individually or as part of multicomponent packages were also shown to be effective for managing associated symptoms of depression and anxiety in people exposed to complex trauma.

Although the underlying findings from the pooled results across all complex trauma populations show that trauma-focused interventions are effective for PTSD and associated mental disorder comorbidities, the effects were less pronounced in veterans and war-affected populations. A recent rapid review of service provision for UK armed forces veterans with PTSD included a meta-review of seven systematic reviews and concluded that there was limited and low-quality evidence in favour of EMDR, cognitive processing therapy, trauma-focused CBT and exposure-based therapies for PTSD symptoms and depression.¹⁷⁶ In addition, this rapid review also found evidence in favour of a broad range of pharmacotherapies for PTSD and depression in veterans. Previous reviews have shown that SSRIs are superior to placebo for PTSD in a wide range of populations with PTSD, including those exposed to combat trauma.¹⁷⁷ By contrast, our findings showed that only antipsychotics were effective for reducing PTSD symptoms in veterans, suggesting that pharmacotherapy might not be a candidate for first-line therapy in the presence of complex trauma.

Although adjacent to and in some senses part of the same broader class of people affected by humanitarian crises, we undertook separate subgroup analyses of war-affected populations and of refugees. Among the war-affected populations, we showed that trauma-focused CBT was effective for reducing PTSD but there was little support for other approaches. Similarly, Purgato *et al.*¹⁷⁸ have shown in a Cochrane review that psychological therapies, many with a trauma focus, are effective at reducing PTSD among people affected by humanitarian crises. The pooled treatment effect for PTSD identified by Purgato *et al.*¹⁷⁸ was twice that identified in our review and this might be accounted for by their exclusive focus on low- to middle-income countries and the inclusion of studies of children and adolescents. Our findings and those of Purgato *et al.*¹⁷⁸ were very similar, however, when assessing the impact of psychological interventions on depression and anxiety in adults alone.

Dorrepaal *et al.*¹⁷⁹ have previously shown that trauma-focused therapies, especially those that include exposure, can benefit people with a history of childhood sexual abuse. Of note in our review was that single-component and non-trauma-focused interventions were the most effective for associated depression symptoms among childhood sexual abuse populations, suggesting that different combinations of therapies that include non-trauma- as well as trauma-focused approaches might be warranted in this population.

Among refugees and asylum seekers resettled in high-income countries, manualised and brief narrative exposure therapies based on CBT have been shown to be effective for PTSD symptoms.¹⁸⁰ There is a strong argument that treatment provision for conflict-affected and displaced populations should be provided as part of multiagency care and extend beyond PTSD symptoms.¹⁸¹ In the absence of such integrated and multiagency care, our review at least confirms that trauma-focused interventions are superior to control for PTSD and can also be effective for depression too.

A review based on 21 studies (11 of which measured PTSD) showed that brief psychological interventions that are tailored to meet the additional needs of people exposed to intimate partner domestic violence are effective for PTSD, depression, increased self-esteem and functioning.¹⁸² The most effective classes of interventions were CBT and IPT. Our findings partially concur, but are based on a very narrow and limited data set drawn from few studies. In the light of the thin evidence base, there is a consensus that further well-designed and controlled studies of the effectiveness of interventions for survivors of intimate partner violence are needed, especially with a focus on how setting moderates effectiveness.

There was a less clear picture about the effectiveness of treatments for the CPTSD symptom cluster. Conventional stand-alone trauma-focused interventions were not effective in treating emotional dysregulation or interpersonal problems, but did have a positive impact on negative self-concept. In keeping with the ISTSS expert consensus guidelines for CPTSD, we identified phase-based approaches as a leading candidate intervention for managing emotional dysregulation, although the evidence was based on only three trials and the result was of borderline significance. More robust evidence was gleaned from the component network meta-analysis, which identified phasing as a key moderating component of the effectiveness of both trauma- and non-trauma-focused interventions.

Taken together, the fact that trauma-focused interventions do less well in certain populations with complex trauma, and only have a modest impact on disturbances of self-organisation, suggests that our review findings endorse the current diagnostic distinction between CPTSD and PTSD. This is an important argument that has implications for research and practice. We explicitly eschewed a diagnostic approach to the inclusion of studies in this review, but, nonetheless, we would suggest that our findings converge with comparable reviews that have opted to use the new ICD-11 diagnostic CPTSD category as an organising feature of their inclusion criteria.¹⁸³ Accordingly, because CPTSD exerts symptoms over and above PTSD extending to disturbances of self-organisation, there is merit in exploring ways to harness existing trauma- and non-trauma-focused interventions more effectively, with phase-based interventions among the leading candidate approaches.

Strengths and limitations

Our review has a number of strengths that enhance the robustness of the findings. By taking a non-diagnostic approach, we were able to develop and operationalise broad inclusion criteria for the population of interest based on exposure to traumatic events that could be defined as complex using the ICD-11 criteria for CPTSD, but which need not have been diagnosed as CPTSD. In doing so, our search was not tied to a narrowly defined group of studies that exclusively evaluated interventions in populations with the as yet untested diagnostic label of CPTSD, but rather captured a broader set of studies salient to more complex trauma rather than a single event and not of an interpersonal nature. In addition, our approach conferred a level of scientific independence from the clinical community actively involved in research in CPTSD and, as such, we feel confident that the process of screening and inclusion was as free from bias as possible. However, to ensure that our review linked with but did not duplicate other ongoing evidence syntheses in the field, we convened a study advisory group that included content and clinical experts in chronic PTSD and CPTSD. The advisory group offered indispensable advice about how to ensure that our review retained an independent identity outside existing evidence syntheses on CPTSD, provided scientific scrutiny about the process of the review, and supported and enabled dissemination activities within the broader trauma studies community.

Our broad approach also extended to including both randomised and non-randomised evaluations of psychological interventions, evaluations of pharmacological interventions and qualitative evaluations of acceptability of interventions, making this review the largest and most comprehensive assessment of treatment effectiveness and acceptability of interventions in complex trauma. This approach was facilitated by conducting an extensive search across key electronic databases, as well as searching

specialist fee-for-service libraries and hand searching existing systematic reviews. Although we did not double screen all titles and abstracts, we did run a pilot screening exercise whereby members of the research team double screened a sample of abstracts and titles to familiarise themselves with the PICO. At the title and abstract screening phase, all uncertain decisions were resolved by a consensus meeting, thus minimising the risk of excluding relevant studies.

Additional strengths of the review include the application of robust and innovative approaches to understanding treatment effectiveness and moderators of effectiveness. We not only completed a broad range of meta-analyses, including subgroup analyses by population, but also explored moderators using multivariable meta-regression. By searching extensively and adopting a broad approach to inclusion, we were able to assemble a much larger data set than in previous reviews, enhancing our ability to quantify and explore heterogeneity with a greater level of statistical power and reducing the chance of spurious findings.¹⁸⁴ Many of the meta-analyses exhibited high levels of estimated heterogeneity, but this is a positive finding, as it appears that heterogeneity levels are being consistently underestimated in meta-analyses.¹⁸⁵ Because there is a link between meta-analysis size and heterogeneity levels, we anticipated that we might detect high levels given the size of our review, but the large between-study variability suggests that there might be other study- or patient-level variables that could explain some of it. Individual patient data meta-analysis is likely to confer considerable advantages to accounting for such residual heterogeneity associated with patient-level characteristics.

We were not able to fully undertake all planned PPI activities as specified in the protocol. Specifically, we were unable to recruit service users with experience of complex trauma to join the study advisory group. Our initial plan was to use The Retreat hospital in York to identify eligible candidates for the advisory group, but the length of time that elapsed between applying for and securing research governance permissions meant that opportunities to do this were prohibitively curtailed. However, during this down time, we worked with the Involvement Lead and Iram Shah from The Retreat to offer experts by experience from a voluntary organisation run by service users for people affected by mental health problems to contribute to a series of telephone and face-to-face focus groups. These groups, in lieu of lay membership of the advisory group, contributed critical thinking about the focus of our review and generated data that informed the scope of the research prioritisation exercise. In addition, via our network with the Tees, Esk and Wear Valleys NHS Foundation Trust, we invited service users by experience (as well as key stakeholders from the scientific and clinical communities with an interest in trauma and stress research) to attend and contribute to the research prioritisation day. We also engaged a wider group of stakeholders and service users in the research prioritisation exercise via our social media presence. In these ways, we were still able to build PPI into our review in ways that aligned with established best practice for user involvement in systematic reviews.¹⁸⁶

We originally committed to using the ROBINS-I⁴⁰ tool for assessing the risk of bias in non-RCTs, but ultimately we opted for a more parsimonious approach afforded by a quality appraisal checklist widely used by NICE in public health guidelines. Although the ROBINS-I tool has emerged as the most likely gold standard method for assessing the risk of bias in non-randomised studies of interventions, it was decided that the tool operated at too high a level of resolution for the purposes of our review and the resource needed to use this tool appropriately would have outstripped capacity within the team at a time when the emphasis was on data extraction and assessing the risk of bias in over 100 RCTs. Future studies that intend on including both non-RCTs and RCTs should ensure that there is sufficient capacity within the review team to use the ROBINS-I tool.

Despite using an extensive search strategy and applying broad inclusion criteria, there is an under-representation of studies in our review with a focus on complex trauma populations drawn from prison settings and survivors of torture and forced migrant labour, otherwise known as modern slavery. Future work should look to identify ways to ensure these populations are not overlooked. In addition, our search did not capture a critical mass of studies that included outcomes related to comorbid psychiatric states such as borderline personality disorder. This might have been off set had we adopted

a more clinical and diagnostic approach to our inclusion criteria, but we have previously explained that our review set out to explicitly avoid running searches around diagnostic labels. Finally, while we did include populations with comorbidities, including psychiatric disorders and common mental health problems, we excluded those with dual diagnosis of complex trauma and substance and alcohol misuse on the grounds that these populations are likely to require care that is different from and more specialist than that typically provided in the context of PTSD. However, recent work among ex-serving regular personnel deployed to combat roles in Iraq or Afghanistan has highlighted that populations with dual diagnoses (e.g. mental health problems and alcohol misuse) are an important feature following exposure to complex trauma.¹⁸⁷

A further limitation relates to the use of standard frequentist approaches to random-effects meta-analyses. When there are few studies included in the meta-analyses, there is the potential for bias in estimating the heterogeneity parameter.

Conclusions and implications for research

The funder called for a review to identify the most promising front runners that the Health Technology Assessment programme could then consider for future primary research in complex trauma as part of a separate call.

We have identified that trauma-focused CBT and other trauma-focused interventions, including EMDR, delivered as single-component or multicomponent approaches are superior to control for PTSD symptoms and associated mental comorbidities. However, the size of these positive treatment effects was not equivalent across populations exposed to complex trauma, with treatments being least effective among veterans. Phase-based interventions, along with non-trauma-focused intervention components including mindfulness and relaxation, are potentially among the most effective approaches for PTSD symptoms in people with a history of complex trauma, such as childhood sexual abuse. In addition, there was inconclusive evidence that existing trauma-focused interventions are effective in treating the symptom cluster associated with disturbances of self-organisation typically seen in CPTSD. There is scope to identify if phase-based approaches are more effective than non-phase-based approaches for PTSD and the broader symptom profile associated with complex trauma. There was little evidence of effectiveness of pharmacological interventions for PTSD or for associated mental comorbidities, and no trial that tested the effectiveness of pharmacological interventions for outcomes related to disturbances of self-organisation.

Going forward, we can synthesise the findings from our meta-analyses and from the stakeholder and service user research prioritisation event and draw up a long-list of research questions for consideration in future funding calls. These research questions come under five main topic domains: (1) the effectiveness of psychological and/or pharmacological interventions, (2) the process and implementation of care, (3) understanding the lived experience of complex trauma, (4) the safety and adverse event profile of interventions and (5) methodological considerations about trials in complex trauma.

1. studies about the effectiveness of interventions

- definitive and fully powered evaluations of the effectiveness of interventions in complex trauma with long-term follow-up (i.e. at least 12 months), especially in veterans, childhood sexual abuse populations and populations affected by humanitarian crises
 - phase-based versus non-phase-based interventions
 - trauma-focused versus non-trauma-focused interventions (including IPT, DBT, mindfulness and relaxation)
 - integrated and multiagency care packages versus control
 - pharmacological interventions versus placebo.

2. studies about the process and implementation of care

- qualitative and quantitative process evaluations that draw on best practice for understanding the relationship between intervention and programme theory and anticipated outputs and trial results (Medical Research Council guidance)
 - measuring fidelity and adherence to interventions
 - understanding if contexts (e.g. setting, timing of delivery) moderate outcomes
 - assessing what was delivered (i.e. intervention content) and how it was delivered (e.g. individual vs. group) with a view to drawing conclusions about drivers of effectiveness
- qualitative evaluations of the acceptability and feasibility of interventions among people exposed to complex interventions to inform barriers to and facilitators of treatment uptake, especially in refugees and asylum seekers.

3. studies about understanding the lived experience of people with a history of complex trauma

- qualitative evaluations that draw on a phenomenological perspective to elicit in-depth narratives of the day-to-day lived experience of people with a history of complex trauma
- ethnographic research to illustrate commonalities and differences in the lived experience of complex trauma across population subgroups.

4. studies about the safety and adverse event profile of interventions for people with a history of complex trauma

- evaluations of adverse events associated with trauma- and non-trauma-focused psychological interventions (e.g. rates of re-traumatisation)
- evaluations of adverse events associated with pharmacological treatments in all complex trauma populations.

5. studies about methodological considerations in trials among people with a history of complex traumatic events

- developing a core outcome set for trials in complex trauma that include outcomes related to disturbances of self-organisation and mental comorbidities
- testing the validity of the new ICD-11 diagnostic category for CPTSD to identify and recruit eligible participants to experimental studies.

Acknowledgements

Contributions of authors

Hollie Melton (<https://orcid.org/0000-0003-3837-510X>) (Research Fellow, evidence synthesis) screened titles, abstracts and full-text papers, led the data extraction and risk-of-bias assessment, undertook attrition meta-analyses, led the writing up of the risk-of-bias assessment for randomised controlled intervention studies and non-randomised controlled intervention studies, led the synthesis of non-randomised intervention studies, led the research prioritisation exercise and ran the INCiTE social media account.

Nick Meader (<https://orcid.org/0000-0001-9332-6605>) (Research Fellow, evidence synthesis and statistics) contributed to the research prioritisation exercise, was principally responsible for the methodological aspects of the effectiveness review and led the meta-analyses, meta-regression and component network meta-analysis.

Holly Dale (<https://orcid.org/0000-0002-6553-7939>) (Research Training Fellow, evidence synthesis) screened titles, abstracts and full-text papers, contributed to the research prioritisation exercise, contributed to data extraction and contributed to writing up the risk-of-bias assessment for randomised controlled intervention studies.

Kath Wright (<https://orcid.org/0000-0002-9020-1572>) (Information Service Manager, Information Specialist) was principally responsible for compiling and running database searches and building and maintaining the EndNote libraries.

Julie Jones-Diette (<https://orcid.org/0000-0003-1769-8612>) (Research Fellow, evidence synthesis and PROSPERO manager) contributed to the research prioritisation exercise and led the data extraction and appraisal of qualitative data.

Melanie Temple (<https://orcid.org/0000-0002-4496-3437>) (Consultant Psychiatrist, complex trauma) contributed to the research prioritisation exercise, data extraction and meta-analyses of phase-based interventions.

Iram Shah (<https://orcid.org/0000-0002-7868-601X>) (Consultant Trauma Psychotherapist, trauma) contributed to the research prioritisation exercise, led the service user engagement, ran the focus groups to support delivery of the PPI strategy and led the writing up of the focus group results.

Karina Lovell (<https://orcid.org/0000-0001-8821-895X>) (Professor of Mental Health, psychological therapies and PPI) contributed to the research prioritisation exercise and supported the development of the PPI engagement strategy.

Dean McMillan (<https://orcid.org/0000-0002-2901-8410>) (Reader, mental health services research) contributed to intervention coding, meta-analyses and protocol development.

Rachel Churchill (<https://orcid.org/0000-0002-1751-0512>) (Professor of Evidence Synthesis, knowledge mobilisation) contributed to the research prioritisation exercise and was a full member of the study advisory group.

Corrado Barbui (<https://orcid.org/0000-0003-1073-9282>) (Professor of Psychiatry, psychiatry and global mental health) contributed to writing the protocol and search terms and to identifying ongoing studies.

Simon Gilbody (<https://orcid.org/0000-0002-8236-6983>) (Professor of Health Services Research, psychological medicine) contributed to writing the protocol and the research prioritisation exercise.

Peter Coventry (<https://orcid.org/0000-0003-0625-3829>) (Senior Lecturer, health services research) had overall responsibility for the project, chaired the review group meetings, was a full member of the advisory group, supervised the review team, contributed to the research prioritisation exercise and took primary responsibility for the drafting of the report.

All authors contributed to the report and approved the final version.

Contributions of others

We would like to express our gratitude to the members of the study advisory group – Professor Jon Bisson (Cardiff University), Professor Thanos Karatzias (Edinburgh Napier University), Dr Marylene Cloitre (New York University School of Medicine) and Dr Neil Roberts (Cardiff University) – for their support and contribution to undertaking this review. Their top-rate critical thinking and wealth of knowledge in the field of trauma studies has been immensely helpful to the review team and our approach to this review has been significantly improved by their guidance. Any errors or omissions in the review are, however, the responsibility of the review team and not the study advisory group.

We thank Dr Jane Dalton (previously of the Centre for Reviews and Dissemination, University of York) for her contributions to screening and data extraction and we also want to thank Gary Raine (the Centre for Reviews and Dissemination, University of York) for early work on the qualitative acceptability review.

We also thank all contributors to the research prioritisation exercise: Professor Joe Reilly [Tees, Esk and Wear Valleys NHS Foundation Trust (TEWV)], Lindsay Jones (TEWV), Simon Hughes (TEWV), Amanda Hall (TEWV), Madeleine Rowlinson (TEWV), Dr Mark McFetridge (The Retreat, York), Emily Herbert (The Retreat, York), Trish Horner (Independent Domestic Abuse Services, York), Dr Dominic Murphy (Combat Stress/King's College London), Maria O'Keefe (Home-Start, York) and Debra Hilton (Home-Start, York). Special thanks go to Vanessa Garrity (Beyond The Room) for facilitating the event and promoting INCITE on social media and to André Tomlin (The Mental Elf/Beyond The Room) for providing support via The Mental Elf and organising the format of the prioritisation day and the online voting.

Publication

Coventry P, Meader N, Melton H, Temple M, Dale H, Wright K, *et al.* Psychological and pharmacological interventions for posttraumatic stress disorder and comorbid mental health problems following complex traumatic events: systematic review and component network meta-analysis. *PLOS Med* 2020;**17**:e1003262.

Data-sharing statement

All data requests should be submitted to the corresponding author for consideration. Access to anonymised data may be granted following review.

References

1. Kessler RC, Sonnega A, Bromet E, Hughes M, Nelson CB. Posttraumatic stress disorder in the National Comorbidity Survey. *Arch Gen Psychiatry* 1995;**52**:1048–60. <https://doi.org/10.1001/archpsyc.1995.03950240066012>
2. Karam EG, Andrews G, Bromet E, Petukhova M, Ruscio AM, Salamoun M, *et al.* The role of criterion A2 in the DSM-IV diagnosis of posttraumatic stress disorder. *Biol Psychiatry* 2010;**68**:465–73. <https://doi.org/10.1016/j.biopsych.2010.04.032>
3. Steel Z, Chey T, Silove D, Marnane C, Bryant RA, van Ommeren M. Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: a systematic review and meta-analysis. *JAMA* 2009;**302**:537–49. <https://doi.org/10.1001/jama.2009.1132>
4. Friedman MJ, Resick PA, Bryant RA, Brewin CR. Considering PTSD for DSM-5. *Depress Anxiety* 2011;**28**:750–69. <https://doi.org/10.1002/da.20767>
5. Herman JL. Complex PTSD: a syndrome in survivors of prolonged and repeated trauma. *J Trauma Stress* 1992;**5**:377–91. <https://doi.org/10.1002/jts.2490050305>
6. Maercker A, Brewin CR, Bryant RA, Cloitre M, van Ommeren M, Jones LM, *et al.* Diagnosis and classification of disorders specifically associated with stress: proposals for ICD-11. *World Psychiatry* 2013;**12**:198–206. <https://doi.org/10.1002/wps.20057>
7. Cloitre M, Garvert DW, Weiss B, Carlson EB, Bryant RA. Distinguishing PTSD, complex PTSD, and borderline personality disorder: a latent class analysis. *Eur J Psychotraumatol* 2014;**5**:25097. <https://doi.org/10.3402/ejpt.v5.25097>
8. Knefel M, Garvert DW, Cloitre M, Lueger-Schuster B. Update to an evaluation of ICD-11 PTSD and complex PTSD criteria in a sample of adult survivors of childhood institutional abuse by Knefel, Lueger-Schuster (2013): a latent profile analysis. *Eur J Psychotraumatol* 2015;**6**:25290. <https://doi.org/10.3402/ejpt.v6.25290>
9. Courtois CA. Complex trauma, complex reactions: assessment and treatment. *Psychotherapy (Chic)* 2004;**41**:412–25. <https://doi.org/10.1037/0033-3204.41.4.412>
10. Cloitre M, Garvert DW, Brewin CR, Bryant RA, Maercker A. Evidence for proposed ICD-11 PTSD and complex PTSD: a latent profile analysis. *Eur J Psychotraumatol* 2013;**4**:20706. <https://doi.org/10.3402/ejpt.v4i0.20706>
11. UNHCR. *UNHCR Mid-Year Trends 2015*. Geneva: United Nations High Commissioner for Refugees; 2015. URL: www.unhcr.org/56701b969.html (accessed 22 October 2019).
12. UNHCR. *Asylum Trends, First Half 2014. Levels and Trends in Industrialized Countries*. Geneva: United Nations High Commissioner for Refugees; 2014. URL: www.unhcr.org/uk/statistics/unhcrstats/551128679/asylum-levels-trends-industrialized-countries-2014.html (accessed 10 January 2020).
13. Turrini G, Purgato M, Ballette F, Nosè M, Ostuzzi G, Barbui C. Common mental disorders in asylum seekers and refugees: umbrella review of prevalence and intervention studies. *Int J Ment Health Syst* 2017;**11**:51. <https://doi.org/10.1186/s13033-017-0156-0>
14. Oram S, Stöckl H, Busza J, Howard LM, Zimmerman C. Prevalence and risk of violence and the physical, mental, and sexual health problems associated with human trafficking: systematic review. *PLOS Med* 2012;**9**:e1001224. <https://doi.org/10.1371/journal.pmed.1001224>

REFERENCES

15. International Labour Organization. *A Global Alliance Against Forced Labour*. Geneva: International Labour Organization; 2005.
16. Hossain M, Zimmerman C, Abas M, Light M, Watts C. The relationship of trauma to mental disorders among trafficked and sexually exploited girls and women. *Am J Public Health* 2010;**100**:2442–9. <https://doi.org/10.2105/AJPH.2009.173229>
17. Tsutsumi A, Izutsu T, Poudyal AK, Kato S, Marui E. Mental health of female survivors of human trafficking in Nepal. *Soc Sci Med* 2008;**66**:1841–7. <https://doi.org/10.1016/j.socscimed.2007.12.025>
18. Radford L, Corral S, Bradley C, Fisher H, Bassett C, Howat N, Collishaw S. *Child Abuse and Neglect in the UK Today*. London: National Society for the Prevention of Cruelty to Children; 2011.
19. Saied-Tessier A. *Estimating the Costs of Child Sexual Abuse in the UK*. London: National Society for the Prevention of Cruelty to Children; 2014.
20. National Collaborating Centre for Mental Health. *The Management of PTSD in Adults and Children in Primary and Secondary Care*. National Clinical Practice Guideline Number 26. London: NICE; 2005.
21. World Health Organization. *WHO Guidelines on Conditions Specifically Related To Stress*. Geneva: World Health Organization; 2013.
22. van Minnen A, Hendriks L, Olf M. When do trauma experts choose exposure therapy for PTSD patients? A controlled study of therapist and patient factors. *Behav Res Ther* 2010;**48**:312–20. <https://doi.org/10.1016/j.brat.2009.12.003>
23. McDonnell M, Robjant K, Katona C. Complex posttraumatic stress disorder and survivors of human rights violations. *Curr Opin Psychiatry* 2013;**26**:1–6. <https://doi.org/10.1097/YCO.0b013e32835aea9d>
24. Cloitre M, Courtois CA, Charuvastra A, Carapezza R, Stolbach BC, Green BL. Treatment of complex PTSD: results of the ISTSS expert clinician survey on best practices. *J Trauma Stress* 2011;**24**:615–27. <https://doi.org/10.1002/jts.20697>
25. De Jongh A, Resick PA, Zoellner LA, van Minnen A, Lee CW, Monson CM, *et al*. Critical analysis of the current treatment guidelines for complex PTSD in adults. *Depress Anxiety* 2016;**33**:359–69. <https://doi.org/10.1002/da.22469>
26. Crumlish N, O'Rourke K. A systematic review of treatments for post-traumatic stress disorder among refugees and asylum-seekers. *J Nerv Ment Dis* 2010;**198**:237–51. <https://doi.org/10.1097/NMD.0b013e3181d61258>
27. Palic S, Elklit A. Psychosocial treatment of posttraumatic stress disorder in adult refugees: a systematic review of prospective treatment outcome studies and a critique. *J Affect Disord* 2011;**131**:8–23. <https://doi.org/10.1016/j.jad.2010.07.005>
28. Powers MB, Halpern JM, Ferenschak MP, Gillihan SJ, Foa EB. A meta-analytic review of prolonged exposure for posttraumatic stress disorder. *Clin Psychol Rev* 2010;**30**:635–41. <https://doi.org/10.1016/j.cpr.2010.04.007>
29. Olatunji BO, Cisler JM, Tolin DF. A meta-analysis of the influence of comorbidity on treatment outcome in the anxiety disorders. *Clin Psychol Rev* 2010;**30**:642–54. <https://doi.org/10.1016/j.cpr.2010.04.008>
30. van Minnen A, Harned MS, Zoellner L, Mills K. Examining potential contraindications for prolonged exposure therapy for PTSD. *Eur J Psychotraumatol* 2012;**3**:18805. <https://doi.org/10.3402/ejpt.v3i0.18805>

31. Nickerson A, Bryant RA, Silove D, Steel Z. A critical review of psychological treatments of posttraumatic stress disorder in refugees. *Clin Psychol Rev* 2011;**31**:399–417. <https://doi.org/10.1016/j.cpr.2010.10.004>
32. Ronconi JM, Shiner B, Watts BV. A meta-analysis of depressive symptom outcomes in randomized, controlled trials for PTSD. *J Nerv Ment Dis* 2015;**203**:522–9. <https://doi.org/10.1097/NMD.0000000000000322>
33. Coventry P, Meader N, Melton H, Temple M, Dale H, Wright K, *et al.* Psychological and pharmacological interventions for posttraumatic stress disorder and comorbid mental health problems following complex traumatic events: systematic review and component network meta-analysis. *PLOS Med* 2020;**17**:e1003262. <https://doi.org/10.1371/journal.pmed.1003262>
34. Coventry P, Churchill R, Gilbody S, Lovell K, Barbui C, Meader N, *et al.* INterventions for Complex Traumatic Events – INCiTE. PROSPERO 2017:CRD42017055523. URL: www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42017055523 (accessed 3 December 2019).
35. Gratz KL, Roemer L. Multidimensional assessment of emotion regulation and dysregulation: development, factor structure, and initial validation of the difficulties in emotion regulation scale. *J Psychopathol Behav Assess* 2004;**26**:41–54. <https://doi.org/10.1023/B:JOBA.0000007455.08539.94>
36. Pilkonis PA, Kim Y, Proietti JM, Barkham M. Scales for personality disorders developed from the Inventory of Interpersonal Problems. *J Personal Disord* 1996;**10**:355–69. <https://doi.org/10.1521/pedi.1996.10.4.355>
37. Falsetti SA, Resnick HS, Resick PA, Kilpatrick DG. The Modified PTSD Symptom Scale: a brief self-report measure of posttraumatic stress disorder. *Behav Ther* 1993;**16**:161–2.
38. Hamilton M. A rating scale for depression. *J Neurol Neurosurg Psychiatry* 1960;**23**:56–62. <https://doi.org/10.1136/jnnp.23.1.56>
39. Zigmond AS, Snaith RP. The hospital anxiety and depression scale. *Acta Psychiatr Scand* 1983;**67**:361–70. <https://doi.org/10.1111/j.1600-0447.1983.tb09716.x>
40. Sterne JA, Hernán MA, Reeves BC, Savović J, Berkman ND, Viswanathan M, *et al.* ROBINS-I: a tool for assessing risk of bias in non-randomised studies of interventions. *BMJ* 2016;**355**:i4919. <https://doi.org/10.1136/bmj.i4919>
41. Wells G, Shay B. *Data Extraction for Non-randomised Systematic Reviews*. Ottawa, ON: University of Ottawa.
42. National Institute for Health and Care Excellence. *Methods for the Development of NICE Public Health Guidance*. 3rd edn. Appendix F: quality appraisal checklist – quantitative intervention studies. London: NICE; 2012.
43. Jackson R, Ameratunga S, Broad J, Connor J, Lethaby A, Robb G, *et al.* The GATE frame: critical appraisal with pictures. *Evid Based Med* 2006;**11**:35–8. <https://doi.org/10.1136/ebm.11.2.35>
44. Higgins JP, Thompson SG. Quantifying heterogeneity in a meta-analysis. *Stat Med* 2002;**21**:1539–58. <https://doi.org/10.1002/sim.1186>
45. Welton NJ, Caldwell DM, Adamopoulos E, Vedhara K. Mixed treatment comparison meta-analysis of complex interventions: psychological interventions in coronary heart disease. *Am J Epidemiol* 2009;**169**:1158–65. <https://doi.org/10.1093/aje/kwp014>

46. Freeman SC, Scott NW, Powell R, Johnston M, Sutton AJ, Cooper NJ. Component network meta-analysis identifies the most effective components of psychological preparation for adults undergoing surgery under general anesthesia. *J Clin Epidemiol* 2018;**98**:105–16. <https://doi.org/10.1016/j.jclinepi.2018.02.012>
47. Dias S, Sutton AJ, Ades AE, Welton NJ. Evidence synthesis for decision making 2: a generalized linear modeling framework for pairwise and network meta-analysis of randomized controlled trials. *Med Decis Making* 2013;**33**:607–17. <https://doi.org/10.1177/0272989X12458724>
48. Spiegelhalter DJ, Best NG, Carlin BP, Van Der Linde A. Bayesian measures of model complexity and fit. *J R Stat Soc Series B Stat Methodol* 2002;**64**:583–639. <https://doi.org/10.1111/1467-9868.00353>
49. GRADE. URL: www.gradeworkinggroup.org (accessed 3 December 2019).
50. Cochrane Qualitative & Implementation Methods Group. URL: <https://methods.cochrane.org/qi/> (accessed 3 December 2019).
51. Lewin S, Booth A, Glenton C, Munthe-Kaas H, Rashidian A, Wainwright M, et al. Applying GRADE-CERQual to qualitative evidence synthesis findings: introduction to the series. *Implement Sci* 2018;**13**:2. <https://doi.org/10.1186/s13012-017-0688-3>
52. Critical Appraisal Skills Programme. *CASP Qualitative Checklist*; 2018. URL: <https://casp-uk.net/casp-tools-checklists/> (accessed 20 April 2017).
53. Acarturk C, Konuk E, Cetinkaya M, Senay I, Sijbrandij M, Cuijpers P, Aker T. EMDR for Syrian refugees with posttraumatic stress disorder symptoms: results of a pilot randomized controlled trial. *Eur J Psychotraumatol* 2015;**6**:27414. <https://doi.org/10.3402/ejpt.v6.27414>
54. Acarturk C, Konuk E, Cetinkaya M, Senay I, Sijbrandij M, Gulen B, Cuijpers P. The efficacy of eye movement desensitization and reprocessing for post-traumatic stress disorder and depression among Syrian refugees: results of a randomized controlled trial. *Psychol Med* 2016;**46**:2583–93. <https://doi.org/10.1017/S0033291716001070>
55. Adenauer H, Catani C, Gola H, Keil J, Ruf M, Schauer M, Neuner F. Narrative exposure therapy for PTSD increases top-down processing of aversive stimuli – evidence from a randomized controlled treatment trial. *BMC Neurosci* 2011;**12**:127. <https://doi.org/10.1186/1471-2202-12-127>
56. Rezaei Ardani A, Hosseini G, Fayyazi Bordbar MR, Talaei A, Mostafavi Toroghi H. Effect of rivastigmine augmentation in treatment of male patients with combat-related chronic posttraumatic stress disorder: a randomized controlled trial. *J Clin Psychopharmacol* 2017;**37**:54–60. <https://doi.org/10.1097/JCP.0000000000000624>
57. Azad Marzabadi E, Hashemi Zadeh SM. The effectiveness of mindfulness training in improving the quality of life of the war victims with post traumatic stress disorder (PTSD). *Iran J Psychiatry* 2014;**9**:228–36.
58. Bartzokis G, Lu PH, Turner J, Mintz J, Saunders CS. Adjunctive risperidone in the treatment of chronic combat-related posttraumatic stress disorder. *Biol Psychiatry* 2005;**57**:474–9. <https://doi.org/10.1016/j.biopsych.2004.11.039>
59. Becker ME, Hertzberg MA, Moore SD, Dennis MF, Bukenya DS, Beckham JC. A placebo-controlled trial of bupropion SR in the treatment of chronic posttraumatic stress disorder. *J Clin Psychopharmacol* 2007;**27**:193–7. <https://doi.org/10.1097/JCP.0b013e318032eaed>
60. Beidel DC, Frueh BC, Uhde TW, Wong N, Mentrkoski JM. Multicomponent behavioral treatment for chronic combat-related posttraumatic stress disorder: a randomized controlled trial. *J Anxiety Disord* 2011;**25**:224–31. <https://doi.org/10.1016/j.janxdis.2010.09.006>

61. Bichescu D, Neuner F, Schauer M, Elbert T. Narrative exposure therapy for political imprisonment-related chronic posttraumatic stress disorder and depression. *Behav Res Ther* 2007;**45**:2212–20. <https://doi.org/10.1016/j.brat.2006.12.006>
62. Bolton P, Bass JK, Zangana GA, Kamal T, Murray SM, Kaysen D, *et al.* A randomized controlled trial of mental health interventions for survivors of systematic violence in Kurdistan, Northern Iraq. *BMC Psychiatry* 2014;**14**:360. <https://doi.org/10.1186/s12888-014-0360-2>
63. Buhmann CB, Nordentoft M, Ekstroem M, Carlsson J, Mortensen EL. The effect of flexible cognitive-behavioural therapy and medical treatment, including antidepressants on post-traumatic stress disorder and depression in traumatised refugees: pragmatic randomised controlled clinical trial. *Br J Psychiatry* 2016;**208**:252–9. <https://doi.org/10.1192/bjp.bp.114.150961>
64. Carlson JG, Chemtob CM, Rusnak K, Hedlund NL, Muraoka MY. Eye movement desensitization and reprocessing (EMDR) treatment for combat-related posttraumatic stress disorder. *Jpn J Biofeedback Res* 1997;**24**:50–64. https://doi.org/10.20595/jjbf.24.0_50
65. Celik C, Ozdemir B, Ozmenler KN, Yelboga Z, Balikci A, Oznur T, *et al.* Efficacy of paroxetine and amitriptyline in posttraumatic stress disorder: an open-label comparative study. *Klinik Psikofarmakol Bulteni* 2011;**21**:179–85. <https://doi.org/10.5455/bcp.20110627111141>
66. Chard KM. An evaluation of cognitive processing therapy for the treatment of posttraumatic stress disorder related to childhood sexual abuse. *J Consult Clin Psychol* 2005;**73**:965–71. <https://doi.org/10.1037/0022-006X.73.5.965>
67. Chung MY, Min KH, Jun YJ, Kim SS, Kim WC, Jun EM. Efficacy and tolerability of mirtazapine and sertraline in Korean veterans with posttraumatic stress disorder: a randomized open label trial. *Hum Psychopharmacol* 2004;**19**:489–94. <https://doi.org/10.1002/hup.615>
68. Classen C, Koopman C, Nevill-Manning K, Spiegel D. A preliminary report comparing trauma-focused and present-focused group therapy against a wait-listed condition among childhood sexual abuse survivors with PTSD. *J Aggression Maltreat Trauma* 2001;**4**:265–88. https://doi.org/10.1300/J146v04n02_12
69. Cloitre M, Koenen KC, Cohen LR, Han H. Skills training in affective and interpersonal regulation followed by exposure: a phase-based treatment for PTSD related to childhood abuse. *J Consult Clin Psychol* 2002;**70**:1067–74. <https://doi.org/10.1037/0022-006X.70.5.1067>
70. Cloitre M, Stovall-McClough KC, Noonan K, Zorbas P, Cherry S, Jackson CL, *et al.* Treatment for PTSD related to childhood abuse: a randomized controlled trial. *Am J Psychiatry* 2010;**167**:915–24. <https://doi.org/10.1176/appi.ajp.2010.09081247>
71. Cook JM, Harb GC, Gehrman PR, Cary MS, Gamble GM, Forbes D, Ross RJ. Imagery rehearsal for posttraumatic nightmares: a randomized controlled trial. *J Trauma Stress* 2010;**23**:553–63. <https://doi.org/10.1002/jts.20569>
72. Davis LL, Davidson JR, Ward LC, Bartolucci A, Bowden CL, Petty F. Divalproex in the treatment of posttraumatic stress disorder: a randomized, double-blind, placebo-controlled trial in a veteran population. *J Clin Psychopharmacol* 2008;**28**:84–8. <https://doi.org/10.1097/JCP.0b013e318160f83b>
73. Davis LL, Jewell ME, Ambrose S, Farley J, English B, Bartolucci A, Petty F. A placebo-controlled study of nefazodone for the treatment of chronic posttraumatic stress disorder: a preliminary study. *J Clin Psychopharmacol* 2004;**24**:291–7. <https://doi.org/10.1097/01.jcp.0000125685.82219.1a>
74. Devilly GJ, Spence SH, Rapee RM. Statistical and reliable change with eye movement desensitization and reprocessing: treating trauma within a veteran population. *Behav Ther* 1998;**29**:435–55. [https://doi.org/10.1016/S0005-7894\(98\)80042-7](https://doi.org/10.1016/S0005-7894(98)80042-7)

75. Edmond T, Rubin A. Assessing the long-term effects of EMDR: results from an 18-month follow-up study with adult female survivors of CSA. *J Child Sex Abus* 2004;**13**:69–86. https://doi.org/10.1300/J070v13n01_04
76. Edmond T, Rubin A, Wambach KG. The effectiveness of EMDR with adult female survivors of childhood sexual abuse. *Social Work Res* 1999;**23**:103–16. <https://doi.org/10.1093/swr/23.2.103>
77. Elkjaer H, Kristensen E, Mortensen EL, Poulsen S, Lau M. Analytic versus systemic group therapy for women with a history of child sexual abuse: 1-year follow-up of a randomized controlled trial. *Psychol Psychother* 2014;**87**:191–208. <https://doi.org/10.1111/papt.12011>
78. Engel CC, Litz B, Magruder KM, Harper E, Gore K, Stein N, *et al.* Delivery of self training and education for stressful situations (DESTRESS-PC): a randomized trial of nurse assisted online self-management for PTSD in primary care. *Gen Hosp Psychiatry* 2015;**37**:323–8. <https://doi.org/10.1016/j.genhosppsych.2015.04.007>
79. Feske U. Treating low-income and minority women with posttraumatic stress disorder: a pilot study comparing prolonged exposure and treatment as usual conducted by community therapists. *J Interpers Violence* 2008;**23**:1027–40. <https://doi.org/10.1177/0886260507313967>
80. Francišković T, Suković Z, Janović S, Stevanović A, Nemčić-Moro I, Rončević-Gržeta I, Letica-Crepulja M. Tianeptine in the combined treatment of combat related posttraumatic stress disorder. *Psychiatr Danub* 2011;**23**:257–63.
81. Franklin CL, Cuccurullo LA, Walton JL, Arseneau JR, Petersen NJ. Face to face but not in the same place: a pilot study of prolonged exposure therapy. *J Trauma Dissociation* 2017;**18**:116–30. <https://doi.org/10.1080/15299732.2016.1205704>
82. Friedman MJ, Marmar CR, Baker DG, Sikes CR, Farfel GM. Randomized, double-blind comparison of sertraline and placebo for posttraumatic stress disorder in a Department of Veterans Affairs setting. *J Clin Psychiatry* 2007;**68**:711–20. <https://doi.org/10.4088/JCP.v68n0508>
83. Gamito P, Oliveira J, Rosa P, Morais D, Duarte N, Oliveira S, Saraiva T. PTSD elderly war veterans: a clinical controlled pilot study. *Cyberpsychol Behav Soc Netw* 2010;**13**:43–8. <https://doi.org/10.1089/cyber.2009.0237>
84. Germain A, Richardson R, Moul DE, Mammen O, Haas G, Forman SD, *et al.* Placebo-controlled comparison of prazosin and cognitive-behavioral treatments for sleep disturbances in US Military Veterans. *J Psychosom Res* 2012;**72**:89–96. <https://doi.org/10.1016/j.jpsychores.2011.11.010>
85. Hamner MB, Faldowski RA, Ulmer HG, Frueh BC, Huber MG, Arana GW. Adjunctive risperidone treatment in post-traumatic stress disorder: a preliminary controlled trial of effects on comorbid psychotic symptoms. *Int Clin Psychopharmacol* 2003;**18**:1–8. <https://doi.org/10.1097/00004850-200301000-00001>
86. Hermenau K, Hecker T, Schaal S, Maedl A, Elbert T. Addressing post-traumatic stress and aggression by means of narrative exposure: a randomized controlled trial with ex-combatants in the eastern DRC. *J Aggression Maltreat Trauma* 2013;**22**:916–34. <https://doi.org/10.1080/10926771.2013.824057>
87. Hijazi AM, Lumley MA, Ziadni MS, Haddad L, Rapport LJ, Arnetz BB. Brief narrative exposure therapy for posttraumatic stress in Iraqi refugees: a preliminary randomized clinical trial. *J Trauma Stress* 2014;**27**:314–22. <https://doi.org/10.1002/jts.21922>
88. Himmerich H, Willmund GD, Zimmermann P, Wolf JE, Bühler AH, Kirkby KC, *et al.* Serum concentrations of TNF- α and its soluble receptors during psychotherapy in German soldiers suffering from combat-related PTSD. *Psychiatr Danub* 2016;**28**:293–8.

89. Hinton DE, Chhean D, Pich V, Safren SA, Hofmann SG, Pollack MH. A randomized controlled trial of cognitive-behavior therapy for Cambodian refugees with treatment-resistant PTSD and panic attacks: a cross-over design. *J Trauma Stress* 2005;**18**:617–29. <https://doi.org/10.1002/jts.20070>
90. Hinton DE, Pham T, Tran M, Safren SA, Otto MW, Pollack MH. CBT for Vietnamese refugees with treatment-resistant PTSD and panic attacks: a pilot study. *J Trauma Stress* 2004;**17**:429–33. <https://doi.org/10.1023/B:JOTS.0000048956.03529.fa>
91. Jensen JA. An investigation of eye movement desensitization and reprocessing (EMD/R) as a treatment for posttraumatic stress disorder (PTSD) symptoms of Vietnam combat veterans. *Behav Ther* 1994;**25**:311–25. [https://doi.org/10.1016/S0005-7894\(05\)80290-4](https://doi.org/10.1016/S0005-7894(05)80290-4)
92. Jung K, Steil R. A randomized controlled trial on cognitive restructuring and imagery modification to reduce the feeling of being contaminated in adult survivors of childhood sexual abuse suffering from posttraumatic stress disorder. *Psychother Psychosom* 2013;**82**:213–20. <https://doi.org/10.1159/000348450>
93. Katz LS, Douglas S, Zaleski K, Williams J, Huffman C, Cojucar G. Comparing holographic reprocessing and prolonged exposure for women veterans with sexual trauma: a pilot randomized trial. *J Contemp Psychother* 2014;**44**:9–19. <https://doi.org/10.1007/s10879-013-9248-6>
94. Keane TM, Fairbank JA, Caddell JM, Zimering RT. Implosive (flooding) therapy reduces symptoms of PTSD in Vietnam combat veterans. *Behav Ther* 1989;**20**:245–60. [https://doi.org/10.1016/S0005-7894\(89\)80072-3](https://doi.org/10.1016/S0005-7894(89)80072-3)
95. Kearney DJ, McDermott K, Malte C, Martinez M, Simpson TL. Effects of participation in a mindfulness program for veterans with posttraumatic stress disorder: a randomized controlled pilot study. *J Clin Psychol* 2013;**69**:14–27. <https://doi.org/10.1002/jclp.21911>
96. Knaevelsrud C, Brand J, Lange A, Ruwaard J, Wagner B. Web-based psychotherapy for posttraumatic stress disorder in war-traumatized Arab patients: randomized controlled trial. *J Med Internet Res* 2015;**17**:e71. <https://doi.org/10.2196/jmir.3582>
97. Kosten TR, Krystal JH, Giller EL, Frank J, Dan E. Alexithymia as a predictor of treatment response in post-traumatic stress disorder. *J Trauma Stress* 1992;**5**:563–73. <https://doi.org/10.1002/jts.2490050406>
98. Krupnick JL, Green BL, Stockton P, Miranda J, Krause E, Mete M. Group interpersonal psychotherapy for low-income women with posttraumatic stress disorder. *Psychother Res* 2008;**18**:497–507. <https://doi.org/10.1080/10503300802183678>
99. Krystal JH, Rosenheck RA, Cramer JA, Vessicchio JC, Jones KM, Vertrees JE, *et al.* Adjunctive risperidone treatment for antidepressant-resistant symptoms of chronic military service-related PTSD: a randomized trial. *JAMA* 2011;**306**:493–502. <https://doi.org/10.1001/jama.2011.1080>
100. Kubany ES, Hill EE, Owens JA. Cognitive trauma therapy for battered women with PTSD: preliminary findings. *J Trauma Stress* 2003;**16**:81–91. <https://doi.org/10.1023/A:1022019629803>
101. Kubany ES, Hill EE, Owens JA, Iannace-Spencer C, McCaig MA, Tremayne KJ, Williams PL. Cognitive trauma therapy for battered women with PTSD (CTT-BW). *J Consult Clin Psychol* 2004;**72**:3–18. <https://doi.org/10.1037/0022-006X.72.1.3>
102. Lande RG, Williams LB, Francis JL, Gragnani C, Morin ML. Efficacy of biofeedback for post-traumatic stress disorder. *Complement Ther Med* 2010;**18**:256–9. <https://doi.org/10.1016/j.ctim.2010.08.004>
103. Lau M, Kristensen E. Outcome of systemic and analytic group psychotherapy for adult women with history of intrafamilial childhood sexual abuse: a randomized controlled study. *Acta Psychiatr Scand* 2007;**116**:96–104. <https://doi.org/10.1111/j.1600-0447.2006.00977.x>

REFERENCES

104. Lindley SE, Carlson EB, Hill K. A randomized, double-blind, placebo-controlled trial of augmentation topiramate for chronic combat-related posttraumatic stress disorder. *J Clin Psychopharmacol* 2007;**27**:677–81. <https://doi.org/10.1097/jcp.0b013e31815a43ee>
105. Margolies SO, Rybarczyk B, Lynch J, Vrana S. Efficacy of a cognitive-behavioral treatment for insomnia among Afghanistan and Iraq (OEF/OIF) veterans with PTSD. *Sleep* 2011;**34**:A253–A4.
106. McDonagh A, Friedman M, McHugo G, Ford J, Sengupta A, Mueser K, *et al.* Randomized trial of cognitive-behavioral therapy for chronic posttraumatic stress disorder in adult female survivors of childhood sexual abuse. *J Consult Clin Psychol* 2005;**73**:515–24. <https://doi.org/10.1037/0022-006X.73.3.515>
107. McLay RN, Wood DP, Webb-Murphy JA, Spira JL, Wiederhold MD, Pyne JM, Wiederhold BK. A randomized, controlled trial of virtual reality-graded exposure therapy for post-traumatic stress disorder in active duty service members with combat-related post-traumatic stress disorder. *Cyberpsychol Behav Soc Netw* 2011;**14**:223–9. <https://doi.org/10.1089/cyber.2011.0003>
108. Meffert SM, Abdo AO, Alla OAA, Elmakki YOM, Omer AA, Yousif S, *et al.* A pilot randomized controlled trial of interpersonal psychotherapy for Sudanese refugees in Cairo, Egypt. *Psychol Trauma* 2014;**6**:240–9. <https://doi.org/10.1037/a0023540>
109. Miyahira SD, Folen RA, Hoffman HG, Garcia-Palacios A, Spira JL, Kawasaki M. The effectiveness of VR exposure therapy for PTSD in returning warfighters. *Stud Health Technol Inform* 2012;**181**:128–32.
110. Monnelly EP, Ciraulo DA, Knapp C, Keane T. Low-dose risperidone as adjunctive therapy for irritable aggression in posttraumatic stress disorder. *J Clin Psychopharmacol* 2003;**23**:193–6. <https://doi.org/10.1097/00004714-200304000-00012>
111. Moradi AR, Moshirpanahi S, Parhon H, Mirzaei J, Dalgleish T, Jobson L. A pilot randomized controlled trial investigating the efficacy of MEMory Specificity Training in improving symptoms of posttraumatic stress disorder. *Behav Res Ther* 2014;**56**:68–74. <https://doi.org/10.1016/j.brat.2014.03.002>
112. Naylor JC, Dolber TR, Strauss JL, Kilts JD, Strauman TJ, Bradford DW, *et al.* A pilot randomized controlled trial with paroxetine for subthreshold PTSD in Operation Enduring Freedom/Operation Iraqi Freedom era veterans. *Psychiatry Res* 2013;**206**:318–20. <https://doi.org/10.1016/j.psychres.2012.11.008>
113. Neuner F, Onyut PL, Ertl V, Odenwald M, Schauer E, Elbert T. Treatment of posttraumatic stress disorder by trained lay counselors in an African refugee settlement: a randomized controlled trial. *J Consult Clin Psychol* 2008;**76**:686–94. <https://doi.org/10.1037/0022-006X.76.4.686>
114. Neuner F, Schauer M, Klaschik C, Karunakara U, Elbert T. A comparison of narrative exposure therapy, supportive counseling, and psychoeducation for treating posttraumatic stress disorder in an African refugee settlement. *J Consult Clin Psychol* 2004;**72**:579–87. <https://doi.org/10.1037/0022-006X.72.4.579>
115. Niles BL, Klunk-Gillis J, Ryngala DJ, Silberbogen AK, Paysnick A, Wolf EJ. Comparing mindfulness and psychoeducation treatments for combat-related PTSD using a telehealth approach. *Psychol Trauma* 2012;**4**:538–47. <https://doi.org/10.1037/a0026161>
116. Otto MW, Hinton D, Korbly NB, Chea A, Ba P, Gershuny BS, Pollack MH. Treatment of pharmacotherapy-refractory posttraumatic stress disorder among Cambodian refugees: a pilot study of combination treatment with cognitive-behavior therapy vs sertraline alone. *Behav Res Ther* 2003;**41**:1271–6. [https://doi.org/10.1016/S0005-7967\(03\)00032-9](https://doi.org/10.1016/S0005-7967(03)00032-9)

117. Owens GP, Pike JL, Chard KM. Treatment effects of cognitive processing therapy on cognitive distortions of female child sexual abuse survivors. *Behav Ther* 2001;**32**:413–24. [https://doi.org/10.1016/S0005-7894\(01\)80028-9](https://doi.org/10.1016/S0005-7894(01)80028-9)
118. Panahi Y, Moghaddam BR, Sahebkar A, Nazari MA, Beiraghdar F, Karami G, Saadat AR. A randomized, double-blind, placebo-controlled trial on the efficacy and tolerability of sertraline in Iranian veterans with post-traumatic stress disorder. *Psychol Med* 2011;**41**:2159–66. <https://doi.org/10.1017/S0033291711000201>
119. Paunovic N, Ost LG. Cognitive-behavior therapy vs exposure therapy in the treatment of PTSD in refugees. *Behav Res Ther* 2001;**39**:1183–97. [https://doi.org/10.1016/S0005-7967\(00\)00093-0](https://doi.org/10.1016/S0005-7967(00)00093-0)
120. Polusny MA, Erbes CR, Thuras P, Moran A, Lamberty GJ, Collins RC, *et al*. Mindfulness-based stress reduction for posttraumatic stress disorder among veterans: a randomized clinical trial. *JAMA* 2015;**314**:456–65. <https://doi.org/10.1001/jama.2015.8361>
121. Possemato K, Bergen-Cico D, Treatman S, Allen C, Wade M, Pigeon W. A randomized clinical trial of primary care brief mindfulness training for veterans with PTSD. *J Clin Psychol* 2016;**72**:179–93. <https://doi.org/10.1002/jclp.22241>
122. Raskind MA, Peskind ER, Hoff DJ, Hart KL, Holmes HA, Warren D, *et al*. A parallel group placebo controlled study of prazosin for trauma nightmares and sleep disturbance in combat veterans with post-traumatic stress disorder. *Biol Psychiatry* 2007;**61**:928–34. <https://doi.org/10.1016/j.biopsych.2006.06.032>
123. Raskind MA, Peterson K, Williams T, Hoff DJ, Hart K, Holmes H, *et al*. A trial of prazosin for combat trauma PTSD with nightmares in active-duty soldiers returned from Iraq and Afghanistan. *Am J Psychiatry* 2013;**170**:1003–10. <https://doi.org/10.1176/appi.ajp.2013.12081133>
124. Ready DJ, Gerardi RJ, Bakscheider AG, Mascaro N, Rothbaum BO. Comparing virtual reality exposure therapy to present-centered therapy with 11 U.S. Vietnam veterans with PTSD. *Cyberpsychol Behav Soc Netw* 2010;**13**:49–54. <https://doi.org/10.1089/cyber.2009.0239>
125. Reed GL, Enright RD. The effects of forgiveness therapy on depression, anxiety, and posttraumatic stress for women after spousal emotional abuse. *J Consult Clin Psychol* 2006;**74**:920–9. <https://doi.org/10.1037/0022-006X.74.5.920>
126. Reger GM, Koenen-Woods P, Zetocha K, Smolenski DJ, Holloway KM, Rothbaum BO, *et al*. Randomized controlled trial of prolonged exposure using imaginal exposure vs. virtual reality exposure in active duty soldiers with deployment-related posttraumatic stress disorder (PTSD). *J Consult Clin Psychol* 2016;**84**:946–59. <https://doi.org/10.1037/ccp0000134>
127. Reich DB, Winternitz S, Hennen J, Watts T, Stanculescu C. A preliminary study of risperidone in the treatment of posttraumatic stress disorder related to childhood abuse in women. *J Clin Psychiatry* 2004;**65**:1601–6. <https://doi.org/10.4088/JCP.v65n1204>
128. Resick PA, Wachen JS, Mintz J, Young-McCaughan S, Roache JD, Borah AM, *et al*. A randomized clinical trial of group cognitive processing therapy compared with group present-centered therapy for PTSD among active duty military personnel. *J Consult Clin Psychol* 2015;**83**:1058–68. <https://doi.org/10.1037/ccp0000016>
129. Rothbaum BO, Price M, Jovanovic T, Norrholm SD, Gerardi M, Dunlop B, *et al*. A randomized, double-blind evaluation of D-cycloserine or alprazolam combined with virtual reality exposure therapy for posttraumatic stress disorder in Iraq and Afghanistan War veterans. *Am J Psychiatry* 2014;**171**:640–8. <https://doi.org/10.1176/appi.ajp.2014.13121625>

REFERENCES

130. Rogers S, Silver SM, Goss J, Obenchain J, Willis A, Whitney RL. A single session, group study of exposure and eye movement desensitization and reprocessing in treating posttraumatic stress disorder among Vietnam War veterans: preliminary data. *J Anxiety Disord* 1999;**13**:119–30. [https://doi.org/10.1016/S0887-6185\(98\)00043-7](https://doi.org/10.1016/S0887-6185(98)00043-7)
131. Sikkema KJ, Hansen NB, Kochman A, Tarakeshwar N, Neufeld S, Meade CS, Fox AM. Outcomes from a group intervention for coping with HIV/AIDS and childhood sexual abuse: reductions in traumatic stress. *AIDS Behav* 2007;**11**:49–60. <https://doi.org/10.1007/s10461-006-9149-8>
132. Sikkema KJ, Ranby KW, Meade CS, Hansen NB, Wilson PA, Kochman A. Reductions in traumatic stress following a coping intervention were mediated by decreases in avoidant coping for people living with HIV/AIDS and childhood sexual abuse. *J Consult Clin Psychol* 2013;**81**:274–83. <https://doi.org/10.1037/a0030144>
133. Smajkic A, Weine S, Djuric-Bijedic Z, Boskailo E, Lewis J, Pavkovic I. Sertraline, paroxetine, and venlafaxine in refugee posttraumatic stress disorder with depression symptoms. *J Trauma Stress* 2001;**14**:445–52. <https://doi.org/10.1023/A:1011177420069>
134. Sonne C, Carlsson J, Bech P, Elklit A, Mortensen EL. Treatment of trauma-affected refugees with venlafaxine versus sertraline combined with psychotherapy – a randomised study. *BMC Psychiatry* 2016;**16**:383. <https://doi.org/10.1186/s12888-016-1081-5>
135. Stein MB, Kline NA, Matloff JL. Adjunctive olanzapine for SSRI-resistant combat-related PTSD: a double-blind, placebo-controlled study. *Am J Psychiatry* 2002;**159**:1777–9. <https://doi.org/10.1176/appi.ajp.159.10.1777>
136. Stenmark H, Catani C, Neuner F, Elbert T, Hohen A. Treating PTSD in refugees and asylum seekers within the general health care system. A randomized controlled multicenter study. *Behav Res Ther* 2013;**51**:641–7. <https://doi.org/10.1016/j.brat.2013.07.002>
137. Teng EJ, Bailey SD, Chaison AD, Petersen NJ, Hamilton JD, Dunn NJ. Treating comorbid panic disorder in veterans with posttraumatic stress disorder. *J Consult Clin Psychol* 2008;**76**:704–10. <https://doi.org/10.1037/0022-006X.76.4.710>
138. Ter Heide FJ, Mooren TM, Kleijn W, de Jongh A, Kleber RJ. EMDR versus stabilisation in traumatised asylum seekers and refugees: results of a pilot study. *Eur J Psychotraumatol* 2011;**2**: 5881. <https://doi.org/10.3402/ejpt.v2i0.5881>
139. Ter Heide FJ, Mooren TM, van de Schoot R, de Jongh A, Kleber RJ. Eye movement desensitisation and reprocessing therapy v. stabilisation as usual for refugees: randomised controlled trial. *Br J Psychiatry* 2016;**209**:311–18. <https://doi.org/10.1192/bjp.bp.115.167775>
140. Ulmer CS, Edinger JD, Calhoun PS. A multicomponent cognitive-behavioral intervention for sleep disturbance in veterans with PTSD: a pilot study. *J Clin Sleep Med* 2011;**7**:57–68.
141. van der Kolk BA, Dreyfuss D, Michaels M, Shera D, Berkowitz R, Fisler R, Saxe G. Fluoxetine in posttraumatic stress disorder. *J Clin Psychiatry* 1994;**55**:517–22.
142. Wahbeh H, Goodrich E, Goy E, Oken BS. Mechanistic Pathways of Mindfulness Meditation in Combat Veterans With Posttraumatic Stress Disorder. *J Clin Psychol* 2016;**72**:365–83. <https://doi.org/10.1002/jclp.22255>
143. Wang SJ, Bytyçi A, Izeti S, Kallaba M, Rushiti F, Montgomery E, Modvig J. A novel bio-psycho-social approach for rehabilitation of traumatized victims of torture and war in the post-conflict context: a pilot randomized controlled trial in Kosovo. *Confl Health* 2016;**10**:34. <https://doi.org/10.1186/s13031-016-0100-y>

144. Weiss WM, Murray LK, Zangana GA, Mahmooth Z, Kaysen D, Dorsey S, *et al.* Community-based mental health treatments for survivors of torture and militant attacks in Southern Iraq: a randomized control trial. *BMC Psychiatry* 2015;**15**:249. <https://doi.org/10.1186/s12888-015-0622-7>
145. Yeomans PD, Forman EM, Herbert JD, Yuen E. A randomized trial of a reconciliation workshop with and without PTSD psychoeducation in Burundian sample. *J Trauma Stress* 2010;**23**:305–12. <https://doi.org/10.1002/jts.20531>
146. Zlotnick C, Shea TM, Rosen K, Simpson E, Mulrenin K, Begin A, Pearlstein T. An affect-management group for women with posttraumatic stress disorder and histories of childhood sexual abuse. *J Trauma Stress* 1997;**10**:425–36. <https://doi.org/10.1002/jts.2490100308>
147. Zohar J, Amital D, Miodownik C, Kotler M, Bleich A, Lane RM, Austin C. Double-blind placebo-controlled pilot study of sertraline in military veterans with posttraumatic stress disorder. *J Clin Psychopharmacol* 2002;**22**:190–5. <https://doi.org/10.1097/00004714-200204000-00013>
148. King AP, Erickson TM, Giardino ND, Favorite T, Rauch SA, Robinson E, *et al.* A pilot study of group mindfulness-based cognitive therapy (MBCT) for combat veterans with posttraumatic stress disorder (PTSD). *Depress Anxiety* 2013;**30**:638–45. <https://doi.org/10.1002/da.22104>
149. Kruse J, Joksimovic L, Cavka M, Wöller W, Schmitz N. Effects of trauma-focused psychotherapy upon war refugees. *J Trauma Stress* 2009;**22**:585–92. <https://doi.org/10.1002/jts.20477>
150. Levi O, Bar-Haim Y, Kreiss Y, Fruchter E. Cognitive-Behavioural Therapy and Psychodynamic Psychotherapy in the Treatment of Combat-Related Post-Traumatic Stress Disorder: A Comparative Effectiveness Study. *Clin Psychol Psychother* 2016;**23**:298–307. <https://doi.org/10.1002/cpp.1969>
151. Lundqvist G, Svedin CG, Hansson K, Broman I. Group therapy for women sexually abused as children: mental health before and after group therapy. *J Interpers Violence* 2006;**21**:1665–77. <https://doi.org/10.1177/0886260506294986>
152. Morgan T, Cummings AL. Change experienced during group therapy by female survivors of childhood sexual abuse. *J Consult Clin Psychol* 1999;**67**:28–36. <https://doi.org/10.1037/0022-006X.67.1.28>
153. Narimani M, Sadeghieh Ahari S, Rajabi S. Comparison of efficacy of eye movement desensitization and reprocessing and cognitive behavioral therapy therapeutic methods for reducing anxiety and depression of Iranian combatant afflicted by post traumatic stress disorder. *J Appl Sci* 2008;**8**:1932–7. <https://doi.org/10.3923/jas.2008.1932.1937>
154. Pivac N, Kozaric-Kovacic D, Muck-Seler D. Olanzapine versus fluphenazine in an open trial in patients with psychotic combat-related post-traumatic stress disorder. *Psychopharmacology* 2004;**175**:451–6.
155. Salo J, Punamaki R-L, Qouta S, El Sarraj E. Individual and group treatment and self and other representations predicting posttraumatic recovery among former political prisoners. *Traumatology* 2008;**14**:45–61. <https://doi.org/10.1177/1534765608319079>
156. Saxe BJ, Johnson SM. An empirical investigation of group treatment for a clinical population of adult female incest survivors. *J Child Sexual Abuse* 1999;**8**:67–88. https://doi.org/10.1300/J070v08n01_05
157. Carlson JG, Chemtob CM, Rusnak K, Hedlund NL, Muraoka MY. Eye movement desensitization and reprocessing (EDMR) treatment for combat-related posttraumatic stress disorder. *J Trauma Stress* 1998;**11**:3–24. <https://doi.org/10.1023/A:1024448814268>

158. Hinton D, Pich V, Chhean D, Pollack M. Olfactory-triggered panic attacks among Khmer refugees: a contextual approach. *Transcult Psychiatry* 2004;**41**:155–99. <https://doi.org/10.1177/1363461504043564>
159. Margolies SO, Rybarczyk B, Vrana SR, Leszczyszyn DJ, Lynch J. Efficacy of a cognitive-behavioral treatment for insomnia and nightmares in Afghanistan and Iraq veterans with PTSD. *J Clin Psychol* 2013;**69**:1026–42. <https://doi.org/10.1002/jclp.21970>
160. Niles B, Seligowski A, Silberbogen A. Measuring mindfulness: which aspects of mindfulness change following a brief telehealth intervention for PTSD? *BMC Complement Altern Med* 2012;**12**:P191. <https://doi.org/10.1186/1472-6882-12-S1-P191>
161. Naved RT, Rimi NA, Jahan S, Lindmark G. Paramedic-conducted mental health counselling for abused women in rural Bangladesh: an evaluation from the perspective of participants. *J Health Popul Nutr* 2009;**27**:477–91. <https://doi.org/10.3329/jhpn.v27i4.3391>
162. Hughes MJ, Rasmussen LA. The utility of motivational interviewing in domestic violence shelters: a qualitative exploration. *J Aggression Maltreat Trauma* 2010;**19**:300–22. <https://doi.org/10.1080/10926771003705213>
163. Bermudez D, Benjamin MT, Porter SE, Saunders PA, Myers NA, Dutton MA. A qualitative analysis of beginning mindfulness experiences for women with post-traumatic stress disorder and a history of intimate partner violence. *Complement Ther Clin Pract* 2013;**19**:104–8. <https://doi.org/10.1016/j.ctcp.2013.02.004>
164. Dutton MA, Bermudez D, Matas A, Majid H, Myers NL. Mindfulness-based stress reduction for low-income, predominantly African American women with PTSD and a history of intimate partner violence. *Cogn Behav Pract* 2013;**20**:23–32. <https://doi.org/10.1016/j.cbpra.2011.08.003>
165. Martinez ME, Kearney DJ, Simpson T, Felleman BI, Bernardi N, Sayre G. Challenges to enrollment and participation in mindfulness-based stress reduction among veterans: a qualitative study. *J Altern Complement Med* 2015;**21**:409–21. <https://doi.org/10.1089/acm.2014.0324>
166. Hundt NE, Barrera TL, Arney J, Stanley MA. 'It's worth it in the end': veterans' experiences in prolonged exposure and cognitive processing therapy. *Cogn Behav Pract* 2017;**24**:50–7. <https://doi.org/10.1016/j.cbpra.2016.02.003>
167. Palmer S, Stalker CA, Harper K, Gadbois S. Balancing positive outcomes with vicarious traumatization: participants' experiences with group treatment for long-term effects of childhood abuse. *Soc Work Groups* 2007;**30**:59–77. https://doi.org/10.1300/J009v30n04_05
168. Parker A, Fourt A, Langmuir JI, Dalton EJ, Classen CC. The experience of trauma recovery: a qualitative study of participants in the Women Recovering from Abuse Program (WRAP). *J Child Sex Abus* 2007;**16**:55–77. https://doi.org/10.1300/J070v16n02_04
169. Vincent F, Jenkins H, Larkin M, Clohessy S. Asylum-seekers' experiences of trauma-focused cognitive behaviour therapy for post-traumatic stress disorder: a qualitative study. *Behav Cogn Psychother* 2013;**41**:579–93. <https://doi.org/10.1017/S1352465812000550>
170. Braye S, Preston-Shoot M. Emerging from out of the shadows? Service user and carer involvement in systematic reviews. *Evid Policy* 2005;**1**:173–94. <https://doi.org/10.1332/1744264053730743>
171. Smith E, Donovan S, Beresford P, Manthorpe J, Brearley S, Sitzia J, Ross F. Getting ready for user involvement in a systematic review. *Health Expect* 2009;**12**:197–208. <https://doi.org/10.1111/j.1369-7625.2009.00535.x>

172. Rushmer RK, Cheetham M, Cox L, Crosland A, Gray J, Hughes L, *et al.* Research utilisation and knowledge mobilisation in the commissioning and joint planning of public health interventions to reduce alcohol-related harms: a qualitative case design using a cocreation approach. *Health Serv Deliv Res* 2015;**3**(33). <https://doi.org/10.3310/hsdr03330>
173. Thompson CT, Vidgen A, Roberts NP. Psychological interventions for post-traumatic stress disorder in refugees and asylum seekers: a systematic review and meta-analysis. *Clin Psychol Rev* 2018;**63**:66–79. <https://doi.org/10.1016/j.cpr.2018.06.006>
174. Bisson JI, Roberts NP, Andrew M, Cooper R, Lewis C. Psychological therapies for chronic post-traumatic stress disorder (PTSD) in adults. *Cochrane Database Syst Rev* 2013;**12**:CD003388. <https://doi.org/10.1002/14651858.CD003388.pub4>
175. Cloitre M, Courtois CA, Ford JD, Green BL, Alexander P, Briere J, *et al.* *The ISTSS Expert Consensus Treatment Guidelines for Complex PTSD in Adults*. 2012. URL: www.istss.org/ISTSS_Main/media/Documents/ISTSS-Expert-Concesnsus-Guidelines-for-Complex-PTSD-Updated-060315.pdf (accessed 10 January 2020).
176. Dalton J, Thomas S, Melton H, Harden M, Eastwood A. The provision of services in the UK for UK armed forces veterans with PTSD: a rapid evidence synthesis. *Health Serv Deliv Res* 2018;**6**(11). <https://doi.org/10.3310/hsdr06110>
177. Hoskins M, Pearce J, Bethell A, Dankova L, Barbui C, Tol WA, *et al.* Pharmacotherapy for post-traumatic stress disorder: systematic review and meta-analysis. *Br J Psychiatry* 2015;**206**:93–100. <https://doi.org/10.1192/bjp.bp.114.148551>
178. Purgato M, Gastaldon C, Papola D, van Ommeren M, Barbui C, Tol WA. Psychological therapies for the treatment of mental disorders in low- and middle-income countries affected by humanitarian crises. *Cochrane Database Syst Rev* 2018;**7**:CD011849. <https://doi.org/10.1002/14651858.CD011849.pub2>
179. Dorrepaal E, Thomaes K, Hoogendoorn AW, Veltman DJ, Draijer N, van Balkom AJ. Evidence-based treatment for adult women with child abuse-related Complex PTSD: a quantitative review. *Eur J Psychotraumatol* 2014;**5**:23613. <https://doi.org/10.3402/ejpt.v5.23613>
180. Nosè M, Ballette F, Bighelli I, Turrini G, Purgato M, Tol W, *et al.* Psychosocial interventions for post-traumatic stress disorder in refugees and asylum seekers resettled in high-income countries: systematic review and meta-analysis. *PLOS ONE* 2017;**12**:e0171030. <https://doi.org/10.1371/journal.pone.0171030>
181. Tol WA, Purgato M, Bass JK, Galappatti A, Eaton W. Mental health and psychosocial support in humanitarian settings: a public mental health perspective. *Epidemiol Psychiatr Sci* 2015;**24**:484–94. <https://doi.org/10.1017/S2045796015000827>
182. Arroyo K, Lundahl B, Butters R, Vanderloo M, Wood DS. Short-term interventions for survivors of intimate partner violence: a systematic review and meta-analysis. *Trauma Violence Abuse* 2017;**18**:155–71. <https://doi.org/10.1177/1524838015602736>
183. Karatzias T, Murphy P, Cloitre M, Bisson J, Roberts N, Shevlin M, *et al.* Psychological interventions for ICD-11 complex PTSD symptoms: systematic review and meta-analysis. *Psychol Med* 2019;**49**:1761–75. <https://doi.org/10.1017/S0033291719000436>
184. Peduzzi P, Concato J, Kemper E, Holford TR, Feinstein AR. A simulation study of the number of events per variable in logistic regression analysis. *J Clin Epidemiol* 1996;**49**:1373–9. [https://doi.org/10.1016/S0895-4356\(96\)00236-3](https://doi.org/10.1016/S0895-4356(96)00236-3)
185. Kontopantelis E, Springate DA, Reeves D. A re-analysis of the Cochrane Library data: the dangers of unobserved heterogeneity in meta-analyses. *PLOS ONE* 2013;**8**:e69930. <https://doi.org/10.1371/journal.pone.0069930>

REFERENCES

186. Vale CL, Tierney JF, Spera N, Whelan A, Nightingale A, Hanley B. Evaluation of patient involvement in a systematic review and meta-analysis of individual patient data in cervical cancer treatment. *Syst Rev* 2012;**1**:23. <https://doi.org/10.1186/2046-4053-1-23>
187. Stevelink SAM, Jones M, Hull L, Pernet D, MacCrimmon S, Goodwin L, *et al*. Mental health outcomes at the end of the British involvement in the Iraq and Afghanistan conflicts: a cohort study. *Br J Psychiatry* 2018;**213**:690–7. <https://doi.org/10.1192/bjp.2018.175>
188. Abramowitz EG, Barak Y, Ben-Avi I, Knobler HY. Hypnotherapy in the treatment of chronic combat-related PTSD patients suffering from insomnia: a randomized, zolpidem-controlled clinical trial. *Int J Clin Exp Hypn* 2008;**56**:270–80. <https://doi.org/10.1080/00207140802039672>
189. Acierno R, Gros DF, Ruggiero KJ, Hernandez-Tejada BM, Knapp RG, Lejuez CW, *et al*. Behavioral activation and therapeutic exposure for posttraumatic stress disorder: a noninferiority trial of treatment delivered in person versus home-based telehealth. *Depress Anxiety* 2016;**33**:415–23. <https://doi.org/10.1002/da.22476>
190. Aderka IM, Gillihan SJ, McLean CP, Foa EB. The relationship between posttraumatic and depressive symptoms during prolonged exposure with and without cognitive restructuring for the treatment of posttraumatic stress disorder. *J Consult Clin Psychol* 2013;**81**:375–82. <https://doi.org/10.1037/a0031523>
191. Adler AB, Bliese PD, McGurk D, Hoge CW, Castro CA. Battlemind debriefing and battlemind training as early interventions with soldiers returning from Iraq: randomization by platoon. *J Consult Clin Psychol* 2009;**77**:928–40. <https://doi.org/10.1037/a0016877>
192. Alderman CP, Condon JT, Gilbert AL. An open-label study of mirtazapine as treatment for combat-related PTSD. *Ann Pharmacother* 2009;**43**:1220–6. <https://doi.org/10.1345/aph.1M009>
193. Alderman CP, McCarthy LC, Condon JT, Marwood AC, Fuller JR. Topiramate in combat-related posttraumatic stress disorder. *Ann Pharmacother* 2009;**43**:635–41. <https://doi.org/10.1345/aph.1L578>
194. Allan NP, Short NA, Albanese BJ, Keough ME, Schmidt NB. Direct and mediating effects of an anxiety sensitivity intervention on posttraumatic stress disorder symptoms in trauma-exposed individuals. *Cogn Behav Ther* 2015;**44**:512–24. <https://doi.org/10.1080/16506073.2015.1075227>
195. Allon M. EMDR group therapy with women who were sexually assaulted in the Congo. *J EMDR Pract Res* 2015;**9**:28–34. <https://doi.org/10.1891/1933-3196.9.1.28>
196. Alvarez J, McLean C, Harris AH, Rosen CS, Ruzek JI, Kimerling R. The comparative effectiveness of cognitive processing therapy for male veterans treated in a VHA posttraumatic stress disorder residential rehabilitation program. *J Consult Clin Psychol* 2011;**79**:590–9. <https://doi.org/10.1037/a0024466>
197. Amin M, Gold M, Gold AR. The effect of nasal continuous positive airway pressure (Nasal CPAP) treatment on post traumatic stress disorder (PTSD) symptoms among veterans population. *Sleep* 2013;**36**:A145.
198. Angelo FN, Miller HE, Zoellner LA, Feeny NC. 'I need to talk about it': a qualitative analysis of trauma-exposed women's reasons for treatment choice. *Behav Ther* 2008;**39**:13–21. <https://doi.org/10.1016/j.beth.2007.02.002>
199. Arntz A, Tiesema M, Kindt M. Treatment of PTSD: a comparison of imaginal exposure with and without imagery rescripting. *J Behav Ther Exp Psychiatry* 2007;**38**:345–70. <https://doi.org/10.1016/j.jbtep.2007.10.006>

200. Ayoughi S, Missmahl I, Weierstall R, Elbert T. Provision of mental health services in resource-poor settings: a randomised trial comparing counselling with routine medical treatment in North Afghanistan (Mazar-e-Sharif). *BMC Psychiatry* 2012;**12**:14. <https://doi.org/10.1186/1471-244X-12-14>
201. Baños RM, Guillen V, Quero S, García-Palacios A, Alcañiz M, Botella C. A virtual reality system for the treatment of stress-related disorders: a preliminary analysis of efficacy compared to a standard cognitive behavioral program. *Int J Hum Comput Stud* 2011;**69**:602–13. <https://doi.org/10.1016/j.ijhcs.2011.06.002>
202. Basharpour S, Narimani M, Gamari-Give H, Abolgasemi A, Molavi P. Effect of cognitive processing therapy and holographic reprocessing on reduction of posttraumatic cognitions in students exposed to trauma. *Iran J Psychiatry* 2011;**6**:138–44.
203. Bass JK, Annan J, Mclvor Murray S, Kaysen D, Griffiths S, Cetinoglu T, *et al.* Controlled trial of psychotherapy for Congolese survivors of sexual violence. *N Engl J Med* 2013;**368**:2182–91. <https://doi.org/10.1056/NEJMoa1211853>
204. Batka C, Tanielian T, Woldetsadik MA, Farmer C, Jaycox LH. Stakeholder experiences in a stepped collaborative care study within U.S. army clinics. *Psychosomatics* 2016;**57**:586–97. <https://doi.org/10.1016/j.psych.2016.05.008>
205. Benedek DM. Posttraumatic stress disorder from Vietnam to today: the evolution of understanding during Eugene Brody's tenure at the journal of nervous and mental disease. *J Nerv Ment Dis* 2011;**199**:544–52. <https://doi.org/10.1097/NMD.0b013e318225f0e9>
206. Bensimon M, Amir D, Wolf Y. A pendulum between trauma and life: group music therapy with post-traumatized soldiers. *Arts Psychother* 2012;**39**:223–33. <https://doi.org/10.1016/j.aip.2012.03.005>
207. Betancourt TS, McBain R, Newnham EA, Akinsulure-Smith AM, Brennan RT, Weisz JR, Hansen NB. A behavioral intervention for war-affected youth in Sierra Leone: a randomized controlled trial. *J Am Acad Child Adolesc Psychiatry* 2014;**53**:1288–97. <https://doi.org/10.1016/j.jaac.2014.09.011>
208. Bisson JI. Trauma-focused group psychotherapy is not effective for posttraumatic stress disorder in Vietnam veterans. *Evid Based Ment Health* 2003;**6**:124. <https://doi.org/10.1136/ebmh.6.4.124>
209. Bisson JI. Eye movement desensitisation and reprocessing reduces PTSD symptoms compared with fluoxetine at six months post-treatment. *Evid Based Ment Health* 2007;**10**:118. <https://doi.org/10.1136/ebmh.10.4.118>
210. Blevins D, Roca J, Spencer T. Life guard: evaluation of an ACT-based workshop to facilitate reintegration of OIF/OEF veterans. *Prof Psychol Res Pr* 2011;**42**:32–9. <https://doi.org/10.1037/a0022321>
211. Bohus M, Dyer AS, Priebe K, Krüger A, Kleindienst N, Schmahl C, *et al.* Dialectical behaviour therapy for post-traumatic stress disorder after childhood sexual abuse in patients with and without borderline personality disorder: a randomised controlled trial. *Psychother Psychosom* 2013;**82**:221–33. <https://doi.org/10.1159/000348451>
212. Bolton P, Lee C, Haroz EE, Murray L, Dorsey S, Robinson C, *et al.* A transdiagnostic community-based mental health treatment for comorbid disorders: development and outcomes of a randomized controlled trial among Burmese refugees in Thailand. *PLOS Med* 2014;**11**:e1001757. <https://doi.org/10.1371/journal.pmed.1001757>
213. Bomyea J, Stein MB, Lang AJ. Interference control training for PTSD: a randomized controlled trial of a novel computer-based intervention. *J Anxiety Disord* 2015;**34**:33–42. <https://doi.org/10.1016/j.janxdis.2015.05.010>

REFERENCES

214. Bormann JE, Thorp S, Wetherell JL, Golshan S. A spiritually based group intervention for combat veterans with posttraumatic stress disorder: feasibility study. *J Holist Nurs* 2008;**26**:109–16. <https://doi.org/10.1177/0898010107311276>
215. Bormann JE, Thorp SR, Wetherell JL, Golshan S, Lang AJ. Meditation-based mantram intervention for veterans with posttraumatic stress disorder: a randomized trial. *Psychol Trauma* 2013;**5**:259–67. <https://doi.org/10.1037/a0027522>
216. Bormann J, Beck D, Glickman M, Zhao S, Osei-Bonsu P, Johnston J, et al. Meditation-based mantram repetition program for veterans with PTSD: a randomized controlled trial in the VA healthcare system. *J Altern Complement Med* 2014;**20**:A10-A. <https://doi.org/10.1089/acm.2014.5022.abstract>
217. Bradley RG, Follingstad DR. Group therapy for incarcerated women who experienced interpersonal violence: a pilot study. *J Trauma Stress* 2003;**16**:337–40. <https://doi.org/10.1023/A:1024409817437>
218. Brady K, Pearlstein T, Asnis GM, Baker D, Rothbaum B, Sikes CR, Farfel GM. Efficacy and safety of sertraline treatment of posttraumatic stress disorder: a randomized controlled trial. *JAMA* 2000;**283**:1837–44. <https://doi.org/10.1001/jama.283.14.1837>
219. Bremner JD, Mletzko T, Welter S, Siddiq S, Reed L, Williams C, et al. Treatment of posttraumatic stress disorder with phenytoin: an open-label pilot study. *J Clin Psychiatry* 2004;**65**:1559–64. <https://doi.org/10.4088/JCP.v65n1120>
220. Bremner JD, Afzal N, Vaccarino V, Carmody J, Divitale S. Mindfulness based stress reduction (MBSR) in the treatment of Iraq combat-related PTSD. *Psychosom Med* 2011;**73**:A39.
221. Brown AJ, Bollini AM, Craighead LW, Astin MC, Norrholm SD, Bradley B. Self-monitoring of reexperiencing symptoms: a randomized trial. *J Trauma Stress* 2014;**27**:519–25. <https://doi.org/10.1002/jts.21950>
222. Bryan CJ, Clemans TA, Hernandez AM, Mintz J, Peterson AL, Yarvis JS, et al. Evaluating potential iatrogenic suicide risk in trauma-focused group cognitive behavioral therapy for the treatment of PTSD in active duty military personnel. *Depress Anxiety* 2016;**33**:549–57. <https://doi.org/10.1002/da.22456>
223. Bui A, Bishop TM, Heffner K, Cerulli C, Crean H, Pigeon WR. Brief CBT-I disproportionately reduces depression, posttraumatic stress, and insomnia severity among survivors of intimate partner violence who are objective short sleepers. *Sleep* 2016;**39**:A220–A1.
224. Byers MG, Allison KM, Wendel CS, Lee JK. Prazosin versus quetiapine for nighttime posttraumatic stress disorder symptoms in veterans: an assessment of long-term comparative effectiveness and safety. *J Clin Psychopharmacol* 2010;**30**:225–9. <https://doi.org/10.1097/JCP.0b013e3181dac52f>
225. Byers MG. Long-term effectiveness of prazosin for PTSD. *Brown Univ Psychopharmacol Update* 2010;**21**:3.
226. Campbell M, Decker KP, Kruk K, Deaver SP. Art therapy and cognitive processing therapy for combat-related PTSD: a randomized controlled trial. *Art Ther* 2016;**33**:169–77. <https://doi.org/10.1080/07421656.2016.1226643>
227. Carr C, d'Ardenne P, Sloboda A, Scott C, Wang D, Priebe S. Group music therapy for patients with persistent post-traumatic stress disorder – an exploratory randomized controlled trial with mixed methods evaluation. *Psychol Psychother* 2012;**85**:179–202. <https://doi.org/10.1111/j.2044-8341.2011.02026.x>

228. Castillo DT, Chee CL, Nason E, Keller J, C'de Baca J, Qualls C, *et al.* Group-delivered cognitive/exposure therapy for PTSD in women veterans: a randomized controlled trial. *Psychol Trauma* 2016;**8**:404–12. <https://doi.org/10.1037/tra0000111>
229. Cates ME, Bishop MH, Davis LL, Lowe JS, Woolley TW. Clonazepam for treatment of sleep disturbances associated with combat-related posttraumatic stress disorder. *Ann Pharmacother* 2004;**38**:1395–9. <https://doi.org/10.1345/aph.1E043>
230. Chemtob CM, Novaco RW, Hamada RS, Gross DM. Cognitive-behavioral treatment for severe anger in posttraumatic stress disorder. *J Consult Clin Psychol* 1997;**65**:184–9. <https://doi.org/10.1037/0022-006X.65.1.184>
231. Chen JA, Keller SM, Zoellner LA, Feeny NC. 'How will it help me?' Reasons underlying treatment preferences between sertraline and prolonged exposure in posttraumatic stress disorder. *J Nerv Ment Dis* 2013;**201**:691–7. <https://doi.org/10.1097/NMD.0b013e31829c50a9>
232. Dempsey C, Chesney M, Lao L, Vegella P, Magyari T, Robertson MB, *et al.* Acupuncture and mindfulness-based stress reduction among female child abuse survivors: a randomized waitlist-controlled pilot study. *J Altern Complement Med* 2014;**20**:A87. <https://doi.org/10.1089/acm.2014.5229.abstract>
233. Church D, Hawk C, Brooks AJ, Toukolehto O, Wren M, Dinter I, Stein P. Psychological trauma symptom improvement in veterans using emotional freedom techniques: a randomized controlled trial. *J Nerv Ment Dis* 2013;**201**:153–60. <https://doi.org/10.1097/NMD.0b013e31827f6351>
234. Church D. Reductions in pain, depression, and anxiety symptoms after PTSD remediation in veterans. *Explore* 2014;**10**:162–9. <https://doi.org/10.1016/j.explore.2014.02.005>
235. Clark RD, Cañive JM, Calais LA, Qualls CR, Tuason VB. Divalproex in posttraumatic stress disorder: an open-label clinical trial. *J Trauma Stress* 1999;**12**:395–401. <https://doi.org/10.1023/A:1024797014210>
236. Classen CC, Palesh OG, Cavanaugh CE, Koopman C, Kaupp JW, Kraemer HC, *et al.* A comparison of trauma-focused and present-focused group therapy for survivors of childhood sexual abuse: a randomized controlled trial. *Psychol Trauma* 2011;**3**:84–93. <https://doi.org/10.1037/a0020096>
237. Cloitre M, Koenen KC. The impact of borderline personality disorder on process group outcome among women with posttraumatic stress disorder related to childhood abuse. *Int J Group Psychother* 2001;**51**:379–98. <https://doi.org/10.1521/ijgp.51.3.379.49886>
238. Cole KL, Sarlund-Heinrich P, Brown L. Developing and assessing effectiveness of a time-limited therapy group for incarcerated women survivors of childhood sexual abuse. *J Trauma Dissociation* 2007;**8**:97–121. https://doi.org/10.1300/J229v08n02_07
239. Connolly S, Sakai C. Brief trauma intervention with Rwandan genocide-survivors using thought field therapy. *Int J Emerg Ment Health* 2011;**13**:161–72.
240. Cort NA, Cerulli C, Poleshuck EL, Bellenger KM, Yinglin X, Xin T, *et al.* Interpersonal psychotherapy for depressed women with histories of intimate partner violence. *Psychol Trauma* 2014;**6**:700–7. <https://doi.org/10.1037/a0037361>
241. Coulter S. Systemic family therapy for families who have experienced trauma: a randomised controlled trial. *Br J Soc Work* 2010;**41**:502–19. <https://doi.org/10.1093/bjsw/bcq132>
242. Crespo M, Arinero M. Assessment of the efficacy of a psychological treatment for women victims of violence by their intimate male partner. *Span J Psychol* 2010;**13**:849–63. <https://doi.org/10.1017/S113874160000250X>

243. David D, De Faria L, Mellman TA. Adjunctive risperidone treatment and sleep symptoms in combat veterans with chronic PTSD. *Depress Anxiety* 2006;**23**:489–91. <https://doi.org/10.1002/da.20187>
244. Davidson JR, Kudler HS, Saunders WB, Erickson L, Smith RD, Stein RM, et al. Predicting response to amitriptyline in posttraumatic stress disorder. *Am J Psychiatry* 1993;**150**:1024–9. <https://doi.org/10.1176/ajp.150.7.1024>
245. Davidson J, Pearlstein T, Lonnberg P, Brady KT, Rothbaum B, Bell J, et al. Efficacy of sertraline in preventing relapse of posttraumatic stress disorder: results of a 28-week double-blind, placebo-controlled study. *Am J Psychiatry* 2001;**158**:1974–81. <https://doi.org/10.1176/appi.ajp.158.12.1974>
246. Davidson JR, Rothbaum BO, van der Kolk BA, Sikes CR, Farfel GM. Multicenter, double-blind comparison of sertraline and placebo in the treatment of posttraumatic stress disorder. *Arch Gen Psychiatry* 2001;**58**:485–92. <https://doi.org/10.1001/archpsyc.58.5.485>
247. Davis LL, Nugent AL, Murray J, Kramer GL, Petty F. Nefazodone treatment for chronic posttraumatic stress disorder: an open trial. *J Clin Psychopharmacol* 2000;**20**:159–64. <https://doi.org/10.1097/00004714-200004000-00007>
248. Davis JL, Rhudy JL, Pruiksmas KE, Byrd P, Williams AE, McCabe KM, Bartley EJ. Physiological predictors of response to exposure, relaxation, and rescripting therapy for chronic nightmares in a randomized clinical trial. *J Clin Sleep Med* 2011;**7**:622–31. <https://doi.org/10.5664/jcsm.1466>
249. Dawson KS, Schafer A, Anjuri D, Ndogoni L, Musyoki C, Sijbrandij M, et al. Feasibility trial of a scalable psychological intervention for women affected by urban adversity and gender-based violence in Nairobi. *BMC Psychiatry* 2016;**16**:410. <https://doi.org/10.1186/s12888-016-1117-x>
250. Dieperink E, Leskela J, Dieperink ME, Evans B, Thuras P, Ho SB. The effect of pegylated interferon- α_{2b} and ribavirin on posttraumatic stress disorder symptoms. *Psychosomatics* 2008;**49**:225–9. <https://doi.org/10.1176/appi.psy.49.3.225>
251. Difede J, Cukor J, Wyka K, Olden M, Hoffman H, Lee FS, Altemus M. D-cycloserine augmentation of exposure therapy for post-traumatic stress disorder: a pilot randomized clinical trial. *Neuropsychopharmacology* 2014;**39**:1052–8. <https://doi.org/10.1038/npp.2013.317>
252. Dorrepaal E, Thomaes K, Smit JH, van Balkom AJ, Veltman DJ, Hoogendoorn AW, Draijer N. Stabilizing group treatment for complex posttraumatic stress disorder related to child abuse based on psychoeducation and cognitive behavioural therapy: a multisite randomized controlled trial. *Psychother Psychosom* 2012;**81**:217–25. <https://doi.org/10.1159/000335044>
253. Dorrepaal E, Thomaes K, Smit JH, Veltman DJ, Hoogendoorn AW, van Balkom AJ, Draijer N. Treatment compliance and effectiveness in complex PTSD patients with co-morbid personality disorder undergoing stabilizing cognitive behavioral group treatment: a preliminary study. *Eur J Psychotraumatol* 2013;**4**:21171. <https://doi.org/10.3402/ejpt.v4i0.21171>
254. Doruk A, Yetkin S, Aydin H. The efficacy of sertraline on post-traumatic stress disorder. *Klinik Psikofarmakol Bulteni* 1999;**9**:47–52.
255. Dougherty MJ. Client satisfaction survey of inpatient trauma and dissociative disorders program. *J Trauma Dissociation* 2002;**3**:97–105. https://doi.org/10.1300/J229v03n02_06
256. Drozdek B. Follow-up study of concentration camp survivors from Bosnia-Herzegovina: three years later. *J Nerv Ment Dis* 1997;**185**:690–4. <https://doi.org/10.1097/00005053-199711000-00007>
257. Drozdek B, Bolwerk N. Evaluation of group therapy with traumatized asylum seekers and refugees—The Den Bosch Model. *Traumatology* 2010;**16**:117–27. <https://doi.org/10.1177/1534765610388298>

258. Droždek B, Kamperman AM, Bolwerk N, Tol WA, Kleber RJ. Group therapy with male asylum seekers and refugees with posttraumatic stress disorder: a controlled comparison cohort study of three day-treatment programs. *J Nerv Ment Dis* 2012;**200**:758–65. <https://doi.org/10.1097/NMD.0b013e318266f860>
259. Duffy JD, Malloy PF. Efficacy of buspirone in the treatment of posttraumatic stress disorder: an open trial. *Ann Clin Psychiatry* 1994;**6**:33–7. <https://doi.org/10.3109/10401239409148837>
260. Duffy M, Gillespie K, Clark DM. Post-traumatic stress disorder in the context of terrorism and other civil conflict in Northern Ireland: randomised controlled trial. *BMJ* 2007;**334**:1147. <https://doi.org/10.1136/bmj.39021.846852.BE>
261. Dunn NJ, Rehm LP, Schillaci J, Soucek J, Mehta P, Ashton CM, *et al.* A randomized trial of self-management and psychoeducational group therapies for comorbid chronic posttraumatic stress disorder and depressive disorder. *J Trauma Stress* 2007;**20**:221–37. <https://doi.org/10.1002/jts.20214>
262. Durham RC, Chambers JA, Power KG, Sharp DM, Macdonald RR, Major KA, *et al.* Long-term outcome of cognitive behaviour therapy clinical trials in central Scotland. *Health Technol Assess* 2005;**9**(42). <https://doi.org/10.3310/hta9420>
263. Echeburúa E, de Corral P, Zubizarreta I, Sarasua B. Psychological treatment of chronic posttraumatic stress disorder in victims of sexual aggression. *Behav Modif* 1997;**21**:433–56. <https://doi.org/10.1177/01454455970214003>
264. Echeburúa E, Sarasua B, Zubizarreta I. Individual versus individual and group therapy regarding a cognitive-behavioral treatment for battered women in a community setting. *J Interpers Violence* 2014;**29**:1783–801. <https://doi.org/10.1177/0886260513511703>
265. Edmond TE, Sloan L, McCarty D. Sexual abuse survivors' perceptions of the effectiveness of EMDR and eclectic therapy. *Res Soc Work Pract* 2004;**14**:259–72. <https://doi.org/10.1177/1049731504265830>
266. Ekstrom M, Carlsson J, Sonne C, Mortensen EL. Stress management versus cognitive restructuring: a randomized clinical study on traumatized refugees. *Eur Psychiatry* 2016;**33**:S399–S400. <https://doi.org/10.1016/j.eurpsy.2016.01.1437>
267. Ekstrom M, Sonne C, Carlsson J, Bech P, Elklit A. The treatment of traumatised refugees with sertraline versus venlafaxine in combination with psychotherapy – a randomised clinical study. *Eur Psychiatry* 2016;**33**:S400. <https://doi.org/10.1016/j.eurpsy.2016.01.1438>
268. Elkjaer H, Kristensen E, Mortensen EL, Poulsen S, Lau M. Efficacy of specialized incest group psychotherapy in reducing symptoms of PTSD: 5 year follow-up of a randomized trial. *Eur Psychiatry* 2012;**27**:1. [https://doi.org/10.1016/S0924-9338\(12\)75304-X](https://doi.org/10.1016/S0924-9338(12)75304-X)
269. Ertl V, Pfeiffer A, Schauer E, Elbert T, Neuner F. Community-implemented trauma therapy for former child soldiers in northern Uganda: a randomized controlled trial. *JAMA* 2011;**306**:503–12. <https://doi.org/10.1001/jama.2011.1060>
270. Esala JJ, Taing S. Testimony therapy with ritual: a pilot randomized controlled trial. *J Trauma Stress* 2017;**30**:94–8. <https://doi.org/10.1002/jts.22163>
271. Falsetti SA, Erwin BA, Resnick HS, Davis J, Combs-Lane AM. Multiple channel exposure therapy of PTSD: impact of treatment on functioning and resources. *J Cogn Psychother* 2003;**17**:133–47. <https://doi.org/10.1891/jcop.17.2.133.57439>
272. Farchi M, Gidron Y. The effects of 'psychological inoculation' versus ventilation on the mental resilience of Israeli citizens under continuous war stress. *J Nerv Ment Dis* 2010;**198**:382–4. <https://doi.org/10.1097/NMD.0b013e3181da4b67>

273. Fiorillo D, McLean C, Pistorello J, Hayes SC, Follette VM. Evaluation of a web-based acceptance and commitment therapy program for women with trauma-related problems: a pilot study. *J Contextual Behav Sci* 2017;**6**:104–13. <https://doi.org/10.1016/j.jcbs.2016.11.003>
274. Foa EB, Rothbaum BO, Riggs DS, Murdock TB. Treatment of posttraumatic stress disorder in rape victims: a comparison between cognitive-behavioral procedures and counseling. *J Consult Clin Psychol* 1991;**59**:715–23. <https://doi.org/10.1037/0022-006X.59.5.715>
275. Foa EB, Dancu CV, Hembree EA, Jaycox LH, Meadows EA, Street GP. A comparison of exposure therapy, stress inoculation training, and their combination for reducing posttraumatic stress disorder in female assault victims. *J Consult Clin Psychol* 1999;**67**:194–200. <https://doi.org/10.1037/0022-006X.67.2.194>
276. Foa EB, Hembree EA, Cahill SP, Rauch SA, Riggs DS, Feeny NC, Yadin E. Randomized trial of prolonged exposure for posttraumatic stress disorder with and without cognitive restructuring: outcome at academic and community clinics. *J Consult Clin Psychol* 2005;**73**:953–64. <https://doi.org/10.1037/0022-006X.73.5.953>
277. Forbes D, Phelps A, McHugh T. Treatment of combat-related nightmares using imagery rehearsal: a pilot study. *J Trauma Stress* 2001;**14**:433–42. <https://doi.org/10.1023/A:1011133422340>
278. Forbes D, Lewis V, Parslow R, Hawthorne G, Creamer M. Naturalistic comparison of models of programmatic interventions for combat-related post-traumatic stress disorder. *Aust N Z J Psychiatry* 2008;**42**:1051–9. <https://doi.org/10.1080/00048670802512024>
279. Forbes D, Lloyd D, Nixon RD, Elliott P, Varker T, Perry D, et al. A multisite randomized controlled effectiveness trial of cognitive processing therapy for military-related posttraumatic stress disorder. *J Anxiety Disord* 2012;**26**:442–52. <https://doi.org/10.1016/j.janxdis.2012.01.006>
280. Ford JD, Steinberg KL, Zhang W. A randomized clinical trial comparing affect regulation and social problem-solving psychotherapies for mothers with victimization-related PTSD. *Behav Ther* 2011;**42**:560–78. <https://doi.org/10.1016/j.beth.2010.12.005>
281. Fortney JC, Pyne JM, Kimbrell TA, Hudson TJ, Robinson DE, Schneider R, et al. Telemedicine-based collaborative care for posttraumatic stress disorder: a randomized clinical trial. *JAMA Psychiatry* 2015;**72**:58–67. <https://doi.org/10.1001/jamapsychiatry.2014.1575>
282. Fortney JC, Pyne JM, Kimbrell TA, Hudson TJ, Robinson DE, Schneider R, et al. 'Telemedicine-based collaborative care for posttraumatic stress disorder: a randomized clinical trial': correction. *JAMA Psychiatry* 2015;**72**:96. <https://doi.org/10.1001/jamapsychiatry.2014.1575>
283. Frommberger U, Stieglitz RD, Nyberg E, Richter H, Novelli-Fischer U, Angenendt J, et al. Comparison between paroxetine and behaviour therapy in patients with posttraumatic stress disorder (PTSD): a pilot study. *Int J Psychiatry Clin Pract* 2004;**8**:19–23. <https://doi.org/10.1080/13651500310004803>
284. Galovski TE, Monson C, Bruce SE, Resick PA. Does cognitive-behavioral therapy for PTSD improve perceived health and sleep impairment? *J Trauma Stress* 2009;**22**:197–204. <https://doi.org/10.1002/jts.20418>
285. Galovski TE, Blain LM, Mott JM, Elwood L, Houle T. Manualized therapy for PTSD: flexing the structure of cognitive processing therapy. *J Consult Clin Psychol* 2012;**80**:968–81. <https://doi.org/10.1037/a0030600>
286. Gamito P, Oliveira J, Morais D, Oliveira S, Duarte N, Saraiva T, et al. Virtual reality therapy controlled study for war veterans with PTSD. Preliminary results. *Stud Health Technol Inform* 2009;**144**:269–72.

287. Garfield DA, Fichtner CG, Leveroni C, Mahableshwarkar A. Open trial of nefazodone for combat veterans with posttraumatic stress disorder. *J Trauma Stress* 2001;**14**:453–60. <https://doi.org/10.1023/A:1011148304140>
288. Gatz M, Brown VB, Hennigan K, Rechberger E, O’Keefe M, Rose T, *et al.* Effectiveness of an integrated, trauma-informed approach to treating women with co-occurring disorders and histories of trauma: the Los Angeles site experience. *J Community Psychol* 2007;**35**:863–78. <https://doi.org/10.1002/jcop.20186>
289. Gebler FA, Maercker A. [Expressive writing and the existential dimension in coping with traumatic experiences: a randomized controlled pilot study.] *Trauma und Gewalt* 2007;**1**:264–72.
290. Gelpin E, Bonne O, Peri T, Brandes D, Shalev AY. Treatment of recent trauma survivors with benzodiazepines: a prospective study. *J Clin Psychiatry* 1996;**57**:390–4.
291. Gillin JC, Smith-Vaniz A, Schnierow B, Rapaport MH, Kelsoe J, Raimo E, *et al.* An open-label, 12-week clinical and sleep EEG study of nefazodone in chronic combat-related posttraumatic stress disorder. *J Clin Psychiatry* 2001;**62**:789–96. <https://doi.org/10.4088/JCP.v62n1007>
292. Ginsberg DL. Prazosin reduces nightmares in posttraumatic stress disorder. *Prim Psychiatry* 2003;**10**:24.
293. Ginzburg K, Butler LD, Giese-Davis J, Cavanaugh CE, Neri E, Koopman C, *et al.* Shame, guilt, and posttraumatic stress disorder in adult survivors of childhood sexual abuse at risk for human immunodeficiency virus: outcomes of a randomized clinical trial of group psychotherapy treatment. *J Nerv Ment Dis* 2009;**197**:536–42. <https://doi.org/10.1097/NMD.0b013e3181ab2ebd>
294. Glover H. A preliminary trial of nalmefene for the treatment of emotional numbing in combat veterans with post-traumatic stress disorder. *Isr J Psychiatry Relat Sci* 1993;**30**:255–63.
295. Glynn SM, Eth S, Randolph ET, Foy DW, Urbaitis M, Boxer L, *et al.* A test of behavioral family therapy to augment exposure for combat-related posttraumatic stress disorder. *J Consult Clin Psychol* 1999;**67**:243–51. <https://doi.org/10.1037/0022-006X.67.2.243>
296. Goldberg JF, Cloitre M, Whiteside JE, Han H. An open-label pilot study of divalproex sodium for posttraumatic stress disorder related to childhood abuse. *Curr Ther Res Clin Exp* 2003;**64**:45–54. [https://doi.org/10.1016/S0011-393X\(03\)00003-1](https://doi.org/10.1016/S0011-393X(03)00003-1)
297. Gosselin A, Shlik J, Christie K. Comparison of two conceptually different methods for treating PTSD and insomnia among Canadian military veterans: CBTi vs. MBSR. *Sleep* 2016;**39**:A397–A8.
298. Graham-Bermann SA, Miller LE. Intervention to reduce traumatic stress following intimate partner violence: an efficacy trial of the Moms’ Empowerment Program (MEP). *Psychodyn Psychiatry* 2013;**41**:329–49. <https://doi.org/10.1521/pdps.2013.41.2.329>
299. Gray MJ, Schorr Y, Nash W, Lebowitz L, Amidon A, Lansing A, *et al.* Adaptive disclosure: an open trial of a novel exposure-based intervention for service members with combat-related psychological stress injuries. *Behav Ther* 2012;**43**:407–15. <https://doi.org/10.1016/j.beth.2011.09.001>
300. Gros DF, Strachan M, Ruggiero KJ, Knapp RG, Frueh BC, Egede LE, *et al.* Innovative service delivery for secondary prevention of PTSD in at-risk OIF-OEF service men and women. *Contemp Clin Trials* 2011;**32**:122–8. <https://doi.org/10.1016/j.cct.2010.10.003>
301. Gros DF, Yoder M, Tuerk PW, Lozano BE, Acierno R. Exposure therapy for PTSD delivered to veterans via telehealth: predictors of treatment completion and outcome and comparison to treatment delivered in person. *Behav Ther* 2011;**42**:276–83. <https://doi.org/10.1016/j.beth.2010.07.005>

302. Gutner CA, Casement MD, Stavitsky Gilbert K, Resick PA. Change in sleep symptoms across cognitive processing therapy and prolonged exposure: a longitudinal perspective. *Behav Res Ther* 2013;**51**:817–22. <https://doi.org/10.1016/j.brat.2013.09.008>
303. Hall BJ, Bolton PA, Annan J, Kaysen D, Robinette K, Cetinoglu T, *et al.* The effect of cognitive therapy on structural social capital: results from a randomized controlled trial among sexual violence survivors in the Democratic Republic of the Congo. *Am J Public Health* 2014;**104**:1680–6. <https://doi.org/10.2105/AJPH.2014.301981>
304. Hamner MB. Clozapine treatment for a veteran with comorbid psychosis and PTSD. *Am J Psychiatry* 1996;**153**:841. <https://doi.org/10.1176/ajp.153.6.841>
305. Hamner MB, Deitsch SE, Brodrick PS, Ulmer HG, Lorberbaum JP. Quetiapine treatment in patients with posttraumatic stress disorder: an open trial of adjunctive therapy. *J Clin Psychopharmacol* 2003;**23**:15–20. <https://doi.org/10.1097/00004714-200302000-00003>
306. Harris JI, Erbes CR, Engdahl BE, Thuras P, Murray-Swank N, Grace D, *et al.* The effectiveness of a trauma focused spiritually integrated intervention for veterans exposed to trauma. *J Clin Psychol* 2011;**67**:425–38. <https://doi.org/10.1002/jclp.20777>
307. Haynes P, Kelly MR, Parthasarathy S, Bootzin R. A randomized controlled trial of cognitive behavioral social rhythm group therapy (CBSRT) for male veterans with PTSD, major depressive disorder, and sleep problems. *Sleep* 2012;**35**:A338. <https://doi.org/10.21236/ADA574704>
308. Hébert M, Bergeron M. Efficacy of a group intervention for adult women survivors of sexual abuse. *J Child Sex Abus* 2007;**16**:37–61. https://doi.org/10.1300/J070v16n04_03
309. Held P, Owens GP. Effects of self-compassion workbook training on trauma-related guilt in a sample of homeless veterans: a pilot study. *J Clin Psychol* 2015;**71**:513–26. <https://doi.org/10.1002/jclp.22170>
310. Hensel-Dittmann D, Schauer M, Ruf M, Catani C, Odenwald M, Elbert T, Neuner F. Treatment of traumatized victims of war and torture: a randomized controlled comparison of narrative exposure therapy and stress inoculation training. *Psychother Psychosom* 2011;**80**:345–52. <https://doi.org/10.1159/000327253>
311. Hertzberg MA, Feldman ME, Beckham JC, Kudler HS, Davidson JR. Lack of efficacy for fluoxetine in PTSD: a placebo controlled trial in combat veterans. *Ann Clin Psychiatry* 2000;**12**:101–5. <https://doi.org/10.3109/10401230009147096>
312. Hertzberg MA, Feldman ME, Beckham JC, Moore SD, Davidson JR. Three- to four-year follow-up to an open trial of nefazodone for combat-related posttraumatic stress disorder. *Ann Clin Psychiatry* 2002;**14**:215–21. <https://doi.org/10.3109/10401230209147460>
313. Hijazi A, Ziadni M, Arnetz BB, Haddad L, Lumley M. Narrative exposure therapy to treat traumatic stress in middle eastern refugees: a clinical trial. *Psychosom Med* 2013;**75**:A-118.
314. Hobfoll SE, Blais RK, Stevens NR, Walt L, Gengler R. Vets prevail online intervention reduces PTSD and depression in veterans with mild-to-moderate symptoms. *J Consult Clin Psychol* 2016;**84**:31–42. <https://doi.org/10.1037/ccp0000041>
315. Holliday R, Williams R, Bird J, Mullen K, Surís A. The role of cognitive processing therapy in improving psychosocial functioning, health, and quality of life in veterans with military sexual trauma-related posttraumatic stress disorder. *Psychol Serv* 2015;**12**:428–34. <https://doi.org/10.1037/ser0000058>
316. Hopton JL, Huta V. Evaluation of an intervention designed for men who were abused in childhood and are experiencing symptoms of posttraumatic stress disorder. *Psychol Men Masc* 2013;**14**:300–13. <https://doi.org/10.1037/a0029705>

317. Igreja V, Kleijn WC, Schreuder BJ, Van Dijk JA, Verschuur M. Testimony method to ameliorate post-traumatic stress symptoms. Community-based intervention study with Mozambican civil war survivors. *Br J Psychiatry* 2004;**184**:251–7. <https://doi.org/10.1192/bjp.184.3.251>
318. Ironson G, Freund B, Strauss JL, Williams J. Comparison of two treatments for traumatic stress: a community-based study of EMDR and prolonged exposure. *J Clin Psychol* 2002;**58**:113–28. <https://doi.org/10.1002/jclp.1132>
319. Ivarsson D, Blom M, Hesser H, Carlbring P, Enderby P, Nordberg R, *et al.* Guided internet-delivered cognitive behavior therapy for post-traumatic stress disorder: a randomized controlled trial. *Internet Interventions* 2014;**1**:33–40. <https://doi.org/10.1016/j.invent.2014.03.002>
320. Iverson KM, Gradus JL, Resick PA, Suvak MK, Smith KF, Monson CM. Cognitive-behavioral therapy for PTSD and depression symptoms reduces risk for future intimate partner violence among interpersonal trauma survivors. *J Consult Clin Psychol* 2011;**79**:193–202. <https://doi.org/10.1037/a0022512>
321. Jaberghaderi N, Greenwald R, Rubin A, Dalatabadi S, Zand SO. A comparison of CBT and EMDR for sexually abused Iranian girls. *Clin Psychol Psychother* 2002;**11**:358–68. <https://doi.org/10.1002/cpp.395>
322. Jain S, McMahon GF, Hasen P, Kozub MP, Porter V, King R, Guarneri EM. Healing Touch with Guided Imagery for PTSD in returning active duty military: a randomized controlled trial. *Mil Med* 2012;**177**:1015–21. <https://doi.org/10.7205/MILMED-D-11-00290>
323. Jenkins MM, Drummond SP, Straus LD, Nappi CM. Examining the efficacy of adding sleep-specific therapies to an empirically validated trauma treatment in veterans with PTSD. *Sleep* 2014;**37**:A277.
324. Jerud AB, Zoellner LA, Pruitt LD, Feeny NC. Changes in emotion regulation in adults with and without a history of childhood abuse following posttraumatic stress disorder treatment. *J Consult Clin Psychol* 2014;**82**:721–30. <https://doi.org/10.1037/a0036520>
325. Jetly R, Heber A, Fraser G, Boisvert D. The efficacy of nabilone, a synthetic cannabinoid, in the treatment of PTSD-associated nightmares: A preliminary randomized, double-blind, placebo-controlled cross-over design study. *Psychoneuroendocrinology* 2015;**51**:585–8. <https://doi.org/10.1016/j.psyneuen.2014.11.002>
326. Johnson DM, Zlotnick C, Perez S. Cognitive behavioral treatment of PTSD in residents of battered women's shelters: results of a randomized clinical trial. *J Consult Clin Psychol* 2011;**79**:542–51. <https://doi.org/10.1037/a0023822>
327. Kaiser EM, Gillette CS, Spinazzola J. A controlled pilot-outcome study of sensory integration (SI) in the treatment of complex adaptation to traumatic stress. *J Aggression Maltreat Trauma* 2010;**19**:699–720. <https://doi.org/10.1080/10926771.2010.515162>
328. Karatzias T, Ferguson S, Gullone A, Cosgrove K. Group psychotherapy for female adult survivors of interpersonal psychological trauma: a preliminary study in Scotland. *J Ment Health* 2016;**25**:512–19. <https://doi.org/10.3109/09638237.2016.1139062>
329. Kaslow NJ, Leiner AS, Reviere S, Jackson E, Bethea K, Bhaju J, *et al.* Suicidal, abused African American women's response to a culturally informed intervention. *J Consult Clin Psychol* 2010;**78**:449–58. <https://doi.org/10.1037/a0019692>
330. Kelly MR, Haynes PL, Parthasarathy S, Bootzin RR, Perkins S. Negative mood regulation expectancies and trauma symptoms following a randomized controlled trial of cognitive behavioral social rhythm group therapy for male veterans with PTSD, major depressive disorder, and sleep problems. *Sleep* 2016;**39**:A299.

REFERENCES

331. Kelly A, Garland EL. Trauma-informed mindfulness-based stress reduction for female survivors of interpersonal violence: results from a stage I RCT. *J Clin Psychol* 2016;**72**:311–28. <https://doi.org/10.1002/jclp.22273>
332. Khazaie H, Nasouri M, Ghadami MR. Prazosin for trauma nightmares and sleep disturbances in combat veterans with post-traumatic stress disorder. *Iran J Psychiatry Behav Sci* 2016;**10**:e2603. <https://doi.org/10.17795/ijpbs-2603>
333. King A, Giardino N, Rauch S, Rebecca S, Hu JY, Liberzon I. Pilot study of mindfulness-based exposure therapy for PTSD in OEF/OIF veterans: preliminary clinical outcomes and pre-post fMRI neuroimaging. *Neuropsychopharmacology* 2011;**36**:S162.
334. King AP, Block SR, Sripada RK, Rauch S, Giardino N, Favorite T, et al. Altered Default Mode Network (DMN) resting state functional connectivity following a mindfulness-based exposure therapy for posttraumatic stress disorder (PTSD) in combat veterans of Afghanistan and Iraq. *Depress Anxiety* 2016;**33**:289–99. <https://doi.org/10.1002/da.22481>
335. King AP, Block SR, Sripada RK, Rauch SA, Porter KE, Favorite TK, et al. A pilot study of mindfulness-based exposure therapy in OEF/OIF combat veterans with PTSD: altered medial frontal cortex and amygdala responses in social-emotional processing. *Front Psychiatry* 2016;**7**:154. <https://doi.org/10.3389/fpsy.2016.00154>
336. Kip KE, Rosenzweig L, Hernandez DF, Shuman A, Sullivan KL, Long CJ, et al. Randomized controlled trial of accelerated resolution therapy (ART) for symptoms of combat-related post-traumatic stress disorder (PTSD). *Mil Med* 2013;**178**:1298–309. <https://doi.org/10.7205/MILMED-D-13-00298>
337. Kip KE, Rosenzweig L, Hernandez DF, Shuman A, Diamond DM, Girling SA, et al. Accelerated Resolution Therapy for treatment of pain secondary to symptoms of combat-related posttraumatic stress disorder. *Eur J Psychotraumatol* 2014;**5**:24066. <https://doi.org/10.3402/ejpt.v5.24066>
338. Kluepfel L, Ward T, Yehuda R, Dimoulas E, Smith A, Daly K. The evaluation of mindfulness-based stress reduction for veterans with mental health conditions. *J Holist Nurs* 2013;**31**:248–55. <https://doi.org/10.1177/0898010113495975>
339. Koehn CV. Women's perceptions of power and control in sexual abuse counseling. *J Child Sex Abus* 2007;**16**:37–60. https://doi.org/10.1300/J070v16n01_03
340. Kozarić-Kovacic D, Pivac N, Mück-Seler D, Rothbaum BO. Risperidone in psychotic combat-related posttraumatic stress disorder: an open trial. *J Clin Psychiatry* 2005;**66**:922–7. <https://doi.org/10.4088/JCP.v66n0716>
341. Kozaric-Kovacic D, Pivac N. Quetiapine treatment in an open trial in combat-related post-traumatic stress disorder with psychotic features. *Int J Neuropsychopharmacol* 2007;**10**:253–61. <https://doi.org/10.1017/S1461145706006596>
342. Kozel FA, Didehbani N, Motes MA, Jones P, Schraufnagel CD, DeLaRosa B, et al. Augmenting cognitive processing therapy with RTMS in combat veterans of recent conflicts with PTSD. *Biol Psychiatry* 2016;**79**:160S.
343. Krakow B, Hollifield M, Schrader R, Koss M, Tandberg D, Lauriello J, et al. A controlled study of imagery rehearsal for chronic nightmares in sexual assault survivors with PTSD: a preliminary report. *J Trauma Stress* 2000;**13**:589–609. <https://doi.org/10.1023/A:1007854015481>
344. Krakow B, Hollifield M, Johnston L, Koss M, Schrader R, Warner TD, et al. Imagery rehearsal therapy for chronic nightmares in sexual assault survivors with posttraumatic stress disorder: a randomized controlled trial. *JAMA* 2001;**286**:537–45. <https://doi.org/10.1001/jama.286.5.537>

345. Kreidler M. Group therapy for survivors of childhood sexual abuse who have chronic mental illness. *Arch Psychiatr Nurs* 2005;**19**:176–83. <https://doi.org/10.1016/j.apnu.2005.05.003>
346. Krüger A, Ehring T, Priebe K, Dyer AS, Steil R, Bohus M. Sudden losses and sudden gains during a DBT-PTSD treatment for posttraumatic stress disorder following childhood sexual abuse. *Eur J Psychotraumatol* 2014;**5**:24470. <https://doi.org/10.3402/ejpt.v5.24470>
347. Kuckertz JM, Amir N, Boffa JW, Warren CK, Rindt SE, Norman S, *et al.* The effectiveness of an attention bias modification program as an adjunctive treatment for post-traumatic stress disorder. *Behav Res Ther* 2014;**63**:25–35. <https://doi.org/10.1016/j.brat.2014.09.002>
348. Labrador FJ, Fernandez-Velasco MdR, Rincon PP. Efficacy of a brief individual treatment program for the posttraumatic stress disorder in women victims of domestic violence. *Int J Clin Health Psychol* 2006;**6**:527–47.
349. Lampe A, Mitmansgruber H, Gast U, Schüssler G, Reddemann L. [Treatment outcome of psychodynamic trauma therapy in an inpatient setting.] *Neuropsychiatr* 2008;**22**:189–97.
350. Lang AJ, Schnurr PP, Jain S, Raman R, Walser R, Bolton E, *et al.* Evaluating transdiagnostic treatment for distress and impairment in veterans: a multisite randomized controlled trial of acceptance and commitment therapy. *Contemp Clin Trials* 2012;**33**:116–23. <https://doi.org/10.1016/j.cct.2011.08.007>
351. Lange A, van de Ven JP, Schrieken B, Emmelkamp PM. Interapy, treatment of posttraumatic stress through the internet: a controlled trial. *J Behav Ther Exp Psychiatry* 2001;**32**:73–90. [https://doi.org/10.1016/S0005-7916\(01\)00023-4](https://doi.org/10.1016/S0005-7916(01)00023-4)
352. Lange A, Rietdijk D, Hudcovicova M, van de Ven JP, Schrieken B, Emmelkamp PM. Interapy: a controlled randomized trial of the standardized treatment of posttraumatic stress through the internet. *J Consult Clin Psychol* 2003;**71**:901–9. <https://doi.org/10.1037/0022-006X.71.5.901>
353. Lange A, van de Ven JP, Schrieken B. Interapy: treatment of post-traumatic stress via the internet. *Cogn Behav Ther* 2003;**32**:110–24. <https://doi.org/10.1080/16506070302317>
354. Largo-Marsh LK. *The Relationships Among Expectancy, Hypnotizability, and Treatment Outcome Associated with Eye Movement Desensitization in the Treatment of Post-traumatic Stress Disorder.* Dissertation. Kalamazoo, MI: Western Michigan University; 1996.
355. Liebling H, Davidson L, Akello GF, Ochola G. The experiences of survivors and trauma counselling service providers in northern Uganda: Implications for mental health policy and legislation. *Int J Law Psychiatry* 2016;**49**:84–92. <https://doi.org/10.1016/j.ijlp.2016.06.012>
356. Liedl A, Müller J, Morina N, Karl A, Denke C, Knaevelsrud C. Physical activity within a CBT intervention improves coping with pain in traumatized refugees: results of a randomized controlled design. *Pain Med* 2011;**12**:234–45. <https://doi.org/10.1111/j.1526-4637.2010.01040.x>
357. Lim K, Erbes C, Thuras P, Rodman J, Sponheim S, Polusny M. Meditation interventions for treatment of PTSD in veterans. *Neuropsychopharmacology* 2014;**39**:S375–S6.
358. Littleton H, Grills AE, Kline KD, Schoemann AM, Dodd JC. The From Survivor to Thriver program: RCT of an online therapist-facilitated program for rape-related PTSD. *J Anxiety Disord* 2016;**43**:41–51. <https://doi.org/10.1016/j.janxdis.2016.07.010>
359. Litz BT, Engel CC, Bryant RA, Papa A. A randomized, controlled proof-of-concept trial of an Internet-based, therapist-assisted self-management treatment for posttraumatic stress disorder. *Am J Psychiatry* 2007;**164**:1676–83. <https://doi.org/10.1176/appi.ajp.2007.06122057>

360. Litz BT, Salters-Pedneault K, Steenkamp MM, Hermos JA, Bryant RA, Otto MW, Hofmann SG. A randomized placebo-controlled trial of D-cycloserine and exposure therapy for posttraumatic stress disorder. *J Psychiatr Res* 2012;**46**:1184–90. <https://doi.org/10.1016/j.jpsychires.2012.05.006>
361. Long ME, Hammons ME, Davis JL, Frueh BC, Khan MM, Elhai JD, Teng EJ. Imagery rescripting and exposure group treatment of posttraumatic nightmares in Veterans with PTSD. *J Anxiety Disord* 2011;**25**:531–5. <https://doi.org/10.1016/j.janxdis.2010.12.007>
362. Macdonald A, Monson CM, Doron-Lamarca S, Resick PA, Palfai TP. Identifying patterns of symptom change during a randomized controlled trial of cognitive processing therapy for military-related posttraumatic stress disorder. *J Trauma Stress* 2011;**24**:268–76. <https://doi.org/10.1002/jts.20642>
363. Macklin ML, Metzger LJ, Lasko NB, Berry NJ, Orr SP, Pitman RK. Five-year follow-up study of eye movement desensitization and reprocessing therapy for combat-related posttraumatic stress disorder. *Compr Psychiatry* 2000;**41**:24–7. [https://doi.org/10.1016/S0010-440X\(00\)90127-5](https://doi.org/10.1016/S0010-440X(00)90127-5)
364. Manteghi AA, Hebrani P, Mortezaia M, Haghighi MB, Javanbakht A. Baclofen add-on to citalopram in treatment of posttraumatic stress disorder. *J Clin Psychopharmacol* 2014;**34**:240–3. <https://doi.org/10.1097/JCP.000000000000089>
365. Martenyi F, Brown EB, Zhang H, Prakash A, Koke SC. Fluoxetine versus placebo in posttraumatic stress disorder. *J Clin Psychiatry* 2002;**63**:199–206. <https://doi.org/10.4088/JCP.v63n0305>
366. Martenyi F, Soldatenkova V. Fluoxetine in the acute treatment and relapse prevention of combat-related post-traumatic stress disorder: Analysis of the veteran group of a placebo-controlled, randomized clinical trial. *Eur Neuropsychopharmacol* 2006;**16**:340–9. <https://doi.org/10.1016/j.euroneuro.2005.10.007>
367. Matud MP, Padilla V, Medina L, Fortes D. [Efficacy of an intervention program for battered women.] *Terapia Psicologica* 2016;**34**:199–208. <https://doi.org/10.4067/S0718-48082016000300004>
368. Mauritz MW, Van Gaal BG, Jongedijk RA, Schoonhoven L, Nijhuis-van der Sanden MW, Goossens PJ. Narrative exposure therapy for posttraumatic stress disorder associated with repeated interpersonal trauma in patients with severe mental illness: a mixed methods design. *Eur J Psychotraumatol* 2016;**7**:32473. <https://doi.org/10.3402/ejpt.v7.32473>
369. McFall M, Saxon AJ, Thompson CE, Yoshimoto D, Malte C, Straits-Troster K, et al. Improving the rates of quitting smoking for veterans with posttraumatic stress disorder. *Am J Psychiatry* 2005;**162**:1311–19. <https://doi.org/10.1176/appi.ajp.162.7.1311>
370. McGlinchey R, Rosenblatt A, Mercado R, Esterman M, DeGutis J. Internet-based cognitive training enhances attention and functional outcomes in OEF/OIF/OND veterans. *Brain Inj* 2014;**28**:624–5.
371. McWhirter PT. Differential therapeutic outcomes of community-based group interventions for women and children exposed to intimate partner violence. *J Interpers Violence* 2011;**26**:2457–82. <https://doi.org/10.1177/0886260510383026>
372. Mehling W, Chesney M, Metzler TJ, Goldstein LA, Maguen S, Geronimo C, et al. Integrative exercise reduces posttraumatic stress symptoms in war veterans: the VGX study. *J Altern Complement Med* 2016;**22**:A20.
373. Mehta A, Wohlgemuth WK, Malphurs JE, Claude LB, Gonzalez C, David D. Mindfulness-based stress reduction improves total sleep time in veterans with PTSD. *Sleep* 2012;**35**:A338.

374. Mello MF, Yeh MS, Barbosa Neto J, Braga LL, Fiks JP, Mendes DD, *et al.* A randomized, double-blind, placebo-controlled trial to assess the efficacy of topiramate in the treatment of post-traumatic stress disorder. *BMC Psychiatry* 2009;**9**:28. <https://doi.org/10.1186/1471-244X-9-28>
375. Mithoefer MC, Wagner MT, Mithoefer AT, Jerome L, Doblin R. The safety and efficacy of \pm 3,4-methylenedioxyamphetamine-assisted psychotherapy in subjects with chronic, treatment-resistant posttraumatic stress disorder: the first randomized controlled pilot study. *J Psychopharmacol* 2011;**25**:439–52. <https://doi.org/10.1177/0269881110378371>
376. Monson CM, Schnurr PP, Resick PA, Friedman MJ, Young-Xu Y, Stevens SP. Cognitive processing therapy for veterans with military-related posttraumatic stress disorder. *J Consult Clin Psychol* 2006;**74**:898–907. <https://doi.org/10.1037/0022-006X.74.5.898>
377. Monson CM, Fredman SJ, Macdonald A, Pukay-Martin ND, Resick PA, Schnurr PP. Effect of cognitive-behavioral couple therapy for PTSD: a randomized controlled trial. *JAMA* 2012;**308**:700–9. <https://doi.org/10.1001/jama.2012.9307>
378. Morland LA, Greene CJ, Rosen CS, Foy D, Reilly P, Shore J, *et al.* Telemedicine for anger management therapy in a rural population of combat veterans with posttraumatic stress disorder: a randomized noninferiority trial. *J Clin Psychiatry* 2010;**71**:855–63. <https://doi.org/10.4088/JCP.09m05604blu>
379. Morland LA, Hynes AK, Mackintosh MA, Resick PA, Chard KM. Group cognitive processing therapy delivered to veterans via telehealth: a pilot cohort. *J Trauma Stress* 2011;**24**:465–9. <https://doi.org/10.1002/jts.20661>
380. Morland LA, Mackintosh MA, Greene CJ, Rosen CS, Chard KM, Resick P, Frueh BC. Cognitive processing therapy for posttraumatic stress disorder delivered to rural veterans via telemental health: a randomized noninferiority clinical trial. *J Clin Psychiatry* 2014;**75**:470–6. <https://doi.org/10.4088/JCP.13m08842>
381. Morland LA, Mackintosh MA, Rosen CS, Willis E, Resick P, Chard K, Frueh BC. Telemedicine versus in-person delivery of cognitive processing therapy for women with posttraumatic stress disorder: a randomized noninferiority trial. *Depress Anxiety* 2015;**32**:811–20. <https://doi.org/10.1002/da.22397>
382. Moser JS, Cahill SP, Foa EB. Evidence for poorer outcome in patients with severe negative trauma-related cognitions receiving prolonged exposure plus cognitive restructuring: implications for treatment matching in posttraumatic stress disorder. *J Nerv Ment Dis* 2010;**198**:72–5. <https://doi.org/10.1097/NMD.0b013e3181c81fac>
383. Mughal U, Carrasco D, Brown R, Ayers S. Rehabilitating civilian victims of war through psychosocial intervention in Sierra Leone. *J Appl Soc Psychol* 2015;**45**:593–601. <https://doi.org/10.1111/jasp.12322>
384. Murray H, Merritt C, Grey N. Clients' experiences of returning to the trauma site during PTSD treatment: an exploratory study. *Behav Cogn Psychother* 2016;**44**:420–30. <https://doi.org/10.1017/S1352465815000338>
385. Muzik M, Rosenblum KL, Alfafara EA, Schuster MM, Miller NM, Waddell RM, Stanton Kohler E. Mom Power: preliminary outcomes of a group intervention to improve mental health and parenting among high-risk mothers. *Arch Womens Ment Health* 2015;**18**:507–21. <https://doi.org/10.1007/s00737-014-0490-z>
386. Nacasch N, Foa EB, Huppert JD, Tzur D, Fostick L, Dinstein Y, *et al.* Prolonged exposure therapy for combat- and terror-related posttraumatic stress disorder: a randomized control comparison with treatment as usual. *J Clin Psychiatry* 2011;**72**:1174–80. <https://doi.org/10.4088/JCP.09m05682blu>

REFERENCES

387. Nagy LM, Morgan CA, Southwick SM, Charney DS. Open prospective trial of fluoxetine for posttraumatic stress disorder. *J Clin Psychopharmacol* 1993;**13**:107–13. <https://doi.org/10.1097/00004714-199304000-00004>
388. Nakamura Y, Lipschitz DL, Landward R, Kuhn R, West G. Two sessions of sleep-focused mind-body bridging improve self-reported symptoms of sleep and PTSD in veterans: A pilot randomized controlled trial. *J Psychosom Res* 2011;**70**:335–45. <https://doi.org/10.1016/j.jpsychores.2010.09.007>
389. Neuner F, Kurreck S, Ruf M, Odenwald M, Elbert T, Schauer M. Can asylum-seekers with posttraumatic stress disorder be successfully treated? A randomized controlled pilot study. *Cogn Behav Ther* 2010;**39**:81–91. <https://doi.org/10.1080/16506070903121042>
390. Neylan TC, Metzler TJ, Schoenfeld FB, Weiss DS, Lenoci M, Best SR, *et al.* Fluvoxamine and sleep disturbances in posttraumatic stress disorder. *J Trauma Stress* 2001;**14**:461–7. <https://doi.org/10.1023/A:1011100420978>
391. Neylan TC, Lenoci M, Maglione ML, Rosenlicht NZ, Leykin Y, Metzler TJ, *et al.* The effect of nefazodone on subjective and objective sleep quality in posttraumatic stress disorder. *J Clin Psychiatry* 2003;**64**:445–50. <https://doi.org/10.4088/JCP.v64n0415>
392. Nijdam MJ, Gersons BP, Reitsma JB, de Jongh A, Olf M. Brief eclectic psychotherapy v. eye movement desensitisation and reprocessing therapy for post-traumatic stress disorder: randomised controlled trial. *Br J Psychiatry* 2012;**200**:224–31. <https://doi.org/10.1192/bjp.bp.111.099234>
393. Niles BL, Vujanovic AA, Silberbogen AK, Seligowski AV, Potter CM. Changes in mindfulness following a mindfulness telehealth intervention. *Mindfulness* 2013;**4**:301–10. <https://doi.org/10.1007/s12671-012-0130-5>
394. Nishith P, Weaver TL, Resick PA, Uhlmansiek MH. General Memory Functioning at pre- and Posttreatment in Female Rape Victims with Posttraumatic Stress Disorder. In Williams LM, Banyard VL, editors. *Trauma & Memory*. Thousand Oaks, CA: SAGE Publications, Inc.; 1999. pp. 47–55.
395. Nishith P, Mueser KT, Morse GA. A brief intervention for posttraumatic stress disorder in persons with a serious mental illness. *Psychiatr Rehabil J* 2015;**38**:314–19. <https://doi.org/10.1037/prj0000158>
396. Ochsner Margolies S, Rybarczyk B, Vrana S, Lynch J. Efficacy of a cognitive-behavioral treatment for insomnia among Afghanistan and Iraq (OEF/OIF) veterans with PTSD. *Sleep* 2012;**35**:A240–A1.
397. Oman D, Bormann JE. Mantram repetition fosters self-efficacy in veterans for managing PTSD: a randomized trial. *Psycholog Relig Spiritual* 2015;**7**:34–45. <https://doi.org/10.1037/a0037994>
398. Padala PR. Risperidone for PTSD in abused women. *Brown Univ Psychopharmacol Update* 2006;**17**:3–4.
399. Padala PR, Madison J, Monnahan M, Marcil W, Price P, Ramaswamy S, *et al.* Risperidone monotherapy for post-traumatic stress disorder related to sexual assault and domestic abuse in women. *Int Clin Psychopharmacol* 2006;**21**:275–80. <https://doi.org/10.1097/00004850-200609000-00005>
400. Paivio SC, Jarry JL, Chagigiorgis H, Hall I, Ralston M. Efficacy of two versions of emotion-focused therapy for resolving child abuse trauma. *Psychother Res* 2010;**20**:353–66. <https://doi.org/10.1080/10503300903505274>
401. Paunovic N. Exposure inhibition therapy as a treatment for chronic posttraumatic stress disorder: a controlled pilot study. *Psychology* 2011;**2**:605–14. <https://doi.org/10.4236/psych.2011.26093>

402. Peskind ER, Bonner LT, Hoff DJ, Raskind MA. Prazosin reduces trauma-related nightmares in older men with chronic posttraumatic stress disorder. *J Geriatr Psychiatry Neurol* 2003;**16**:165–71. <https://doi.org/10.1177/0891988703256050>
403. Petty F, Brannan S, Casada J, Davis LL, Gajewski V, Kramer GL, *et al.* Olanzapine treatment for post-traumatic stress disorder: an open-label study. *Int Clin Psychopharmacol* 2001;**16**:331–7. <https://doi.org/10.1097/00004850-200111000-00003>
404. Pigeon WR, May PE, Perlis ML, Ward EA, Lu N, Talbot NL. The effect of interpersonal psychotherapy for depression on insomnia symptoms in a cohort of women with sexual abuse histories. *J Trauma Stress* 2009;**22**:634–8. <https://doi.org/10.1002/jts.20456>
405. Pigeon WR, Cerulli C, Crean H, Gallegos A, Nelson L, Casey C, *et al.* Cognitive-behavioral therapy for insomnia for survivors of interpersonal violence who subsequently receive cognitive processing therapy. *Sleep* 2015;**38**:A224.
406. Pivac N, Kozarić-Kovacic D. Pharmacotherapy of treatment-resistant combat-related posttraumatic stress disorder with psychotic features. *Croat Med J* 2006;**47**:440–51.
407. Pokhariyal GP, Rono RC, Munywoki S. Analysis of treatment methods for victims of torture in Kenya and east Africa region. *Traumatology* 2012;**19**:107–17. <https://doi.org/10.1177/1534765612451341>
408. Pollack MH, Hoge EA, Worthington JJ, Moshier SJ, Wechsler RS, Brandes M, Simon NM. Eszopiclone for the treatment of posttraumatic stress disorder and associated insomnia: a randomized, double-blind, placebo-controlled trial. *J Clin Psychiatry* 2011;**72**:892–7. <https://doi.org/10.4088/JCP.09m05607gry>
409. Possemato K, Ouimette P, Knowlton P. A brief self-guided telehealth intervention for post-traumatic stress disorder in combat veterans: a pilot study. *J Telemed Telecare* 2011;**17**:245–50. <https://doi.org/10.1258/jtt.2011.100909>
410. Possemato K, Kuhn E, Johnson E, Hoffman JE, Owen JE, Kanuri N, *et al.* Using PTSD Coach in primary care with and without clinician support: a pilot randomized controlled trial. *Gen Hosp Psychiatry* 2016;**38**:94–8. <https://doi.org/10.1016/j.genhospspsych.2015.09.005>
411. Price C. Body-oriented therapy in recovery from child sexual abuse: an efficacy study. *Altern Ther Health Med* 2005;**11**:46–57.
412. Price C. Body-oriented therapy in sexual abuse recovery: a pilot-test comparison. *J Bodyw Mov Ther* 2006;**10**:58–64. <https://doi.org/10.1016/j.jbmt.2005.03.001>
413. Pruiksma KE, Davis J, Cranston C. A randomized controlled trial of exposure, relaxation, and rescripting therapy (ERRT) versus relaxation training (RT) for chronic nightmares in trauma-exposed persons: preliminary findings. *Sleep* 2012;**35**:A252–A3.
414. Pruiksma KE, Taylor DJ, Resick PA, Wachen JS, Mintz J, Young-McCaughan S. Do sleep disturbances remain after PTSD treatments? *Sleep* 2013;**36**:A305–A6.
415. Ragsdale KG, Cox RD, Finn P, Eisler RM. Effectiveness of short-term specialized inpatient treatment for war-related posttraumatic stress disorder: a role for adventure-based counseling and psychodrama. *J Trauma Stress* 1996;**9**:269–83. <https://doi.org/10.1002/jts.2490090209>
416. Rahman A, Hamdani SU, Awan NR, Bryant RA, Dawson KS, Khan MF, *et al.* Effect of a multicomponent behavioral intervention in adults impaired by psychological distress in a conflict-affected area of Pakistan: a randomized clinical trial. *JAMA* 2016;**316**:2609–17. <https://doi.org/10.1001/jama.2016.17165>

417. Randall PK, Bremner JD, Krystal JH, Nagy LM, Heninger GR, Nicolaou AL, Charney DS. Effects of the benzodiazepine antagonist flumazenil in PTSD. *Biol Psychiatry* 1995;**38**:319–24. [https://doi.org/10.1016/0006-3223\(94\)00306-N](https://doi.org/10.1016/0006-3223(94)00306-N)
418. Raskind MA, Peskind ER, Kanter ED, Petrie EC, Radant A, Thompson CE, *et al.* Reduction of nightmares and other PTSD symptoms in combat veterans by prazosin: a placebo-controlled study. *Am J Psychiatry* 2003;**160**:371–3. <https://doi.org/10.1176/appi.ajp.160.2.371>
419. Raskind MA, Peterson K, Williams T, Peskind ER. A trial of prazosin for combat trauma PTSD with nightmares in active duty soldiers returned from Iraq and Afghanistan. *Neuropsychopharmacology* 2012;**38**:S127. <https://doi.org/10.1037/e533652013-069>
420. Raskind M. Update on the use of alpha-1 adrenoreceptor antagonists for PTSD. *Int J Neuropsychopharmacol* 2014;**17**:20–1.
421. Rauch S, Sripada R, King A, Abelson J, Rothbaum B, Liberzon I. Extinction and change in cognitions and cortisol activity in posttraumatic stress disorder treatment. *Neuropsychopharmacology* 2014;**39**:S356–S7.
422. Rauch SA, King AP, Abelson J, Tuerk PW, Smith E, Rothbaum BO, *et al.* Biological and symptom changes in posttraumatic stress disorder treatment: a randomized clinical trial. *Depress Anxiety* 2015;**32**:204–12. <https://doi.org/10.1002/da.22331>
423. Ready DJ, Pollack S, Rothbaum BO, Alarcon RD. Virtual reality exposure for veterans with posttraumatic stress disorder. *J Aggression Maltreat Trauma* 2006;**12**:199–220. https://doi.org/10.1300/J146v12n01_11
424. Reed GL. *A Forgiveness Intervention with Post-relationship Psychologically Abused Women*. Dissertation. Madison, WI: University of Wisconsin–Madison; 2004.
425. Renner W, Banninger-Huber E, Peltzer K. Culture-Sensitive and Resource Oriented Peer (CROP)-groups as a community based intervention for trauma survivors: a randomized controlled pilot study with refugees and asylum seekers from Chechnya. *Australasian J Disaster Trauma Stud* 2011;**1**:1–13.
426. Resick PA, Schnicke MK. Cognitive processing therapy for sexual assault victims. *J Consult Clin Psychol* 1992;**60**:748–56. <https://doi.org/10.1037/0022-006X.60.5.748>
427. Resick PA, Nishith P, Weaver TL, Astin MC, Feuer CA. A comparison of cognitive-processing therapy with prolonged exposure and a waiting condition for the treatment of chronic posttraumatic stress disorder in female rape victims. *J Consult Clin Psychol* 2002;**70**:867–79. <https://doi.org/10.1037/0022-006X.70.4.867>
428. Resick PA, Nishith P, Griffin MG. How well does cognitive-behavioral therapy treat symptoms of complex PTSD? An examination of child sexual abuse survivors within a clinical trial. *CNS Spectr* 2003;**8**:340–55. <https://doi.org/10.1017/S1092852900018605>
429. Resick PA, Galovski TE, Uhlmansiek MO, Scher CD, Clum GA, Young-Xu Y. A randomized clinical trial to dismantle components of cognitive processing therapy for posttraumatic stress disorder in female victims of interpersonal violence. *J Consult Clin Psychol* 2008;**76**:243–58. <https://doi.org/10.1037/0022-006X.76.2.243>
430. Resick PA, Wachen JS, Dondanville KA, Pruiksma KE, Yarvis JS, Peterson AL, *et al.* Effect of group vs individual cognitive processing therapy in active-duty military seeking treatment for posttraumatic stress disorder: a randomized clinical trial. *JAMA Psychiatry* 2017;**74**:28–36. <https://doi.org/10.1001/jamapsychiatry.2016.2729>

431. Rimane E, Rosner R. *Developmentally Adapted Cognitive Processing Therapy for Adolescents and Young Adults with PTSD Symptoms after Physical and Sexual Abuse*. Deutsches Register Klinischer Studien [German Clinical Trials Register]; 2013. URL: www.drks.de/DRKS00004787 (accessed 31 July 2017).
432. Robert S, Hamner MB, Durkalski VL, Brown MW, Ulmer HG. An open-label assessment of aripiprazole in the treatment of PTSD. *Psychopharmacol Bull* 2009;**42**:69–80.
433. Rodgman C, Verrico CD, Holst M, Thompson-Lake D, Haile CN, De La Garza R, *et al*. Doxazosin XL reduces symptoms of posttraumatic stress disorder in veterans with PTSD: a pilot clinical trial. *J Clin Psychiatry* 2016;**77**:e561–5. <https://doi.org/10.4088/JCP.14m09681>
434. Rosenbaum S, Sherrington C, Tiedemann A. Exercise augmentation compared with usual care for post-traumatic stress disorder: a randomized controlled trial. *Acta Psychiatr Scand* 2015;**131**:350–9. <https://doi.org/10.1111/acps.12371>
435. Rothbaum BO. A controlled study of eye movement desensitization and reprocessing in the treatment of posttraumatic stress disorder sexual assault victims. *Bull Menninger Clin* 1997;**61**:317–34.
436. Rothbaum BO, Hodges LF, Ready D, Graap K, Alarcon RD. Virtual reality exposure therapy for Vietnam veterans with posttraumatic stress disorder. *J Clin Psychiatry* 2001;**62**:617–22. <https://doi.org/10.4088/JCP.v62n0808>
437. Rothbaum BO, Astin MC, Marsteller F. Prolonged Exposure versus Eye Movement Desensitization and Reprocessing (EMDR) for PTSD rape victims. *J Trauma Stress* 2005;**18**:607–16. <https://doi.org/10.1002/jts.20069>
438. Rothbaum BO, Davidson JR, Stein DJ, Pedersen R, Musgnung J, Tian XW, *et al*. A pooled analysis of gender and trauma-type effects on responsiveness to treatment of PTSD with venlafaxine extended release or placebo. *J Clin Psychiatry* 2008;**69**:1529–39. <https://doi.org/10.4088/JCP.v69n1002>
439. Ryan M, Nitsun M, Gilbert L, Mason H. A prospective study of the effectiveness of group and individual psychotherapy for women CSA survivors. *Psychol Psychother* 2005;**78**:465–79. <https://doi.org/10.1348/147608305X42226>
440. Sachsse U, Vogel C, Leichsenring F. Results of psychodynamically oriented trauma-focused inpatient treatment for women with complex posttraumatic stress disorder (PTSD) and borderline personality disorder (BPD). *Bull Menninger Clin* 2006;**70**:125–44. <https://doi.org/10.1521/bumc.2006.70.2.125>
441. Sack M, Spieler D, Wizelman L, Epple G, Stich J, Zaba M, Schmidt U. Intranasal oxytocin reduces provoked symptoms in female patients with posttraumatic stress disorder despite exerting sympathomimetic and positive chronotropic effects in a randomized controlled trial. *BMC Med* 2017;**15**:40. <https://doi.org/10.1186/s12916-017-0801-0>
442. Salloum A, Dorsey CS, Swaidan VR, Storch EA. Parents' and children's perception of parent-led trauma-focused cognitive behavioral therapy. *Child Abuse Negl* 2015;**40**:12–23. <https://doi.org/10.1016/j.chiabu.2014.11.018>
443. Sautter FJ, Glynn SM, Cretu JB, Senturk D, Vaught AS. Efficacy of structured approach therapy in reducing PTSD in returning veterans: a randomized clinical trial. *Psychol Serv* 2015;**12**:199–212. <https://doi.org/10.1037/ser0000032>
444. Schaal S, Elbert T, Neuner F. Narrative exposure therapy versus interpersonal psychotherapy. A pilot randomized controlled trial with Rwandan genocide orphans. *Psychother Psychosom* 2009;**78**:298–306. <https://doi.org/10.1159/000229768>

445. Schnurr PP, Friedman MJ, Foy DW, Shea MT, Hsieh FY, Lavori PW, *et al.* Randomized trial of trauma-focused group therapy for posttraumatic stress disorder: results from a department of veterans affairs cooperative study. *Arch Gen Psychiatry* 2003;**60**:481–9. <https://doi.org/10.1001/archpsyc.60.5.481>
446. Schnurr PP, Friedman MJ, Engel CC, Foa EB, Shea MT, Chow BK, *et al.* Cognitive behavioral therapy for posttraumatic stress disorder in women: a randomized controlled trial. *JAMA* 2007;**297**:820–30. <https://doi.org/10.1001/jama.297.8.820>
447. Schnurr PP, Lunney CA, Forshay E, Thurston VL, Chow BK, Resick PA, Foa EB. Sexual function outcomes in women treated for posttraumatic stress disorder. *J Womens Health* 2009;**18**:1549–57. <https://doi.org/10.1089/jwh.2008.1165>
448. Schnurr PP, Lunney CA. Differential effects of prolonged exposure on posttraumatic stress disorder symptoms in female veterans. *J Consult Clin Psychol* 2015;**83**:1154–60. <https://doi.org/10.1037/ccp0000031>
449. Schnurr PP, Lunney CA. Symptom benchmarks of improved quality of life in PTSD. *Depress Anxiety* 2016;**33**:247–55. <https://doi.org/10.1002/da.22477>
450. Seppälä EM, Nitschke JB, Tudorascu DL, Hayes A, Goldstein MR, Nguyen DT, *et al.* Breathing-based meditation decreases posttraumatic stress disorder symptoms in U.S. military veterans: a randomized controlled longitudinal study. *J Trauma Stress* 2014;**27**:397–405. <https://doi.org/10.1002/jts.21936>
451. Sezgin U, Punamäki R. Effectiveness of group psychotherapy among women with multiple traumatic life events: a pilot study in the southeast Anatolian region. *J Loss Trauma* 2008;**13**:557–75. <https://doi.org/10.1080/15325020802173694>
452. Shearing V, Lee D, Clohessy S. How do clients experience reliving as part of trauma-focused cognitive behavioural therapy for posttraumatic stress disorder? *Psychol Psychother* 2011;**84**:458–75. <https://doi.org/10.1111/j.2044-8341.2010.02012.x>
453. Short NP. Vocal heroes: the views of two people who experienced a cognitive behavioural approach for their difficulties. Their narratives are accompanied by a commentary from the therapist. *J Psychiatr Ment Health Nurs* 2005;**12**:574–81. <https://doi.org/10.1111/j.1365-2850.2005.00877.x>
454. Silver SM, Brooks A, Obenchain J. Treatment of Vietnam War veterans with PTSD: a comparison of eye movement desensitization and reprocessing, biofeedback, and relaxation training. *J Trauma Stress* 1995;**8**:337–42. <https://doi.org/10.1002/jts.2490080212>
455. Skinhoj KT, Larsson S, Helweg-Joergensen S, Hansen EH. Experiences of long-term tranquilizer use: a psychodynamic perspective. *Subst Use Misuse* 2001;**36**:1165–86. <https://doi.org/10.1081/JA-100106222>
456. Smith PN, Gamble SA, Cort NA, Ward EA, He H, Talbot NL. Attachment and alliance in the treatment of depressed, sexually abused women. *Depress Anxiety* 2012;**29**:123–30. <https://doi.org/10.1002/da.20913>
457. Spence J, Titov N, Johnston L, Jones MP, Dear BF, Solley K. Internet-based trauma-focused cognitive behavioural therapy for PTSD with and without exposure components: a randomised controlled trial. *J Affect Disord* 2014;**162**:73–80. <https://doi.org/10.1016/j.jad.2014.03.009>
458. Spiegel D, Classen C, Thurston E, Butler L. Trauma-focused versus Present-focused Models of Group Therapy for Women Sexually Abused in Childhood. In Koenig LJ, Doll LS, O’Leary A, Pequegnat W, editors. *From Child Sexual Abuse to Adult Sexual Risk: Trauma, Revictimization, and Intervention*. Washington, DC: American Psychological Association; 2004. pp. 251–68. <https://doi.org/10.1037/10785-013>

459. Stade K, Skammeritz S, Hjortkjær C, Carlsson J. 'After all the traumas my body has been through, I feel good that it is still working.' – Basic Body Awareness Therapy for traumatised refugees. *Torture* 2015;**25**:33–50.
460. Stalker CA, Fry R. A comparison of short-term group and individual therapy for sexually abused women. *Can J Psychiatry* 1999;**44**:168–74. <https://doi.org/10.1177/070674379904400208>
461. Steil R, Dyer A, Priebe K, Kruger A, Bohus M. Dialectical-behavior-therapy for severe posttraumatic stress disorder after childhood sexual abuse: a randomized controlled trial. *Eur J Psychotraumatol* 2011;**24**:102–6.
462. Stein DJ, van der Kolk BA, Austin C, Fayyad R, Clary C. Efficacy of sertraline in posttraumatic stress disorder secondary to interpersonal trauma or childhood abuse. *Ann Clin Psychiatry* 2006;**18**:243–9. <https://doi.org/10.1080/10401230600948431>
463. Steinert C, Bumke PJ, Hollekamp RL, Larisch A, Leichsenring F, Mattheß H, *et al.* Resource activation for treating post-traumatic stress disorder, co-morbid symptoms and impaired functioning: a randomized controlled trial in Cambodia. *Psychol Med* 2017;**47**:553–64. <https://doi.org/10.1017/S0033291716002592>
464. Steuwe C, Rullkötter N, Ertl V, Berg M, Neuner F, Beblo T, Driessen M. Effectiveness and feasibility of Narrative Exposure Therapy (NET) in patients with borderline personality disorder and posttraumatic stress disorder – a pilot study. *BMC Psychiatry* 2016;**16**:254. <https://doi.org/10.1186/s12888-016-0969-4>
465. Stovall-McClough KC, Cloitre M. Reorganization of unresolved childhood traumatic memories following exposure therapy. *Ann N Y Acad Sci* 2003;**1008**:297–9. <https://doi.org/10.1196/annals.1301.036>
466. Su H, Wang JT, Lou ZS, Lu HT. Cognitive-exposure therapy for post-traumatic stress disorder. *J Clin Rehab Tissue Eng Res* 2007;**11**:7783–6.
467. Sulejmanpasic-Arslanagic G, Bise Srebrenka B. Olanzapine augmentation in alleviating treatment-resistant nightmares and insomnia in patients with combat-related PTSD. *Eur Neuropsychopharmacol* 2015;**25**:S570–S1. [https://doi.org/10.1016/S0924-977X\(15\)30799-9](https://doi.org/10.1016/S0924-977X(15)30799-9)
468. Surís A, North C, Adinoff B, Powell CM, Greene R. Effects of exogenous glucocorticoid on combat-related PTSD symptoms. *Ann Clin Psychiatry* 2010;**22**:274–9.
469. Surís A, Link-Malcolm J, Chard K, Ahn C, North C. A randomized clinical trial of cognitive processing therapy for veterans with PTSD related to military sexual trauma. *J Trauma Stress* 2013;**26**:28–37. <https://doi.org/10.1002/jts.21765>
470. Swanson LM, Favorite TK, Horin E, Arnedt JT. A combined group treatment for nightmares and insomnia in combat veterans: a pilot study. *J Trauma Stress* 2009;**22**:639–42. <https://doi.org/10.1002/jts.20468>
471. Taing S, Strasser J, Chhim S. Culturally sensitive trauma treatment for Khmer Rouge survivors. *Asian J Psych* 2011;**4**:S35. [https://doi.org/10.1016/S1876-2018\(11\)60136-6](https://doi.org/10.1016/S1876-2018(11)60136-6)
472. Talbot NL, Chaudron LH, Ward EA, Duberstein PR, Conwell Y, O'Hara MW, *et al.* A randomized effectiveness trial of interpersonal psychotherapy for depressed women with sexual abuse histories. *Psychiatr Serv* 2011;**62**:374–80. https://doi.org/10.1176/ps.62.4.pss6204_0374
473. Talbot LS, Maguen S, Metzler TJ, Schmitz M, McCaslin SE, Richards A, *et al.* Cognitive behavioral therapy for insomnia in posttraumatic stress disorder: a randomized controlled trial. *Sleep* 2014;**37**:327–41. <https://doi.org/10.5665/sleep.3408>

474. Tan G, Dao TK, Farmer L, Sutherland RJ, Gevirtz R. Heart rate variability (HRV) and posttraumatic stress disorder (PTSD): a pilot study. *Appl Psychophysiol Biofeedback* 2011;**36**:27–35. <https://doi.org/10.1007/s10484-010-9141-y>
475. Tarquinio C, Brennstuhl M, Rydberg J, Schmitt A, Mouda F, Lourel M, et al. Eye movement desensitization and reprocessing (EMDR) therapy in the treatment of victims of domestic violence: a pilot study. *Eur Rev Appl Psychol* 2012;**62**:205–12. <https://doi.org/10.1016/j.erap.2012.08.006>
476. Tarrrier N, Sommerfield C. Treatment of chronic PTSD by cognitive therapy and exposure: 5-Year follow-up. *Behav Ther* 2004;**35**:231–46. [https://doi.org/10.1016/S0005-7894\(04\)80037-6](https://doi.org/10.1016/S0005-7894(04)80037-6)
477. Thomaes K, Dorrepaal E, van Balkom AJ, Veltman DJ, Smit JH, Hoogendoorn AW, Draijer N. [Complex PTSD following early-childhood trauma: emotion-regulation training as addition to the PTSD guideline.] *Tijdschr Psychiatr* 2015;**57**:171–82.
478. Thorp SR, Stein MB, Jeste DV, Patterson TL, Wetherell JL. Prolonged exposure therapy for older veterans with posttraumatic stress disorder: a pilot study. *Am J Geriatr Psychiatry* 2012;**20**:276–80. <https://doi.org/10.1097/JGP.0b013e3182435ee9>
479. Tourigny M, Guillor M-L, Morissette P. Effectiveness of a group intervention for men sexually molested during childhood. *Can J Behav Sci* 2005;**37**:97–109. <https://doi.org/10.1037/h0087248>
480. Truijens FL, Van Emmerik AAP. Visual feedback in written imaginal exposure for posttraumatic stress: a preliminary study. *J Loss Trauma* 2014;**19**:403–15. <https://doi.org/10.1080/15325024.2013.794664>
481. van den Berg DP, van der Gaag M. Treating trauma in psychosis with EMDR: a pilot study. *J Behav Ther Exp Psychiatry* 2012;**43**:664–71. <https://doi.org/10.1016/j.jbtep.2011.09.011>
482. van der Kolk BA, Spinazzola J, Blaustein ME, Hopper JW, Hopper EK, Korn DL, Simpson WB. A randomized clinical trial of eye movement desensitization and reprocessing (EMDR), fluoxetine, and pill placebo in the treatment of posttraumatic stress disorder: treatment effects and long-term maintenance. *J Clin Psychiatry* 2007;**68**:37–46. <https://doi.org/10.4088/JCP.v68n0105>
483. van Emmerik AA, Kamphuis JH, Emmelkamp PM. Treating acute stress disorder and posttraumatic stress disorder with cognitive behavioral therapy or structured writing therapy: a randomized controlled trial. *Psychother Psychosom* 2008;**77**:93–100. <https://doi.org/10.1159/000112886>
484. Vera M, Reyes-Rabanillo ML, Juarbe D, Pérez-Pedrogo C, Olmo A, Kichic R, Chaplin WF. Prolonged exposure for the treatment of Spanish-speaking Puerto Ricans with posttraumatic stress disorder: a feasibility study. *BMC Res Notes* 2011;**4**:415. <https://doi.org/10.1186/1756-0500-4-415>
485. Villarreal G, Calais LA, Cañive JM, Lundy SL, Pickard J, Toney G. Prospective study to evaluate the efficacy of aripiprazole as a monotherapy in patients with severe chronic posttraumatic stress disorder: an open trial. *Psychopharmacol Bull* 2007;**40**:6–18.
486. Villarreal G, Cañive JM, Calais LA, Toney G, Smith AK. Duloxetine in military posttraumatic stress disorder. *Psychopharmacol Bull* 2010;**43**:26–34.
487. Vitriol VG, Ballesteros ST, Florenzano RU, Weil KP, Benadof DF. Evaluation of an outpatient intervention for women with severe depression and a history of childhood trauma. *Psychiatr Serv* 2009;**60**:936–42. <https://doi.org/10.1176/ps.2009.60.7.936>
488. Weine S, Kulauzovic Y, Klebic A, Besic S, Mujagic A, Muzurovic J, et al. Evaluating a multiple-family group access intervention for refugees with PTSD. *J Marital Fam Ther* 2008;**34**:149–64. <https://doi.org/10.1111/j.1752-0606.2008.00061.x>

489. Wells A, Colbear JS. Treating posttraumatic stress disorder with metacognitive therapy: a preliminary controlled trial. *J Clin Psychol* 2012;**68**:373–81. <https://doi.org/10.1002/jclp.20871>
490. Westbury E, Tutty LM. The efficacy of group treatment for survivors of childhood abuse. *Child Abuse Negl* 1999;**23**:31–44. [https://doi.org/10.1016/S0145-2134\(98\)00109-4](https://doi.org/10.1016/S0145-2134(98)00109-4)
491. Wood DP, Webb-Murphy J, McLay RN, Wiederhold BK, Spira JL, Johnston S, *et al.* Reality graded exposure therapy with physiological monitoring for the treatment of combat related post traumatic stress disorder: a pilot study. *Stud Health Technol Inform* 2011;**163**:696–702.
492. Yeh MS, Mari JJ, Costa MC, Andreoli SB, Bressan RA, Mello MF. A double-blind randomized controlled trial to study the efficacy of topiramate in a civilian sample of PTSD. *CNS Neurosci Ther* 2011;**17**:305–10. <https://doi.org/10.1111/j.1755-5949.2010.00188.x>
493. Yehua R. Skills training plus exposure therapy may reduce post traumatic stress in women who experienced childhood abuse. *Evid Based Ment Health* 2003;**6**:50. <https://doi.org/10.1136/ebmh.6.2.50>
494. Yehuda R, Bierer LM, Pratchett LC, Lehrner A, Koch EC, Van Manen JA, *et al.* Cortisol augmentation of a psychological treatment for warfighters with posttraumatic stress disorder: Randomized trial showing improved treatment retention and outcome. *Psychoneuroendocrinology* 2015;**51**:589–97. <https://doi.org/10.1016/j.psyneuen.2014.08.004>
495. Yuen EK, Gros DF, Price M, Zeigler S, Tuerk PW, Foa EB, Acierno R. Randomized controlled trial of home-based telehealth versus in-person prolonged exposure for combat-related PTSD in veterans: preliminary results. *J Clin Psychol* 2015;**71**:500–12. <https://doi.org/10.1002/jclp.22168>
496. Ziemba SJ, Bradley NS, Landry LA, Roth CH, Porter LS, Cuyler RN. Posttraumatic stress disorder treatment for Operation Enduring Freedom/Operation Iraqi Freedom combat veterans through a civilian community-based telemedicine network. *Telemed J E Health* 2014;**20**:446–50. <https://doi.org/10.1089/tmj.2013.0312>
497. Zimmermann P, Guse U, Barre K, Biesold K. EMDR in the German Armed Forces – therapeutic impact of inpatient therapy of posttraumatic stress disorder. *Krankenhauspsychiatrie* 2005;**16**:57–63. <https://doi.org/10.1055/s-2004-830275>
498. Zimmermann P, Biesold KH, Barre K, Lanczik M. Long-term course of post-traumatic stress disorder (PTSD) in German soldiers: effects of inpatient eye movement desensitization and reprocessing therapy and specific trauma characteristics in patients with non-combat-related PTSD. *Mil Med* 2007;**172**:456–60. <https://doi.org/10.7205/MILMED.172.5.456>
499. Zisook S, Chentsova-Dutton YE, Smith-Vaniz A, Kline NA, Ellenor GL, Kods AB, Gillin JC. Nefazodone in patients with treatment-refractory posttraumatic stress disorder. *J Clin Psychiatry* 2000;**61**:203–8. <https://doi.org/10.4088/JCP.v61n0310>
500. Zlotnick C, Capezza NM, Parker D. An interpersonally based intervention for low-income pregnant women with intimate partner violence: a pilot study. *Arch Womens Ment Health* 2011;**14**:55–65. <https://doi.org/10.1007/s00737-010-0195-x>
501. Zoellner LA, Feeny NC, Fitzgibbons LA, Foa EB. Response of African American and Caucasian women to cognitive behavioral therapy for PTSD. *Behav Ther* 1999;**30**:581–95. [https://doi.org/10.1016/S0005-7894\(99\)80026-4](https://doi.org/10.1016/S0005-7894(99)80026-4)
502. Shapiro F. *Three Day Training Course (Levels 1 and 2) in EMDR*. Gold Coast, QLD; 1992.

Appendix 1 Literature search strategies for the effectiveness review

Literature searches of the following databases were conducted: CINAHL, CENTRAL, EMBASE, International Pharmaceutical Abstracts, MEDLINE, PILOTS, PsycINFO and Science Citation Index.

The original searches carried out in April and May 2017 identified 17,177 records, which were downloaded, imported into EndNote bibliographic software and de-duplicated to leave 10,212 unique records.

CINAHL via EBSCOhost

Search date: 20 April 2017.

Records retrieved: 1919.

Date range searched: 1937 onwards.

TABLE 15 Search strategy for CINAHL via EBSCOhost

Search terms	Search options
S1	(MH "Violence") OR (MH "Exposure to Violence")
S2	TX violence
S3	(MH "Domestic Violence") OR (MH "Intimate Partner Violence") OR (MH "Dating Violence")
S4	TX (batter\$ N2 (wife* or wive* or woman or women or men or husband* or partner*)) OR TX (physical* N2 (abus* or assault* or violen* or aggress*)) OR TX emotional N2 abus*
S5	(MH "Rape")
S6	TX rape OR TX (sexual* N2 (assault* or abus* or violen* or aggress*))
S7	(MH "Child Abuse, Sexual") OR (MH "Child Abuse Survivors") OR (MH "Sexual Abuse") OR (MH "Child Abuse")
S8	TX "child* sexual abuse"
S9	TX child* N2 exploit* OR TX child* N2 neglect* OR TX child* N2 trauma* OR TX ("non accidental injur*" or "non-accidental injur*" or "nonaccidental injur*")
S10	TX "human rights abuse"
S11	(MH "Human Trafficking")
S12	TX ((human or person* or people) N2 (traffick* or exploit*)) OR TX ((forced or exploit*) N2 labour*)
S13	organ N2 traffick*
S14	TX slavery or slaves or "slave trade"
S15	(MH "Torture") OR (MH "Torture Survivors")
S16	(MH "Prostitution")
S17	TX (prostitut* or brothel*) OR TX (sex* N2 (exploit* or traffick*))
S18	(MH "Terrorism")
S19	TX (terrorism or terrorist*) OR TX "political terror*"

continued

TABLE 15 Search strategy for CINAHL via EBSCOhost (continued)

Search terms	Search options
S20	(MH "War") OR (MH "War Crimes")
S21	(MH "Holocaust")
S22	TX ethnic* N2 cleans* OR TX genocide OR TX (civil N2 (unrest or conflict* or disturb* or war or wars or warfare)) OR TX (persecution or victimisation or victimization) OR TX (captivity or imprison*) OR TX concentration camp*
S23	(MH "Disasters") OR (MH "Natural Disasters") OR (MH "Mass Casualty Incidents")
S24	catastrophe* or ("catastrophic event*") or ("catastrophic experience*")
S25	(MH "Survivors+")
S26	(MH "Refugees")
S27	TX refugee* OR TX "asylum seek*" OR TX migrant* OR TX ((forcibly or internally) N2 displaced) OR TX (displace* N2 (people or person* or civilian*))
S28	(MH "Crime Victims") OR (MH "Victims")
S29	(MH "Prisoners")
S30	(MH "Veterans")
S31	TX ((expose* or exposure) N2 (abuse or assault* or disaster* or terror* or torture* or trauma* or rape or violent* or war or warfare)) OR TX (survivor* N2 (abuse or assault* or disaster* or terror* or torture* or trauma* or rape or violent* or war or warfare)) OR TX (victim* N2 (abuse or assault* or crime or disaster* or rape or terror* or torture* or trauma* or violent* or war or warfare)) OR TX (witness* N2 (abuse or assault* or disaster* or rape or terror* or torture* or trauma* or violent* or war or warfare))
S32	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 (143,422)
S33	(MH "Stress Disorders, Post-Traumatic+")
S34	TX (PTSD or CPTSD) OR TX posttrauma* OR TX post-trauma* OR TX "post trauma*" OR TX "post traumatic stress" OR TX "combat stress*" OR TX "combat disorder*" OR TX DESNOS OR TX "complex trauma*" OR TX complex N3 trauma* OR TX "traumatic stress" OR TX "traumatic memor*"
S35	TX traumatisation OR TX traumatization OR TX (trauma* N3 (expos* or event* or experienc*))
S36	S33 OR S34 OR S35 (28,298)
S37	(MH "Cognitive Therapy+") OR TX "cognitive behaviour* therap*" OR TX "cognitive behavior* therap*" OR TX "cognitive restructuring" OR TX "cognitive rescripting" OR TX "cognitive processing therap*" OR TX (CPT or CBT or TFCBT) OR TX "cognitive therap*" OR TX "cognitive behavioural treat*" OR TX "cognitive behavioral treat*" OR TX "cognitive trauma therap*" OR TX "trauma focus* CBT"
S38	(MH "Behavior Therapy") OR TX (behavior* N2 (therap* or treat* or modif*)) OR TX (behavior* N2 (therap* or treat* or modif*)) OR TX ((dialectical behavio*) N1 (therap* or treat*)) OR TX (biofeedback or neurofeedback or ("sensory feedback")) OR TX psychological N2 desensiti#ation OR TX ("eye movement desensiti#ation reprocessing") OR TX EMDR OR TX (exposure N1 (therap* or treat*)) OR TX "live exposure" OR TX "imaginal exposure" OR TX "prolonged exposure therapy"
S39	TX "imaginal flooding" OR TX "exposure inhibition therap*" OR TX "implosive therap*" OR TX "image habituation" OR TX "inoculation training"
S40	((MH "Acceptance and Commitment Therapy")) OR TX acceptance N2 therap* OR TX commitment N2 therap*
S41	(MH "Biofeedback")
S42	(MH "Feedback")
S43	(MH "Eye Movement Desensitization and Reprogramming")
S44	(MH "Virtual Reality Exposure Therapy")
S45	(MH "Hypnosis")

TABLE 15 Search strategy for CINAHL via EBSCOhost (continued)

Search terms	Search options
S46	TX hypnosis or hypnotherap*
S47	(MH "Mindfulness")
S48	TX mindfulness
S49	TX "supportive therap*" OR TX (non-directive N1 (counselling or counseling)) OR TX ((non directive) N1 (counselling or counseling))
S50	((MH "Psychotherapy") OR (MH "Psychotherapy, Brief") OR (MH "Psychotherapy, Group") OR (MH "Psychotherapy, Psychodynamic")) OR TX psychodynamic N1 therap* OR TX "inter personal psychotherap*" OR TX "interpersonal psychotherap*" OR TX IPT OR TX "compassion therap*" OR TX "accelerated resolution*" OR TX "sensorimotor therap*" OR TX "schema therap*" OR TX stress N2 manag*
S51	(MH "Counseling") OR TX "non-directive counsel*" OR TX "non directive counsel*" OR TX "nondirective counsel*" OR "compassion therap*"
S52	S37 OR S38 OR S39 OR S40 OR S41 OR S42 OR S43 OR S44 OR S45 OR S46 OR S47 OR S48 OR S49 OR S50 OR S51 (99,780)
S53	((MH "Hypnotics and Sedatives")) OR TX (alprazolam or amobarbital or azaperone or barbital or bromisovalum or "chloral hydrate" or chloralose or chlordiazepoxide or chlormethiazole or dexmedetomidine or diazepam or diphenhydramine or eszopiclone or ethchlorvynol or etomidate or etorphine or flurazepam or glutethimide or hexobarbital or lorazepam or medazepam or medetomidine or mephobarbital or meprobamate or methapyrilene or methaqualone or midazolam or nitrazepam or oxazepam or paraldehyde or pentobarbital or phenobarbital or propofol or secobarbital or temazepam or thiamylal or thiopental or xylazine) OR TX "z drugs"
S54	(MH "Antianxiety Agents+") OR (bromazepam or buspirone or chlormezanone or "clorazepate dipotassium" or estazolam or flunitrazepam or fluvoxamine or nordazepam or ondansetron or oxprenolol or prazepam or pregabalin or ritanserlin or tranlycypromine or trazodone or triazolam or zolazepam or benzodiazepines or benzodiazepinones or "sedative antihistamine*" or promethazine)
S55	(MH "Antidepressive Agents+") OR TX (benactyzine or clorgyline or deanol or "desvenlafaxine succinate" or "duloxetine hydrochloride" or iproniazid or isocarboxazid or "lithium carbonate" or "lithium compounds" or moclobemide or nialamide or phenelzine or pizotyline or rolipram or sertraline or tranlycypromine or "vilazodone hydrochloride" or Imipramine or mirtazapine)
S56	(MH "Antipsychotic Agents+") OR TX (acepromazine or aripiprazole or azaperone or benperidol or butaclamol or chlorpromazine or chlorprothixene or clopenthixol or clozapine or droperidol or etazolate or flupenthixol or fluphenazine or fluspirilene or haloperidol or loxapine or "lurasidone hydrochloride" or mesoridazine or methiothepin or methotrimeprazine or molindone or ondansetron or "paliperidone palmitate" or penfluridol or perazine or perphenazine or pimozide or prochlorperazine) OR TX (promazine or "quetiapine fumarate" or raclopride or remoxipride or reserpine or risperidone or ritanserlin or spiperone or sulphiride or thioridazine or thiothixene or "tiapride hydrochloride" or trifluoperazine or trifluperidol or triflupromazine or olanzapine)
S57	(MH "Anticonvulsants+") OR TX (anticonvulsants or acetazolamide or bromides or carbamazepine or clonazepam or "clorazepate dipotassium" or diazepam or dimethadione or estazolam or ethosuximide or flunarizine or lorazepam or "magnesium sulfate" or medazepam or mephenytoin or mephobarbital or meprobamate or nitrazepam or paraldehyde or phenobarbital or phenytoin or pregabalin or primidone or riluzole or thiothixene or trimethadione or "valproic acid" or vigabatrin)
S58	(MH "Antimanic Agents+") OR TX ("lithium chloride" or "lithium compounds" or lamotrigine or topiramate)
S59	(MH "Monoamine Oxidase Inhibitors+") OR TX (chlorphenamidine or clorgyline or cuprizone or furazolidone or harmaline or harmine or isocarboxazid or moclobemide or monocrotophos or pargyline or selegiline or tranlycypromine or Prazosin or N-Methyl-3,4-methylenedioxyamphetamine or MDMA or ecstasy)
S60	S53 OR S54 OR S55 OR S56 OR S57 OR S58 OR S59 (68,988)
S61	S32 AND S36 AND S52 (1786)
S62	S32 AND S36 AND S60 (229)
S63	S61 OR S62 (1936)
S64	S61 OR S62 (1919) 1992 ONWARDS

CENTRAL via The Cochrane Library

Search date: 21 April 2017.

Records retrieved: 637.

Date range searched: from inception.

TABLE 16 Search strategy for CENTRAL via The Cochrane Library

#1	MeSH descriptor: [Violence] explode all trees
#2	violence:ti,ab,kw (Word variations have been searched)
#3	MeSH descriptor: [Domestic Violence] explode all trees
#4	MeSH descriptor: [Intimate Partner Violence] explode all trees
#5	MeSH descriptor: [Battered Women] explode all trees
#6	batter* near/2 (wife* or wive* or woman or women or men or husband* or partner*):ti,ab,kw (Word variations have been searched)
#7	physical* near/2 (abus* or assault* or violen* or aggress*):ti,ab,kw (Word variations have been searched)
#8	emotional* near/2 abus*:ti,ab,kw (Word variations have been searched)
#9	MeSH descriptor: [Rape] explode all trees
#10	rape:ti,ab,kw or sexual* near/2 (abus* or assault* or violen* or aggress*):ti,ab,kw (Word variations have been searched)
#11	MeSH descriptor: [Child Abuse, Sexual] explode all trees
#12	child* sexual abuse:ti,ab,kw (Word variations have been searched)
#13	child* near/2 (exploit* or neglect* or trauma*):ti,ab,kw (Word variations have been searched)
#14	non accidental injur*:ti,ab,kw or non-accidental injur*:ti,ab,kw or nonaccidental injur*:ti,ab,kw (Word variations have been searched)
#15	MeSH descriptor: [Human Rights Abuses] explode all trees
#16	MeSH descriptor: [Human Trafficking] explode all trees
#17	(human or person or people) near/2 (traffick* or exploit*):ti,ab,kw (Word variations have been searched)
#18	(forced or exploit*) near/2 labour:ti,ab,kw (Word variations have been searched)
#19	MeSH descriptor: [Organ Trafficking] explode all trees
#20	MeSH descriptor: [Slavery] explode all trees
#21	MeSH descriptor: [Torture] explode all trees
#22	slavery or enslave* or torture*:ti,ab,kw (Word variations have been searched)
#23	MeSH descriptor: [Sex Workers] explode all trees
#24	MeSH descriptor: [Prostitution] explode all trees
#25	prostitut* or brothel*:ti,ab,kw (Word variations have been searched)
#26	sex* near/2 (exploit* or traffick*):ti,ab,kw (Word variations have been searched)
#27	MeSH descriptor: [Terrorism] explode all trees
#28	terrorism or terrorist*:ti,ab,kw (Word variations have been searched)
#29	political terror*:ti,ab,kw (Word variations have been searched)
#30	MeSH descriptor: [Torture] explode all trees

TABLE 16 Search strategy for CENTRAL via The Cochrane Library (continued)

#31	MeSH descriptor: [Warfare] explode all trees
#32	MeSH descriptor: [Armed Conflicts] explode all trees
#33	MeSH descriptor: [War Crimes] explode all trees
#34	MeSH descriptor: [Genocide] explode all trees
#35	MeSH descriptor: [Holocaust] explode all trees
#36	MeSH descriptor: [Ethnic Cleansing] explode all trees
#37	civil near/2 (unrest or conflict* or disturbance* or war or wars or warfare):ti,ab,kw (Word variations have been searched)
#38	persecution or victimization or victimisation:ti,ab,kw (Word variations have been searched)
#39	captivity or imprison* or concentration camp*:ti,ab,kw (Word variations have been searched)
#40	MeSH descriptor: [Disasters] explode all trees
#41	MeSH descriptor: [Earthquakes] explode all trees
#42	MeSH descriptor: [Tsunamis] explode all trees
#43	natural disaster*:ti,ab,kw (Word variations have been searched)
#44	earthquake* or tsunami*:ti,ab,kw (Word variations have been searched)
#45	humanitarian near/1 (crisis or crises):ti,ab,kw (Word variations have been searched)
#46	catastrophe* or catastrophic event* or catastrophic experience*:ti,ab,kw (Word variations have been searched)
#47	MeSH descriptor: [Survivors] explode all trees
#48	MeSH descriptor: [Refugees] explode all trees
#49	asylum seeker* or refugee* or migrant*:ti,ab,kw (Word variations have been searched)
#50	(forcibly or internally) near/2 displace*:ti,ab,kw (Word variations have been searched)
#51	displace* near/2 (people or person* or civilian*):ti,ab,kw (Word variations have been searched)
#52	MeSH descriptor: [Crime Victims] explode all trees
#53	MeSH descriptor: [Adult Survivors of Child Abuse] explode all trees
#54	MeSH descriptor: [Disaster Victims] explode all trees
#55	MeSH descriptor: [Prisoners] explode all trees
#56	MeSH descriptor: [Prisoners of War] explode all trees
#57	MeSH descriptor: [Slaves] explode all trees
#58	MeSH descriptor: [Veterans] explode all trees
#59	MeSH descriptor: [Military Personnel] explode all trees
#60	exposure near/2 (abuse or assault* or disaster* or terror* or torture* or trauma* or rape or violen* or war or warfare):ti,ab,kw (Word variations have been searched)
#61	exposed near/2 (abuse or assault* or disaster* or terror* or torture* or trauma* or rape or violen* or war or warfare):ti,ab,kw (Word variations have been searched)
#62	survivor* near/2 (abuse or assault* or disaster* or terror* or torture* or trauma* or rape or violen* or war or warfare):ti,ab,kw (Word variations have been searched)
#63	victim* near/2 (abuse or assault* or crime or disaster* or rape or terror* or torture* or trauma* or violen* or war or warfare):ti,ab,kw (Word variations have been searched)
#64	witness* near/2 (abuse or assault* or disaster* or rape or terror* or torture* or trauma* or violen* or war or warfare):ti,ab,kw (Word variations have been searched)

continued

TABLE 16 Search strategy for CENTRAL via The Cochrane Library (continued)

#65	#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21 or #22 or #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30 or #31 or #32 or #33 or #34 or #35 or #36 or #37 or #38 or #39 or #40 or #41 or #42 or #43 or #44 or #45 or #46 or #47 or #48 or #49 or #50 or #51 or #52 or #53 or #54 or #55 or #56 or #57 or #58 or #59 or #60 or #61 or #62 or #63 or #64
#66	MeSH descriptor: [Stress Disorders, Post-Traumatic] explode all trees
#67	PTSD or CPTSD:ti,ab,kw (Word variations have been searched)
#68	posttrauma*:ti,ab,kw (Word variations have been searched)
#69	post-trauma*:ti,ab,kw (Word variations have been searched)
#70	post trauma*:ti,ab,kw (Word variations have been searched)
#71	"post traumatic stress":ti,ab,kw (Word variations have been searched)
#72	combat stress:ti,ab,kw (Word variations have been searched)
#73	combat disorder*:ti,ab,kw (Word variations have been searched)
#74	DESNOS:ti,ab,kw (Word variations have been searched)
#75	extreme distress:ti,ab,kw (Word variations have been searched)
#76	complex near/3 trauma:ti,ab,kw (Word variations have been searched)
#77	traumatic stress:ti,ab,kw (Word variations have been searched)
#78	traumatic memories:ti,ab,kw (Word variations have been searched)
#79	traumatization:ti,ab,kw (Word variations have been searched)
#80	"traumatisation":ti,ab,kw (Word variations have been searched)
#81	trauma near/3 (expos* or event* or experienc*):ti,ab,kw (Word variations have been searched)
#82	#66 or #67 or #68 or #69 or #70 or #71 or #72 or #73 or #74 or #75 or #76 or #77 or #78 or #79 or #80 or #81
#83	#65 and #82
#84	MeSH descriptor: [Cognitive Therapy] explode all trees
#85	cognitive near/2 therap*:ti,ab,kw (Word variations have been searched)
#86	"cognitive restructuring":ti,ab,kw (Word variations have been searched)
#87	cognitive rescripting:ti,ab,kw (Word variations have been searched)
#88	"cognitive processing therapy":ti,ab,kw (Word variations have been searched)
#89	CPT:ti,ab,kw (Word variations have been searched)
#90	cognitive near/2 treat*:ti,ab,kw (Word variations have been searched)
#91	CBT or TFCBT:ti,ab,kw (Word variations have been searched)
#92	MeSH descriptor: [Behavior Therapy] explode all trees
#93	behavior* near/2 (therap* or treat* or modif*):ti,ab,kw (Word variations have been searched)
#94	behaviour* near/2 (therap* or treat* or modif*):ti,ab,kw (Word variations have been searched)
#95	MeSH descriptor: [Biofeedback, Psychology] explode all trees
#96	MeSH descriptor: [Feedback, Sensory] explode all trees
#97	MeSH descriptor: [Neurofeedback] explode all trees
#98	biofeedback:ti,ab,kw (Word variations have been searched)
#99	"neurofeedback":ti,ab,kw (Word variations have been searched)
#100	"sensory feedback":ti,ab,kw (Word variations have been searched)
#101	MeSH descriptor: [Eye Movement Desensitization Reprocessing] explode all trees

TABLE 16 Search strategy for CENTRAL via The Cochrane Library (continued)

#102	MeSH descriptor: [Implosive Therapy] explode all trees
#103	MeSH descriptor: [Virtual Reality Exposure Therapy] explode all trees
#104	psychological near/2 desensit*:ti,ab,kw (Word variations have been searched)
#105	“Eye Movement Desensitization Reprocessing”:ti,ab,kw or “Eye Movement Desensitisation Reprocessing”:ti,ab,kw (Word variations have been searched)
#106	EMDR:ti,ab,kw (Word variations have been searched)
#107	exposure near/1 (therap* or treat*):ti,ab,kw (Word variations have been searched)
#108	“live exposure”:ti,ab,kw (Word variations have been searched)
#109	“imaginal exposure”:ti,ab,kw (Word variations have been searched)
#110	“prolonged exposure therapy”:ti,ab,kw (Word variations have been searched)
#111	“imaginal flooding”:ti,ab,kw (Word variations have been searched)
#112	“exposure inhibition therapy”:ti,ab,kw (Word variations have been searched)
#113	“implosive therapy”:ti,ab,kw (Word variations have been searched)
#114	“image habituation”:ti,ab,kw (Word variations have been searched)
#115	“inoculation training”:ti,ab,kw (Word variations have been searched)
#116	MeSH descriptor: [Acceptance and Commitment Therapy] explode all trees
#117	acceptance near/2 therap*:ti,ab,kw (Word variations have been searched)
#118	commitment near/2 therap*:ti,ab,kw (Word variations have been searched)
#119	MeSH descriptor: [Hypnosis] explode all trees
#120	hypnosis:ti,ab,kw (Word variations have been searched)
#121	hypnotherap*:ti,ab,kw (Word variations have been searched)
#122	MeSH descriptor: [Mindfulness] explode all trees
#123	mindfulness:ti,ab,kw (Word variations have been searched)
#124	supportive near/1 therap*:ti,ab,kw (Word variations have been searched)
#125	non-directive near/1 counsel*:ti,ab,kw (Word variations have been searched)
#126	nondirective near/2 counsel*:ti,ab,kw (Word variations have been searched)
#127	“non directive” near/1 counsel*:ti,ab,kw (Word variations have been searched)
#128	MeSH descriptor: [Psychotherapy] explode all trees
#129	MeSH descriptor: [Psychotherapy, Brief] explode all trees
#130	MeSH descriptor: [Cognitive Therapy] explode all trees
#131	MeSH descriptor: [Psychotherapy, Group] explode all trees
#132	MeSH descriptor: [Psychotherapy, Multiple] explode all trees
#133	MeSH descriptor: [Psychotherapy, Psychodynamic] explode all trees
#134	MeSH descriptor: [Psychotherapy, Rational-Emotive] explode all trees
#135	psychodynamic near/1 therap*:ti,ab,kw (Word variations have been searched)
#136	interpersonal near/1 psychotherap*:ti,ab,kw (Word variations have been searched)
#137	compassion near/2 therap*:ti,ab,kw (Word variations have been searched)
#138	“accelerated resolution”:ti,ab,kw (Word variations have been searched)
#139	sensorimotor near/2 therap*:ti,ab,kw (Word variations have been searched)

continued

TABLE 16 Search strategy for CENTRAL via The Cochrane Library (continued)

#140	schema near/1 therap*:ti,ab,kw (Word variations have been searched)
#141	MeSH descriptor: [Counseling] explode all trees
#142	#84 or #85 or #86 or #87 or #88 or #89 or #90 or #91 or #92 or #93 or #94 or #95 or #96 or #97 or #98 or #99 or #100 or #101 or #102 or #103 or #104 or #105 or #106 or #107 or #108 or #109 or #110 or #111 or #112 or #113 or #114 or #115 or #116 or #117 or #118 or #119 or #120 or #121 or #122 or #123 or #124 or #125 or #126 or #127 or #128 or #129 or #130 or #131 or #132 or #133 or #134 or #135 or #136 or #137 or #138 or #139 or #140 or #141
#143	MeSH descriptor: [Hypnotics and Sedatives] explode all trees
#144	MeSH descriptor: [Alprazolam] explode all trees
#145	MeSH descriptor: [Amobarbital] explode all trees
#146	MeSH descriptor: [Azaperone] explode all trees
#147	MeSH descriptor: [Barbital] explode all trees
#148	MeSH descriptor: [Bromisovalum] explode all trees
#149	MeSH descriptor: [Chloral Hydrate] explode all trees
#150	MeSH descriptor: [Chloralose] explode all trees
#151	MeSH descriptor: [Chlordiazepoxide] explode all trees
#152	MeSH descriptor: [Chlormethiazole] explode all trees
#153	MeSH descriptor: [Dexmedetomidine] explode all trees
#154	MeSH descriptor: [Diazepam] explode all trees
#155	MeSH descriptor: [Diphenhydramine] explode all trees
#156	MeSH descriptor: [Eszopiclone] explode all trees
#157	MeSH descriptor: [Ethchlorvynol] explode all trees
#158	MeSH descriptor: [Etomidate] explode all trees
#159	MeSH descriptor: [Etorphine] explode all trees
#160	MeSH descriptor: [Flurazepam] explode all trees
#161	MeSH descriptor: [Glutethimide] explode all trees
#162	MeSH descriptor: [Hexobarbital] explode all trees
#163	MeSH descriptor: [Lorazepam] explode all trees
#164	MeSH descriptor: [Medazepam] explode all trees
#165	MeSH descriptor: [Medetomidine] explode all trees
#166	MeSH descriptor: [Mephobarbital] explode all trees
#167	MeSH descriptor: [Meprobamate] explode all trees
#168	MeSH descriptor: [Methapyrilene] explode all trees
#169	MeSH descriptor: [Methaqualone] explode all trees
#170	MeSH descriptor: [Midazolam] explode all trees
#171	MeSH descriptor: [Nitrazepam] explode all trees
#172	MeSH descriptor: [Oxazepam] explode all trees
#173	MeSH descriptor: [Paraldehyde] explode all trees
#174	MeSH descriptor: [Pentobarbital] explode all trees
#175	MeSH descriptor: [Phenobarbital] explode all trees

TABLE 16 Search strategy for CENTRAL via The Cochrane Library (continued)

#176	MeSH descriptor: [Propofol] explode all trees
#177	MeSH descriptor: [Secobarbital] explode all trees
#178	MeSH descriptor: [Temazepam] explode all trees
#179	MeSH descriptor: [Thiamylal] explode all trees
#180	MeSH descriptor: [Thiopental] explode all trees
#181	MeSH descriptor: [Xylazine] explode all trees
#182	#143 or #144 or #145 or #146 or #147 or #148 or #149 or #150 or #151 or #152 or #153 or #154 or #155 or #156 or #157 or #158 or #159 or #160 or #161 or #162 or #163 or #164 or #165 or #166 or #167 or #168 or #169 or #170 or #171 or #172 or #173 or #174 or #175 or #176 or #177 or #178 or #179 or #180 or #181
#183	"z drugs":ti,ab,kw (Word variations have been searched)
#184	MeSH descriptor: [Anti-Anxiety Agents] explode all trees
#185	MeSH descriptor: [Bromazepam] explode all trees
#186	MeSH descriptor: [Buspirone] explode all trees
#187	MeSH descriptor: [Chlormezanone] explode all trees
#188	MeSH descriptor: [Estazolam] explode all trees
#189	MeSH descriptor: [Flunitrazepam] explode all trees
#190	MeSH descriptor: [Fluvoxamine] explode all trees
#191	MeSH descriptor: [Nordazepam] explode all trees
#192	MeSH descriptor: [Ondansetron] explode all trees
#193	MeSH descriptor: [Oxprenolol] explode all trees
#194	MeSH descriptor: [Prazepam] explode all trees
#195	MeSH descriptor: [Pregabalin] explode all trees
#196	MeSH descriptor: [Ritanserlin] explode all trees
#197	MeSH descriptor: [Tranlycypromine] explode all trees
#198	MeSH descriptor: [Trazodone] explode all trees
#199	MeSH descriptor: [Triazolam] explode all trees
#200	MeSH descriptor: [Zolazepam] explode all trees
#201	MeSH descriptor: [Benzodiazepines] explode all trees
#202	MeSH descriptor: [Benzodiazepinones] explode all trees
#203	sedative near/1 antihistamine*:ti,ab,kw (Word variations have been searched)
#204	MeSH descriptor: [Promethazine] explode all trees
#205	#183 or #184 or #185 or #186 or #187 or #188 or #189 or #190 or #191 or #192 or #193 or #194 or #195 or #196 or #197 or #198 or #199 or #200 or #201 or #202 or #203 or #204
#206	MeSH descriptor: [Antidepressive Agents] explode all trees
#207	MeSH descriptor: [Benactyzine] explode all trees
#208	MeSH descriptor: [Clorgyline] explode all trees
#209	MeSH descriptor: [Deanol] explode all trees
#210	MeSH descriptor: [Desvenlafaxine Succinate] explode all trees
#211	MeSH descriptor: [Duloxetine Hydrochloride] explode all trees

continued

TABLE 16 Search strategy for CENTRAL via The Cochrane Library (continued)

#212	MeSH descriptor: [Iproniazid] explode all trees
#213	MeSH descriptor: [Isocarboxazid] explode all trees
#214	MeSH descriptor: [Lithium Compounds] explode all trees
#215	MeSH descriptor: [Moclobemide] explode all trees
#216	MeSH descriptor: [Nialamide] explode all trees
#217	MeSH descriptor: [Phenelzine] explode all trees
#218	MeSH descriptor: [Pizotyline] explode all trees
#219	MeSH descriptor: [Rolipram] explode all trees
#220	MeSH descriptor: [Sertraline] explode all trees
#221	MeSH descriptor: [Tranlycypromine] explode all trees
#222	MeSH descriptor: [Vilazodone Hydrochloride] explode all trees
#223	MeSH descriptor: [Imipramine] explode all trees
#224	#206 or #207 or #208 or #209 or #210 or #211 or #212 or #213 or #214 or #215 or #216 or #217 or #218 or #219 or #220 or #221 or #222 or #223
#225	MeSH descriptor: [Antipsychotic Agents] explode all trees
#226	MeSH descriptor: [Acepromazine] explode all trees
#227	MeSH descriptor: [Aripiprazole] explode all trees
#228	MeSH descriptor: [Azaperone] explode all trees
#229	MeSH descriptor: [Benperidol] explode all trees
#230	MeSH descriptor: [Butaclamol] explode all trees
#231	MeSH descriptor: [Chlorpromazine] explode all trees
#232	MeSH descriptor: [Chlorprothixene] explode all trees
#233	MeSH descriptor: [Clopenthixol] explode all trees
#234	MeSH descriptor: [Clozapine] explode all trees
#235	MeSH descriptor: [Droperidol] explode all trees
#236	MeSH descriptor: [Etazolate] explode all trees
#237	MeSH descriptor: [Flupenthixol] explode all trees
#238	MeSH descriptor: [Fluphenazine] explode all trees
#239	MeSH descriptor: [Fluspirilene] explode all trees
#240	MeSH descriptor: [Haloperidol] explode all trees
#241	MeSH descriptor: [Loxapine] explode all trees
#242	MeSH descriptor: [Mesoridazine] explode all trees
#243	MeSH descriptor: [Methiothepin] explode all trees
#244	MeSH descriptor: [Methotrimeprazine] explode all trees
#245	MeSH descriptor: [Molindone] explode all trees
#246	MeSH descriptor: [Paliperidone Palmitate] explode all trees
#247	MeSH descriptor: [Penfluridol] explode all trees
#248	MeSH descriptor: [Perazine] explode all trees
#249	MeSH descriptor: [Perphenazine] explode all trees

TABLE 16 Search strategy for CENTRAL via The Cochrane Library (continued)

#250	MeSH descriptor: [Pimozide] explode all trees
#251	MeSH descriptor: [Prochlorperazine] explode all trees
#252	MeSH descriptor: [Promazine] explode all trees
#253	MeSH descriptor: [Quetiapine Fumarate] explode all trees
#254	MeSH descriptor: [Raclopride] explode all trees
#255	MeSH descriptor: [Remoxipride] explode all trees
#256	MeSH descriptor: [Reserpine] explode all trees
#257	MeSH descriptor: [Risperidone] explode all trees
#258	MeSH descriptor: [Ritanserin] explode all trees
#259	MeSH descriptor: [Spiperone] explode all trees
#260	MeSH descriptor: [Sulpiride] explode all trees
#261	MeSH descriptor: [Thioridazine] explode all trees
#262	MeSH descriptor: [Thiothixene] explode all trees
#263	MeSH descriptor: [Tiapride Hydrochloride] explode all trees
#264	MeSH descriptor: [Trifluoperazine] explode all trees
#265	MeSH descriptor: [Trifluoperidol] explode all trees
#266	MeSH descriptor: [Triflupromazine] explode all trees
#267	"olanzapine":ti,ab,kw (Word variations have been searched)
#268	#225 or #226 or #227 or #228 or #229 or #230 or #231 or #232 or #233 or #234 or #235 or #236 or #237 or #238 or #239 or #240 or #241 or #242 or #243 or #244 or #245 or #246 or #247 or #248 or #249 or #250 or #251 or #252 or #253 or #254 or #255 or #256 or #257 or #258 or #259 or #260 or #261 or #262 or #263 or #264 or #265 or #266 or #267
#269	MeSH descriptor: [Anticonvulsants] explode all trees
#270	MeSH descriptor: [Acetazolamide] explode all trees
#271	MeSH descriptor: [Bromides] explode all trees
#272	MeSH descriptor: [Carbamazepine] explode all trees
#273	MeSH descriptor: [Clonazepam] explode all trees
#274	MeSH descriptor: [Clorazepate Dipotassium] explode all trees
#275	MeSH descriptor: [Diazepam] explode all trees
#276	MeSH descriptor: [Dimethadione] explode all trees
#277	MeSH descriptor: [Estazolam] explode all trees
#278	MeSH descriptor: [Ethosuximide] explode all trees
#279	MeSH descriptor: [Flunarizine] explode all trees
#280	MeSH descriptor: [Lorazepam] explode all trees
#281	MeSH descriptor: [Magnesium Sulfate] explode all trees
#282	MeSH descriptor: [Medazepam] explode all trees
#283	MeSH descriptor: [Mephentoin] explode all trees
#284	MeSH descriptor: [Mephobarbital] explode all trees
#285	MeSH descriptor: [Meprobamate] explode all trees

continued

TABLE 16 Search strategy for CENTRAL via The Cochrane Library (continued)

#286	MeSH descriptor: [Nitrazepam] explode all trees
#287	MeSH descriptor: [Paraldehyde] explode all trees
#288	MeSH descriptor: [Phenobarbital] explode all trees
#289	MeSH descriptor: [Phenytoin] explode all trees
#290	MeSH descriptor: [Pregabalin] explode all trees
#291	MeSH descriptor: [Primidone] explode all trees
#292	MeSH descriptor: [Riluzole] explode all trees
#293	MeSH descriptor: [Thiopental] explode all trees
#294	MeSH descriptor: [Tiletamine] explode all trees
#295	MeSH descriptor: [Trimethadione] explode all trees
#296	MeSH descriptor: [Valproic Acid] explode all trees
#297	MeSH descriptor: [Vigabatrin] explode all trees
#298	#269 or #270 or #271 or #272 or #273 or #274 or #275 or #276 or #277 or #278 or #279 or #280 or #281 or #282 or #283 or #284 or #285 or #286 or #287 or #288 or #289 or #290 or #291 or #292 or #293 or #294 or #295 or #296 or #297
#299	MeSH descriptor: [Antimanic Agents] explode all trees
#300	MeSH descriptor: [Lithium Chloride] explode all trees
#301	"lamotrigine":ti,ab,kw (Word variations have been searched)
#302	"topiramate":ti,ab,kw (Word variations have been searched)
#303	MeSH descriptor: [Monoamine Oxidase Inhibitors] explode all trees
#304	MeSH descriptor: [Chlorpheniramine] explode all trees
#305	MeSH descriptor: [Clorgyline] explode all trees
#306	MeSH descriptor: [Cuprizone] explode all trees
#307	MeSH descriptor: [Furazolidone] explode all trees
#308	MeSH descriptor: [Harmaline] explode all trees
#309	MeSH descriptor: [Harmine] explode all trees
#310	MeSH descriptor: [Isocarboxazid] explode all trees
#311	MeSH descriptor: [Moclobemide] explode all trees
#312	MeSH descriptor: [Monocrotophos] explode all trees
#313	MeSH descriptor: [Pargyline] explode all trees
#314	MeSH descriptor: [Selegiline] explode all trees
#315	MeSH descriptor: [Tranlycypromine] explode all trees
#316	MeSH descriptor: [Prazosin] explode all trees
#317	MeSH descriptor: [N-Methyl-3,4-methylenedioxymphetamine] explode all trees
#318	MDMA:ti,ab,kw or ecstasy:kw (Word variations have been searched)
#319	#299 or #300 or #301 or #302 or #303 or #304 or #305 or #306 or #307 or #308 or #309 or #310 or #311 or #312 or #313 or #314 or #315 or #316 or #317 or #318
#320	#182 or #205 or #224 or #268 or #298 or #319
#321	#83 and #142
#322	#83 and #320
#323	#321 or #322

EMBASE via Ovid

Search date: 19 April 2017.

Records retrieved: 5473.

Date range searched: 1974 to 2017 week 16.

TABLE 17 Search strategy for EMBASE via Ovid

1	exp Violence/ (127,415)
2	violence.ti,ab. (42,364)
3	Exposure to Violence/ (299)
4	Domestic Violence/(8799)
5	Sexual Violence/ (1468)
6	Battered Woman/ (3115)
7	(batter\$ adj2 (wife\$ or wive\$ or woman or women or men or husband\$ or partner\$)).ti,ab. (973)
8	(physical\$ adj2 (abus\$ or assault\$ or violen\$ or aggress\$)).ti,ab. (12,350)
9	(emotional\$ adj2 abus\$).ti,ab. (2304)
10	Rape/(7255)
11	Sexual Assault/ (1440)
12	rape.ti,ab. (7034)
13	(sexual\$ adj2 (abus\$ or assault\$ or violen\$ or aggress\$)).ti,ab. (23,249)
14	Child Sexual Abuse/ (8661)
15	child\$ sexual abuse.ti,ab. (4983)
16	Child Abuse/ (27,390)
17	(child\$ adj2 exploit\$).ti,ab. (221)
18	child neglect.ti,ab. (490)
19	(child\$ adj2 trauma).ti,ab. (6375)
20	(non accidental injur\$ or non-accidental injur\$ or nonaccidental injury).ti,ab. (755)
21	Human Rights Abuse/ (1442)
22	Human Trafficking/(259)
23	((human or person or people) adj2 (traffick\$ or exploit\$)).ti,ab. (907)
24	((forced or exploit\$) adj2 labour).ti,ab. (62)
25	Organ Trafficking/ (190)
26	Slavery/ (115)
27	Torture/ (2635)
28	(slavery or enslave\$ or torture\$).ti,ab. (2768)
29	Prostitution/ (8919)
30	(prostitut\$ or brothel\$).ti,ab. (3430)
31	(sex\$ adj2 (exploit\$ or traffick\$)).ti,ab. (618)
32	exp Terrorism/ (9017)
33	(terrorism or terrorist\$).ti,ab. (6169)

continued

TABLE 17 Search strategy for EMBASE via Ovid (continued)

34	political terror\$.ti,ab. (19)
35	Torture/ (2635)
36	exp warfare/ (18,460)
37	War crime/ (174)
38	Genocide/ (334)
39	Holocaust/ (369)
40	Ethnic Conflict/ (58)
41	(civil adj (unrest or conflict\$ or disturbance\$ or war or wars or warfare)).ti,ab. (1866)
42	(persecution or victimization or victimisation).ti,ab. (7768)
43	(captivity or imprison\$ or concentration camp\$).ti,ab. (6611)
44	exp Disasters/ (27,191)
45	natural disaster\$.ti,ab. (3220)
46	(earthquake\$ or tsunami\$).ti,ab. (8306)
47	(humanitarian adj (crisis or crises)).ti,ab. (230)
48	(catastrophe\$ or catastrophic event\$ or catastrophic experience\$).ti,ab. (7315)
49	exp Survivor/ (65,046)
50	Refugee/ (9945)
51	(asylum seeker\$ or refugee\$ or migrant\$).ti,ab. (22,105)
52	((forcibly or internally) adj2 displace\$).ti,ab. (518)
53	(displace\$ adj2 (people or person\$ or civilian\$)).ti,ab. (769)
54	Crime Victim/(1526)
55	exp Childhood Trauma Survivor/ (209)
56	Disaster Victim/ (296)
57	exp Prisoner/ (15,304)
58	Prisoner of War/ (396)
59	Slave/ (82)
60	Veteran/ (24,063)
61	Soldier/ (29,325)
62	((expose\$ or exposure) adj2 (abuse or assault\$ or disaster\$ or terror\$ or torture\$ or trauma\$ or rape or violen\$ or war or warfare)).ti,ab. (8060)
63	(survivor\$ adj2 (abuse or assault\$ or disaster\$ or terror\$ or torture\$ or trauma\$ or rape or violen\$ or war or warfare)).ti,ab. (2541)
64	(victim\$ adj2 (abuse or assault\$ or crime or disaster\$ or rape or terror\$ or torture\$ or trauma\$ or violen\$ or war or warfare)).ti,ab. (9275)
65	(witness\$ adj2 (abuse or assault\$ or disaster\$ or rape or terror\$ or torture\$ or trauma\$ or violen\$ or war or warfare)).ti,ab. (1147)
66	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 57 or 58 or 59 or 60 or 61 or 62 or 63 or 64 or 65 (372,799)
67	Posttraumatic Stress Disorder/ (48,288)
68	(PTSD or CPTSD).ti,ab. (22,853)
69	posttrauma\$.ti,ab. (35,543)
70	post-trauma\$.ti,ab. (32,384)

TABLE 17 Search strategy for EMBASE via Ovid (continued)

71	"post trauma\$.ti,ab. (32,384)
72	post traumatic stress.ti,ab. (12,118)
73	post traumatic stress.kw. (2904)
74	combat stress\$.ti,ab. (414)
75	combat disorder\$.ti,ab. (19)
76	DESNOS.ti,ab. (37)
77	"Disorders of Extreme Distress Not Otherwise Specified".ti,ab. (0)
78	complex trauma\$.ti,ab. (468)
79	(complex adj3 trauma\$.ti,ab. (1446)
80	traumatic stress.ti,ab. (14,496)
81	traumatic memor\$.ti,ab. (767)
82	traumatization.ti,ab. (1253)
83	traumatisation.ti,ab. (258)
84	(trauma\$ adj3 (expos\$ or event\$ or experienc\$)).ti,ab. (20,684)
85	67 or 68 or 69 or 70 or 71 or 72 or 73 or 74 or 75 or 76 or 77 or 78 or 79 or 80 or 81 or 82 or 83 or 84 (99,034)
86	66 and 85 (29,961)
87	exp Cognitive Therapy/ (44,498)
88	cognitive behaviour\$ therapy.ti,ab. (5617)
89	cognitive behavior\$ therapy.ti,ab. (10,869)
90	cognitive restructuring.ti,ab. (1117)
91	cognitive rescripting.ti,ab. (0)
92	cognitive processing therapy.ti,ab. (197)
93	CPT.ti,ab. (15,303)
94	cognitive therapy.ti,ab. (3567)
95	cognitive behavioural treatment\$.ti,ab. (569)
96	cognitive behavioral treatment\$.ti,ab. (1915)
97	(CBT or TFCBT).ti,ab. (11,649)
98	cognitive trauma therapy.ti,ab. (7)
99	trauma focus\$ CBT.ti,ab. (48)
100	87 or 88 or 89 or 90 or 91 or 92 or 93 or 94 or 95 or 96 or 97 or 98 or 99 (65,898)
101	exp Behavior Therapy/ (42,878)
102	(behavior\$ adj2 (therap\$ or treat\$ or modif\$)).ti,ab. (35,788)
103	(behaviour\$ adj2 (therap\$ or treat\$ or modif\$)).ti,ab. (13,871)
104	(dialectical behavio\$ adj (therap\$ or treat\$)).ti,ab. (829)
105	biofeedback, psychology/or feedback, sensory/or neurofeedback/ (21,789)
106	(biofeedback or neurofeedback or sensory feedback).ti,ab. (11,442)
107	eye movement desensitization reprocessing/or implosive therapy/or virtual reality exposure therapy/ (414)
108	(psychological adj2 desensiti\$.ti,ab. (9)
109	eye movement desensiti?ation reprocessing.ti,ab. (39)
110	EMDR.ti,ab. (560)
111	(exposure adj (therap\$ or treat\$)).ti,ab. (2851)

continued

TABLE 17 Search strategy for EMBASE via Ovid (continued)

112	live exposure.ti,ab. (16)
113	imaginal exposure.ti,ab. (183)
114	prolonged exposure therapy.ti,ab. (120)
115	imaginal flooding.ti,ab. (27)
116	exposure inhibition therap\$.ti,ab. (0)
117	implosive therap\$.ti,ab. (58)
118	image habituation.ti,ab. (4)
119	inoculation training.ti,ab. (114)
120	101 or 102 or 103 or 104 or 105 or 106 or 107 or 108 or 109 or 110 or 111 or 112 or 113 or 114 or 115 or 116 or 117 or 118 or 119 (107,793)
121	"Acceptance and Commitment Therapy"/ (780)
122	(acceptance adj2 therap\$.ti,ab. (384)
123	(commitment adj2 therap\$.ti,ab. (858)
124	Hypnosis/ (14,590)
125	(hypnosis or hypnotherap\$.ti,ab. (9008)
126	Mindfulness/ (3696)
127	mindfulness.ti,ab. (5250)
128	supportive therap\$.ti,ab. (5535)
129	(non-directive adj (counselling or counseling)).ti,ab. (118)
130	(nondirective adj (counselling or counseling)).ti,ab. (51)
131	(non directive adj (counselling or counseling)).ti,ab. (118)
132	Psychotherapy/or Group Therapy/or Psychodynamic Psychotherapy/ (104,777)
133	psychodynamic therap\$.ti,ab. (636)
134	inter personal psychotherap\$.ti,ab. (1)
135	interpersonal psychotherap\$.ti,ab. (940)
136	IPT.ti,ab. (2383)
137	(compassion adj2 therap\$.ti,ab. (58)
138	accelerated resolution.ti,ab. (120)
139	sensorimotor therap\$.ti,ab. (24)
140	schema therapy.ti,ab. (180)
141	(stress adj2 manag\$.ti,ab. (6629)
142	supportive therap\$.ti,ab. (5535)
143	Counseling/ (75,492)
144	(non-directive counsel\$ or non directive counsel\$ or nondirective counsel\$.ti,ab. (170)
145	compassion therap\$.ti,ab. (2)
146	121 or 122 or 123 or 124 or 125 or 126 or 127 or 128 or 129 or 130 or 131 or 132 or 133 or 134 or 135 or 136 or 137 or 138 or 139 or 140 or 141 or 142 or 143 or 144 or 145 (209,736)
147	100 or 120 or 146 (330,152)
148	hypnotic sedative agent/or alprazolam/or amobarbital/or azaperone/or barbital/or bromisovalum/or chloral hydrate/or chloralose/or chlordiazepoxide/or chlomethiazole/or dexmedetomidine/or diazepam/or diphenhydramine/or eszopiclone/or ethchlorvynol/or etomidate/or etorphine/or flurazepam/or glutethimide/or hexobarbital/or lorazepam/or medazepam/or medetomidine/or methylphenobarbital/or meprobamate/or methapyrilene/or methaqualone/or midazolam/or nitrazepam/or oxazepam/or paraldehyde/or pentobarbital/or phenobarbital/or propofol/or secobarbital/or temazepam/or thiamylal/or thiopental/or xylazine/ (321,753)

TABLE 17 Search strategy for EMBASE via Ovid (continued)

149	z drugs.ti,ab. (207)
150	anxiolytic agent/or bromazepam/or buspirone/or chloremezanone/or clorazepate dipotassium/or estazolam/or flunitrazepam/or fluvoxamine/or nordazepam/or ondansetron/or oxprenolol/or prazepam/or pregabalin/or ritanserin/or tranlycypromine/or trazodone/or triazolam/or zolazepam/ (100,358)
151	benzodiazepine derivative/ (40,227)
152	sedative antihistamine\$.ti,ab. (114)
153	promethazine/ (13,661)
154	antidepressive agent/or benactyzine/or clorgyline/or deanol/or desvenlafaxine/or duloxetine/or iproniazid/or isocarboxazid/or lithium carbonate/or lithium derivative/or moclobemide/or nialamide/or phenelzine/or pizotifen/or rolipram/or sertraline/or tranlycypromine/or vilazodone/ (147,901)
155	Imipramine/ (34,101)
156	mirtazapine/ (10,903)
157	neuroleptic agent/or acepromazine/or aripiprazole/or azaperone/or benperidol/or butaclamol/or chlorpromazine/or chlorprothixene/or clopenthixol/or clozapine/or droperidol/or etazolate/or flupentixol/or fluphenazine/or fluspirilene/or haloperidol/or loxapine/or lurasidone/or mesoridazine/or metitepine/or methotrimeprazine/or molindone/or ondansetron/or paliperidone/or penfluridol/or perazine/or perphenazine/or pimozide/or prochlorperazine/or promazine/or quetiapine/or raclopride/or remoxipride/or reserpine/or risperidone/or ritanserin/or spiperone/or sulphiride/or thioridazine/or thiothixene/or tiapride/or trifluoperazine/or trifluperidol/or triflupromazine/ (250,352)
158	olanzapine/ (30,419)
159	anticonvulsive agent/or acetazolamide/or bromides/or carbamazepine/or clonazepam/or clorazepate dipotassium/or diazepam/or dimethadione/or estazolam/or ethosuximide/or flunarizine/or lorazepam/or magnesium sulfate/or medazepam/or mephenytoin/or methylphenobarbital/or meprobamate/or nitrazepam/or paraldehyde/or phenobarbital/or phenytoin/or pregabalin/or primidone/or riluzole/or thiopental/or tiletamine/or trimethadione/or valproic acid/or vigabatrin/ (370,923)
160	tranquillizer/or lithium chloride/or lithium derivative/ (25,358)
161	lamotrigine/ (21,972)
162	topiramate/ (18,900)
163	monoamine oxidase inhibitor/or chlorphenamidine/or clorgyline/or cuprizone/or furazolidone/or harmaline/or harmine/or isocarboxazid/or moclobemide/or monocrotophos/or pargyline/or selegiline/or tranlycypromine/ (44,538)
164	Prazosin/ (22,822)
165	3,4 methylenedioxyamphetamine/ (2221)
166	(MDMA or ecstasy).ti,ab. (6467)
167	148 or 149 or 150 or 151 or 152 or 153 or 154 or 155 or 156 or 157 or 158 or 159 or 160 or 161 or 162 or 163 or 164 or 165 or 166 (904,230)
168	86 and 147 (4620)
169	86 and 167 (1616)
170	168 or 169 (5607)
171	limit 170 to yr="1992 -Current" (5473)

International Pharmaceutical Abstracts via ProQuest

Search date: 30 August 2017.

The initial search identified 625 records.

Date range searched: 1970 onwards.

TABLE 18 Search strategy for International Pharmaceutical Abstracts via ProQuest

(SU.EXACT("Stress disorders")) OR (PTSD or CPTSD) OR (posttrauma* or post-trauma*) OR ("post traumatic stress") OR ("combat disorder*") OR ("combat stress") OR DESNOS OR (traumatisation OR traumatization) OR (complex NEAR/3 trauma*) OR (trauma* NEAR/3 (expos* or event* or experienc*))

MEDLINE via Ovid

Search date: 18 April 2017.

Records retrieved: 2818.

Database: Ovid MEDLINE Epub Ahead of Print and In-Process & Other Non-Indexed Citations, Ovid MEDLINE Daily and Ovid MEDLINE.

Date range searched: 1946 to present.

TABLE 19 Search strategy for MEDLINE via Ovid

-
- 1 exp Violence/ (84,653)
 - 2 violence.ti,ab. (38,287)
 - 3 Domestic Violence/ (5769)
 - 4 Intimate Partner Violence/ (716)
 - 5 Battered Women/ (2579)
 - 6 (batter\$ adj2 (wife\$ or wive\$ or woman or women or men or husband\$ or partner\$)).ti,ab. (870)
 - 7 (physical\$ adj2 (abus\$ or assault\$ or violen\$ or aggress\$)).ti,ab. (10,464)
 - 8 (emotional\$ adj2 abus\$).ti,ab. (1749)
 - 9 Rape/ (6157)
 - 10 rape.ti,ab. (6600)
 - 11 (sexual\$ adj2 (abus\$ or assault\$ or violen\$ or aggress\$)).ti,ab. (19,466)
 - 12 Child Sexual Abuse/ (9551)
 - 13 child\$ sexual abuse.ti,ab. (4339)
 - 14 (child\$ adj2 exploit\$).ti,ab. (200)
 - 15 child neglect.ti,ab. (468)
 - 16 (child\$ adj2 trauma).ti,ab. (4689)
 - 17 (non accidental injur\$ or non-accidental injur\$ or nonaccidental injury).ti,ab. (533)
 - 18 Human Rights Abuses/ (734)
 - 19 Human Trafficking/ (177)
 - 20 ((human or person or people) adj2 (traffick\$ or exploit\$)).ti,ab. (818)
 - 21 ((forced or exploit\$) adj2 labour).ti,ab. (56)
 - 22 Organ Trafficking/ (33)
 - 23 Slavery/ (45)
 - 24 Torture/ (1996)
-

TABLE 19 Search strategy for MEDLINE via Ovid (continued)

25	(slavery or enslave\$ or torture\$.ti,ab. (2480)
26	Sex Work/ (5675)
27	(prostitut\$ or brothel\$.ti,ab. (3946)
28	(sex\$ adj2 (exploit\$ or traffick\$)).ti,ab. (561)
29	Terrorism/ (4718)
30	(terrorism or terrorist\$.ti,ab. (5408)
31	political terror\$.ti,ab. (16)
32	Torture/ (1996)
33	exp warfare/ (35,511)
34	exp Armed Conflicts/ (8467)
35	War crimes/ (1197)
36	Genocide/ (84)
37	Holocaust/ (782)
38	Ethnic Cleansing/ (0)
39	(civil adj (unrest or conflict\$ or disturbance\$ or war or wars or warfare)).ti,ab. (1859)
40	(persecution or victimization or victimisation).ti,ab. (7276)
41	(captivity or imprison\$ or concentration camp\$.ti,ab. (6151)
42	exp Disasters/ (67,463)
43	Earthquakes/ (3095)
44	Tsunamis/ (708)
45	natural disaster\$.ti,ab. (2928)
46	(earthquake\$ or tsunami\$.ti,ab. (7947)
47	(humanitarian adj (crisis or crises)).ti,ab. (221)
48	(catastrophe\$ or catastrophic event\$ or catastrophic experience\$.ti,ab. (5922)
49	exp Survivors/ (22,782)
50	Refugees/ (8204)
51	(asylum seeker\$ or refugee\$ or migrant\$.ti,ab. (21,535)
52	((forcibly or internally) adj2 displace\$.ti,ab. (476)
53	(displace\$ adj2 (people or person\$ or civilian\$)).ti,ab. (763)
54	Crime Victims/ (7200)
55	Adult Survivors of Child Abuse/ (1437)
56	Disaster Victims/ (96)
57	Prisoners/ (15,110)
58	Prisoners of War/ (469)
59	Slaves/ (31)
60	Veterans/ (13,136)
61	Military Personnel/ (35,416)
62	((expose\$ or exposure) adj2 (abuse or assault\$ or disaster\$ or terror\$ or torture\$ or trauma\$ or rape or violen\$ or war or warfare)).ti,ab. (7019)

continued

TABLE 19 Search strategy for MEDLINE via Ovid (continued)

63	(survivor\$ adj2 (abuse or assault\$ or disaster\$ or terror\$ or torture\$ or trauma\$ or rape or violen\$ or war or warfare)).ti,ab. (2319)
64	(victim\$ adj2 (abuse or assault\$ or crime or disaster\$ or rape or terror\$ or torture\$ or trauma\$ or violen\$ or war or warfare)).ti,ab. (8160)
65	(witness\$ adj2 (abuse or assault\$ or disaster\$ or rape or terror\$ or torture\$ or trauma\$ or violen\$ or war or warfare)).ti,ab. (1041)
66	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 57 or 58 or 59 or 60 or 61 or 62 or 63 or 64 or 65 (331,505)
67	Stress Disorders, Post Traumatic/ (26,733)
68	(PTSD or CPTSD).ti,ab. (18,107)
69	posttrauma\$.ti,ab. (30,066)
70	post-trauma\$.ti,ab. (25,637)
71	"post trauma\$".ti,ab. (25,637)
72	post traumatic stress.ti,ab. (9289)
73	post traumatic stress.kw. (88)
74	combat stress\$.ti,ab. (343)
75	combat disorder\$.ti,ab. (15)
76	DESNOS.ti,ab. (31)
77	"Disorders of Extreme Distress Not Otherwise Specified".ti,ab. (0)
78	complex trauma\$.ti,ab. (403)
79	(complex adj3 trauma\$.ti,ab. (1217)
80	traumatic stress.ti,ab. (10,740)
81	traumatic memor\$.ti,ab. (579)
82	traumatization.ti,ab. (990)
83	traumatisation.ti,ab. (192)
84	(trauma\$ adj3 (expos\$ or event\$ or experienc\$)).ti,ab. (16,288)
85	67 or 68 or 69 or 70 or 71 or 72 or 73 or 74 or 75 or 76 or 77 or 78 or 79 or 80 or 81 or 82 or 83 or 84 (75,076)
86	66 and 85 (24,059)
87	exp Cognitive Therapy/ (22,441)
88	cognitive behaviour\$ therapy.ti,ab. (3982)
89	cognitive behavior\$ therapy.ti,ab. (8052)
90	cognitive restructuring.ti,ab. (723)
91	cognitive rescripting.ti,ab. (0)
92	cognitive processing therapy.ti,ab. (178)
93	CPT.ti,ab. (10,770)
94	cognitive therapy.ti,ab. (2397)
95	cognitive behavioural treatment\$.ti,ab. (403)
96	cognitive behavioral treatment\$.ti,ab. (1378)
97	(CBT or TFCBT).ti,ab. (7996)

TABLE 19 Search strategy for MEDLINE via Ovid (continued)

98	cognitive trauma therapy.ti,ab. (6)
99	trauma focus\$ CBT.ti,ab. (31)
100	87 or 88 or 89 or 90 or 91 or 92 or 93 or 94 or 95 or 96 or 97 or 98 or 99 (40,659)
101	exp Behavior Therapy/ (64,582)
102	(behavior\$ adj2 (therap\$ or treat\$ or modif\$)).ti,ab. (26,789)
103	(behaviour\$ adj2 (therap\$ or treat\$ or modif\$)).ti,ab. (9862)
104	(dialectical behavio\$ adj (therap\$ or treat\$)).ti,ab. (581)
105	biofeedback, psychology/or feedback, sensory/or neurofeedback/ (9330)
106	(biofeedback or neurofeedback or sensory feedback).ti,ab. (8461)
107	eye movement desensitization reprocessing/or implosive therapy/or virtual reality exposure therapy/ (1347)
108	(psychological adj2 desensiti\$).ti,ab. (4)
109	eye movement desensiti?ation reprocessing.ti,ab. (25)
110	EMDR.ti,ab. (372)
111	(exposure adj (therap\$ or treat\$)).ti,ab. (2282)
112	live exposure.ti,ab. (11)
113	imaginal exposure.ti,ab. (147)
114	prolonged exposure therapy.ti,ab. (99)
115	imaginal flooding.ti,ab. (13)
116	exposure inhibition therap\$.ti,ab. (0)
117	implosive therap\$.ti,ab. (43)
118	image habituation.ti,ab. (3)
119	inoculation training.ti,ab. (78)
120	101 or 102 or 103 or 104 or 105 or 106 or 107 or 108 or 109 or 110 or 111 or 112 or 113 or 114 or 115 or 116 or 117 or 118 or 119 (90,057)
121	"Acceptance and Commitment Therapy"/ (184)
122	(acceptance adj2 therap\$).ti,ab. (257)
123	(commitment adj2 therap\$).ti,ab. (603)
124	Hypnosis/ (8730)
125	(hypnosis or hypnotherap\$).ti,ab. (7561)
126	Mindfulness/ (1325)
127	mindfulness.ti,ab. (4005)
128	supportive therap\$.ti,ab. (3906)
129	(non-directive adj (counselling or counseling)).ti,ab. (100)
130	(nondirective adj (counselling or counseling)).ti,ab. (54)
131	(non directive adj (counselling or counseling)).ti,ab. (100)
132	Psychotherapy/or Psychotherapy, Brief/or Psychotherapy, Group/or Psychotherapy, Multiple/or Psychotherapy, Psychodynamic/or Psychotherapy, Rational-emotive/ (65,822)
133	psychodynamic therap\$.ti,ab. (431)
134	inter personal psychotherap\$.ti,ab. (1)

continued

TABLE 19 Search strategy for MEDLINE via Ovid (continued)

135	interpersonal psychotherap\$.ti,ab. (778)
136	IPT.ti,ab. (1907)
137	(compassion adj2 therap\$.ti,ab. (39)
138	accelerated resolution.ti,ab. (86)
139	sensorimotor therap\$.ti,ab. (21)
140	schema therapy.ti,ab. (106)
141	(stress adj2 manag\$.ti,ab. (5168)
142	supportive therap\$.ti,ab. (3906)
143	Counseling/(32,854)
144	(non-directive counsel\$ or non directive counsel\$ or nondirective counsel\$.ti,ab. (155)
145	compassion therap\$.ti,ab. (1)
146	121 or 122 or 123 or 124 or 125 or 126 or 127 or 128 or 129 or 130 or 131 or 132 or 133 or 134 or 135 or 136 or 137 or 138 or 139 or 140 or 141 or 142 or 143 or 144 or 145 (122,017)
147	100 or 120 or 146 (211,031)
148	"hypnotics and sedatives"/or alprazolam/or amobarbital/or azaperone/or barbital/or bromisovalum/or chloral hydrate/or chloralose/or chlordiazepoxide/or chlormethiazole/or dexmedetomidine/or diazepam/or diphenhydramine/ or eszopiclone/or ethchlorvynol/or etomidate/or etorphine/or flurazepam/or glutethimide/or hexobarbital/or lorazepam/or medazepam/or medetomidine/or mephobarbital/or meprobamate/or methapyrilene/or methaqualone/or midazolam/or nitrazepam/or oxazepam/or paraldehyde/or pentobarbital/or phenobarbital/or propofol/or secobarbital/ or temazepam/or thiamylal/or thiopental/or xylazine/ (114,648)
149	z drugs.ti,ab. (120)
150	anti-anxiety agents/or bromazepam/or buspirone/or chlormezanone/or clorazepate dipotassium/or estazolam/or flunitrazepam/or fluvoxamine/or nordazepam/or ondansetron/or oxprenolol/or prazepam/or pregabalin/or ritanserin/or tranlycypromine/or trazodone/or triazolam/or zolazepam/ (33,101)
151	benzodiazepines/or benzodiazepinones/ (23,660)
152	sedative antihistamine\$.ti,ab. (61)
153	promethazine.ti,ab. (2061)
154	antidepressive agents/or benactyzine/or clorgyline/or deanol/or desvenlafaxine succinate/or duloxetine hydrochloride/or iproniazid/or isocarboxazid/or lithium carbonate/or lithium compounds/or moclobemide/or nialamide/ or phenelzine/or pizotyline/or rolipram/or sertraline/or tranlycypromine/or vilazodone hydrochloride/ (55,533)
155	Imipramine/ (9832)
156	mirtazapine.ti,ab. (1765)
157	antipsychotic agents/or acepromazine/or aripiprazole/or azaperone/or benperidol/or butaclamol/or chlorpromazine/ or chlorprothixene/or clopenthixol/or clozapine/or droperidol/or etazolate/or flupenthixol/or fluphenazine/or fluspirilene/or haloperidol/or loxapine/or lurasidone hydrochloride/or mesoridazine/or methiothepin/or methotrimeprazine/or molindone/ or ondansetron/or paliperidone palmitate/or penfluridol/or perazine/or perphenazine/or pimozide/or prochlorperazine/or promazine/or quetiapine fumarate/or raclopride/or remoxipride/or reserpine/or risperidone/or ritanserin/or spiperone/or sulphiride/or thioridazine/or thiothixene/or tiapride hydrochloride/or trifluoperazine/or trifluoperidol/or triflupromazine/ (114,997)
158	olanzapine.ti,ab. (7555)
159	anticonvulsants/or acetazolamide/or bromides/or carbamazepine/or clonazepam/or clorazepate dipotassium/or diazepam/or dimethadione/or estazolam/or ethosuximide/or flunarizine/or lorazepam/or magnesium sulfate/or medazepam/or mephenytoin/or mephobarbital/or meprobamate/or nitrazepam/or paraldehyde/or phenobarbital/or phenytoin/or pregabalin/or primidone/or riluzole/or thiopental/or tiletamine/or trimethadione/or valproic acid/or vigabatrin/ (129,932)
160	antimanic agents/or lithium chloride/or lithium compounds/ (9229)
161	lamotrigine.ti,ab. (4632)

TABLE 19 Search strategy for MEDLINE via Ovid (continued)

162	topiramate.ti.ab. (4045)
163	monoamine oxidase inhibitors/or chlorphenamine/or clorgyline/or cuprizone/or furazolidone/or harmaline/or harmine/or isocarboxazid/or moclobemide/or monocrotophos/or pargyline/or selegiline/or tranlycypromine/ (17,953)
164	Prazosin/ (7567)
165	N-Methyl-3,4-methylenedioxyamphetamine/ (3644)
166	(MDMA or ecstasy).ti.ab. (5232)
167	148 or 149 or 150 or 151 or 152 or 153 or 154 or 155 or 156 or 157 or 158 or 159 or 160 or 161 or 162 or 163 or 164 or 165 or 166 (407,459)
168	86 and 147 (2717)
169	86 and 167 (405)
170	168 or 169 (3004)
171	limit 170 to yr="1992 -Current" (2818)

PILOTS via ProQuest

Search date: 2 May 2017.

Two separate searches were conducted: one for psychological interventions and a second for pharmacological interventions.

Total records retrieved: 1981.

Date range searched: 1987 onwards.

TABLE 20 Search strategy for PILOTS via ProQuest

Set	Search	Results
Psychological interventions search strategy		
S1	(SU.EXACT("Dating Violence") OR SU.EXACT("Interpersonal Violence") OR SU.EXACT("Family Violence")) OR (batter* NEAR/2 (wife* OR wive* OR woman OR women OR men OR husband* OR partner*)) OR (physical* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR (emotional* NEAR/1 abus*) OR (SU.EXACT("Acquaintance Rape") OR SU.EXACT("Acquaintance Rape" OR "Partner Rape" OR "Rape") OR SU.EXACT("Partner Rape")) OR (sexual* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR SU.EXACT("Child Abuse") OR (child* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR (child* NEAR/2 (exploit* OR neglect* OR trauma*)) OR ("non accidental injur*" OR "non-accidental injur*" OR "nonaccidental injur*") OR SU.EXACT("Human Trafficking") OR ((human OR person OR people) NEAR/2 (traffick* OR exploit*)) OR ((forced OR exploit*) NEAR/2 labour) OR SU.EXACT("Slavery") OR SU.EXACT("Torture") OR (slavery OR enslave* OR torture*) OR SU.EXACT("Prostitution") OR (prostitution* OR brothel*) OR (sex* NEAR/2 (exploit* OR traffick*)) OR SU.EXACT("Terrorism") OR SU.EXACT("Chemical Warfare" OR "Civil Warfare" OR "Humanitarian Intervention" OR "Military Intervention" OR "War") OR SU.EXACT("Genocide") OR (SU.EXACT("War Neuroses") OR SU.EXACT("War Imprisonment")) OR SU.EXACT("Persecution") OR (civil NEAR/1 (unrest OR conflict* OR disturbance* OR war OR wars OR warfare)) OR (persecution OR victimization OR victimisation) OR (captivity OR imprison*) OR SU.EXACT("Concentration Camps") OR (SU.EXACT("Avalanches" OR "Blizzards" OR "Drought" OR "Earthquakes" OR "Epidemics" OR "Epizootics" OR "Famine" OR "Floods" OR "Hurricanes" OR "Landslides" OR "Lightning" OR "Natural Disasters" OR "Tornadoes" OR "Tsunamis" OR "Volcanoes") OR SU.EXACT("Accidents" OR "Agent Orange" OR "Air Traffic Accidents" OR "Avalanches" OR "Blizzards" OR "Building Collapse" OR "Disasters" OR "Drought" OR "Earthquakes" OR "Epidemics" OR "Epizootics" OR "Explosions" OR	43,537°

continued

TABLE 20 Search strategy for PILOTS via ProQuest (continued)

Set	Search	Results
	"Famine" OR "Fires" OR "Floods" OR "Home Accidents" OR "Hurricanes" OR "Industrial Accidents" OR "Landmines" OR "Landslides" OR "Lightning" OR "Motor Traffic Accidents" OR "Natural Disasters" OR "Nuclear Accidents" OR "Nuclear Testing" OR "Oil Spills" OR "Pedestrian Accidents" OR "Railroad Accidents" OR "Ship Accidents" OR "Technological Disasters" OR "Tornadoes" OR "Toxic Contamination" OR "Tsunamis" OR "Volcanoes") OR (humanitarian NEAR/1 (crisis OR crises)) OR (catastrophe OR catastrophic) OR SU.EXACT("Survivors") OR SU.EXACT("Asylum Seekers" OR "Refugees") OR ((forcibly OR internally) NEAR/1 displace*) OR (displace* NEAR/1 (people OR person* OR civilian*)) OR (victim* NEAR/2 (crime* OR disaster*)) OR (SU.EXACT("Political Prisoners") OR SU.EXACT("Prisoners of War")) OR SU.EXACT("Military Personnel") OR ((expose* OR exposure) NEAR/2 (abuse OR assault* OR disaster* OR terror* OR torture* OR trauma* OR rape OR violen* OR war OR warfare)) OR (survivor* NEAR/2 (abuse OR assault* OR disaster* OR terror* OR torture* OR trauma* OR rape OR violen* OR war OR warfare)) OR (victim* NEAR/2 (abuse OR assault* OR crime OR disaster* OR rape OR terror* OR torture* OR trauma* OR violen* OR war OR warfare)) OR (witness* NEAR/2 (abuse OR assault* OR crime OR disaster* OR rape OR terror* OR torture* OR trauma* OR violen* OR war OR warfare))	
S2	(cognitive N2 therap*) OR (cognitive N2 treat*) OR (cognitive N1 rescript*) OR (cognitive N1 restructur*) OR CPT OR CBT OR TFCBT OR (trauma N2 CBT)	812°
S4	(behav* N2 therap*) OR (behav* N2 treat*) OR (behav* N2 modif*) OR biofeedback OR neurofeedback OR "sensory feedback" OR "eye movement desensitization reprocessing" OR "eye movement desensitisation reprocessing" OR EMDR	1077°
S6	(exposure N2 therap*) OR (exposure N2 treat*) OR "live exposure" OR "imaginal exposure" OR "imaginal flooding" OR "exposure inhibition therapy" OR (implosive N2 therap*) OR "image habituation" OR "inoculation training"	223°
S8	(acceptance N2 therap*) OR (commitment N2 therap*) OR hypnosis OR hypnotherap* OR mindfulness OR (supportive N2 therap*) OR (non-directive N2 counsel*) OR (nondirective N2 counsel*) OR psychotherapy OR "group therapy"	6900°
S9	(psychodynamic N1 therap*) OR (interpersonal psychotherap*) OR IPT OR (compassion N2 therap*) OR "accelerated resolution" OR (sensorimotor N1 therap*) OR (schema N1 therap*)	756°
S10	((cognitive N2 therap*) OR (cognitive N2 treat*) OR (cognitive N1 rescript*) OR (cognitive N1 restructur*) OR CPT OR CBT OR TFCBT OR (trauma N2 CBT)) OR ((behav* N2 therap*) OR (behav* N2 treat*) OR (behav* N2 modif*) OR biofeedback OR neurofeedback OR "sensory feedback" OR "eye movement desensitization reprocessing" OR "eye movement desensitisation reprocessing" OR EMDR) OR ((exposure N2 therap*) OR (exposure N2 treat*) OR "live exposure" OR "imaginal exposure" OR "imaginal flooding" OR "exposure inhibition therapy" OR (implosive N2 therap*) OR "image habituation" OR "inoculation training") OR ((acceptance N2 therap*) OR (commitment N2 therap*) OR hypnosis OR hypnotherap* OR mindfulness OR (supportive N2 therap*) OR (non-directive N2 counsel*) OR (nondirective N2 counsel*) OR psychotherapy OR "group therapy") OR ((psychodynamic N1 therap*) OR (interpersonal psychotherap*) OR IPT OR (compassion N2 therap*) OR "accelerated resolution" OR (sensorimotor N1 therap*) OR (schema N1 therap*))	8207°
S11	((SU.EXACT("Dating Violence") OR SU.EXACT("Interpersonal Violence") OR SU.EXACT("Family Violence")) OR (batter* NEAR/2 (wife* OR wive* OR woman OR women OR men OR husband* OR partner*)) OR (physical* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR (emotional* NEAR/1 abus*) OR (SU.EXACT("Acquaintance Rape") OR SU.EXACT("Acquaintance Rape" OR "Partner Rape" OR "Rape") OR SU.EXACT("Partner Rape")) OR (sexual* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR SU.EXACT("Child Abuse") OR (child* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR (child* NEAR/2 (exploit* OR neglect* OR trauma*)) OR ("non accidental injur*" OR "non-accidental injur*" OR "nonaccidental injur*") OR SU.EXACT("Human Trafficking") OR ((human OR person OR people) NEAR/2 (traffick* OR exploit*)) OR ((forced OR exploit*) NEAR/2 labour) OR SU.EXACT("Slavery") OR SU.EXACT("Torture") OR (slavery OR enslave* OR torture*) OR SU.EXACT("Prostitution") OR (prostitution* OR brothel*) OR (sex* NEAR/2 (exploit* OR traffick*)) OR SU.EXACT("Terrorism") OR SU.EXACT("Chemical Warfare" OR "Civil Warfare" OR "Humanitarian Intervention" OR "Military Intervention" OR "War") OR SU.EXACT("Genocide") OR (SU.EXACT("War Neuroses") OR SU.EXACT("War Imprisonment")) OR SU.EXACT("Persecution") OR (civil NEAR/1 (unrest OR conflict* OR disturbance* OR war OR wars OR warfare)) OR (persecution OR victimization OR victimisation) OR (captivity OR imprison*) OR SU.EXACT("Concentration Camps") OR (SU.EXACT("Avalanches" OR "Blizzards" OR "Drought" OR "Earthquakes" OR "Epidemics" OR "Epizootics" OR "Famine" OR "Floods" OR "Hurricanes" OR "Landslides" OR "Lightning" OR "Natural Disasters" OR "Tornadoes" OR "Tsunamis" OR "Volcanoes") OR SU.EXACT("Accidents" OR "Agent Orange" OR "Air Traffic Accidents" OR "Avalanches" OR "Blizzards" OR "Building Collapse" OR	5986°

TABLE 20 Search strategy for PILOTS via ProQuest (continued)

Set	Search	Results
	"Disasters" OR "Drought" OR "Earthquakes" OR "Epidemics" OR "Epizootics" OR "Explosions" OR "Famine" OR "Fires" OR "Floods" OR "Home Accidents" OR "Hurricanes" OR "Industrial Accidents" OR "Landmines" OR "Landslides" OR "Lightning" OR "Motor Traffic Accidents" OR "Natural Disasters" OR "Nuclear Accidents" OR "Nuclear Testing" OR "Oil Spills" OR "Pedestrian Accidents" OR "Railroad Accidents" OR "Ship Accidents" OR "Technological Disasters" OR "Tornadoes" OR "Toxic Contamination" OR "Tsunamis" OR "Volcanoes")) OR (humanitarian NEAR/1 (crisis OR crises)) OR (catastrophe OR catastrophic) OR SU.EXACT("Survivors") OR SU.EXACT("Asylum Seekers" OR "Refugees") OR ((forcibly OR internally) NEAR/1 displace*) OR (displace* NEAR/1 (people OR person* OR civilian*)) OR (victim* NEAR/2 (crime* OR disaster*)) OR (SU.EXACT("Political Prisoners") OR SU.EXACT("Prisoners of War")) OR SU.EXACT("Military Personnel") OR ((expose* OR exposure) NEAR/2 (abuse OR assault* OR disaster* OR terror* OR torture* OR trauma* OR rape OR violen* OR war OR warfare)) OR (survivor* NEAR/2 (abuse OR assault* OR disaster* OR terror* OR torture* OR trauma* OR rape OR violen* OR war OR warfare)) OR (victim* NEAR/2 (abuse OR assault* OR crime OR disaster* OR torture* OR trauma* OR violen* OR war OR warfare)) OR (witness* NEAR/2 (abuse OR assault* OR crime OR disaster* OR rape OR terror* OR torture* OR trauma* OR violen* OR war OR warfare))) AND (((cognitive N2 therap*) OR (cognitive N2 treat*) OR (cognitive N1 rescript*) OR (cognitive N1 restructur*) OR CPT OR CBT OR TFCBT OR (trauma N2 CBT)) OR ((behav* N2 therap*) OR (behav* N2 treat*) OR (behav* N2 modif*) OR biofeedback OR neurofeedback OR "sensory feedback" OR "eye movement desensitization reprocessing" OR "eye movement desensitisation reprocessing" OR EMDR) OR ((exposure N2 therap*) OR (exposure N2 treat*) OR "live exposure" OR "imaginal exposure" OR "imaginal flooding" OR "exposure inhibition therapy" OR (implosive N2 therap*) OR "image habituation" OR "inoculation training") OR ((acceptance N2 therap*) OR (commitment N2 therap*) OR hypnosis OR hypnotherap* OR mindfulness OR (supportive N2 therap*) OR (non-directive N2 counsel*) OR (nondirective N2 counsel*) OR psychotherapy OR "group therapy") OR ((psychodynamic N1 therap*) OR (interpersonal psychotherap*) OR IPT OR (compassion N2 therap*) OR "accelerated resolution" OR (sensorimotor N1 therap*) OR (schema N1 therap*)))	
S12	SU.EXACT("Complex PTSD") OR SU.EXACT("PTSD")	18,871°
S13	((SU.EXACT("Dating Violence") OR SU.EXACT("Interpersonal Violence") OR SU.EXACT("Family Violence")) OR (batter* NEAR/2 (wife* OR wive* OR woman OR women OR men OR husband* OR partner*)) OR (physical* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR (emotional* NEAR/1 abus*) OR (SU.EXACT("Acquaintance Rape") OR SU.EXACT("Acquaintance Rape" OR "Partner Rape" OR "Rape") OR SU.EXACT("Partner Rape")) OR (sexual* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR SU.EXACT("Child Abuse") OR (child* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR (child* NEAR/2 (exploit* OR neglect* OR trauma*)) OR ("non accidental injur*" OR "non-accidental injur*" OR "nonaccidental injur*") OR SU.EXACT("Human Trafficking") OR (human OR person OR people) NEAR/2 (traffick* OR exploit*)) OR ((forced OR exploit*) NEAR/2 labour) OR SU.EXACT("Slavery") OR SU.EXACT("Torture") OR (slavery OR enslave* OR torture*) OR SU.EXACT("Prostitution") OR (prostitution* OR brothel*) OR (sex* NEAR/2 (exploit* OR traffick*)) OR SU.EXACT("Terrorism") OR SU.EXACT("Chemical Warfare" OR "Civil Warfare" OR "Humanitarian Intervention" OR "Military Intervention" OR "War") OR SU.EXACT("Genocide") OR (SU.EXACT("War Neuroses") OR SU.EXACT("War Imprisonment")) OR SU.EXACT("Persecution") OR (civil NEAR/1 (unrest OR conflict* OR disturbance* OR war OR wars OR warfare)) OR (persecution OR victimization OR victimisation) OR (captivity OR imprison*) OR SU.EXACT("Concentration Camps") OR (SU.EXACT("Avalanches" OR "Blizzards" OR "Drought" OR "Earthquakes" OR "Epidemics" OR "Epizootics" OR "Famine" OR "Floods" OR "Hurricanes" OR "Landslides" OR "Lightning" OR "Natural Disasters" OR "Tornadoes" OR "Tsunamis" OR "Volcanoes") OR SU.EXACT("Accidents" OR "Agent Orange" OR "Air Traffic Accidents" OR "Avalanches" OR "Blizzards" OR "Building Collapse" OR "Disasters" OR "Drought" OR "Earthquakes" OR "Epidemics" OR "Epizootics" OR "Explosions" OR "Famine" OR "Fires" OR "Floods" OR "Home Accidents" OR "Hurricanes" OR "Industrial Accidents" OR "Landmines" OR "Landslides" OR "Lightning" OR "Motor Traffic Accidents" OR "Natural Disasters" OR "Nuclear Accidents" OR "Nuclear Testing" OR "Oil Spills" OR "Pedestrian Accidents" OR "Railroad Accidents" OR "Ship Accidents" OR "Technological Disasters" OR "Tornadoes" OR "Toxic Contamination" OR "Tsunamis" OR "Volcanoes")) OR (humanitarian NEAR/1 (crisis OR crises)) OR (catastrophe OR catastrophic) OR SU.EXACT("Survivors") OR SU.EXACT("Asylum Seekers" OR "Refugees") OR ((forcibly OR internally) NEAR/1 displace*) OR (displace* NEAR/1 (people OR person* OR civilian*)) OR (victim* NEAR/2 (crime* OR disaster*)) OR (SU.EXACT("Political Prisoners") OR SU.EXACT("Prisoners of War")) OR SU.EXACT("Military Personnel") OR ((expose* OR exposure) NEAR/2 (abuse OR assault* OR disaster* OR terror* OR torture* OR trauma* OR rape OR violen* OR war OR warfare)) OR (survivor* NEAR/2 (abuse OR assault* OR disaster* OR terror* OR torture* OR trauma* OR rape OR violen* OR war OR warfare)) OR (victim* NEAR/2 (abuse OR assault* OR crime OR disaster* OR rape OR terror* OR torture* OR trauma* OR violen* OR war OR warfare)) OR	1955°

continued

TABLE 20 Search strategy for PILOTS via ProQuest (continued)

Set	Search	Results
S14	<p>(witness* NEAR/2 (abuse OR assault* OR crime OR disaster* OR rape OR terror* OR torture* OR trauma* OR violen* OR war OR warfare)) AND (((cognitive N2 therap*) OR (cognitive N2 treat*) OR (cognitive N1 rescript*) OR (cognitive N1 restructur*) OR CPT OR CBT OR TFCBT OR (trauma N2 CBT)) OR ((behav* N2 therap*) OR (behav* N2 treat*) OR (behav* N2 modif*) OR biofeedback OR neurofeedback OR "sensory feedback" OR "eye movement desensitization reprocessing" OR "eye movement desensitisation reprocessing" OR EMDR) OR ((exposure N2 therap*) OR (exposure N2 treat*) OR "live exposure" OR "imaginal exposure" OR "imaginal flooding" OR "exposure inhibition therapy" OR (implosive N2 therap*) OR "image habituation" OR "inoculation training") OR ((acceptance N2 therap*) OR (commitment N2 therap*) OR hypnosis OR hypnotherap* OR mindfulness OR (supportive N2 therap*) OR (non-directive N2 counsel*) OR (nondirective N2 counsel*) OR psychotherapy OR "group therapy") OR ((psychodynamic N1 therap*) OR (interpersonal psychotherap*) OR IPT OR (compassion N2 therap*) OR "accelerated resolution" OR (sensorimotor N1 therap*) OR (schema N1 therap*)))) AND (SU.EXACT("Complex PTSD") OR SU.EXACT("PTSD"))</p> <p>((SU.EXACT("Dating Violence") OR SU.EXACT("Interpersonal Violence") OR SU.EXACT("Family Violence")) OR (batter* NEAR/2 (wife* OR wive* OR woman OR women OR men OR husband* OR partner*)) OR (physical* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR (emotional* NEAR/1 abus*) OR (SU.EXACT("Acquaintance Rape") OR SU.EXACT("Acquaintance Rape" OR "Partner Rape" OR "Rape") OR SU.EXACT("Partner Rape")) OR (sexual* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR SU.EXACT("Child Abuse") OR (child* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR (child* NEAR/2 (exploit* OR neglect* OR trauma*)) OR ("non accidental injur*" OR "non-accidental injur*" OR "nonaccidental injur*") OR SU.EXACT("Human Trafficking") OR ((human OR person OR people) NEAR/2 (traffick* OR exploit*)) OR ((forced OR exploit*) NEAR/2 (labour) OR SU.EXACT("Slavery") OR SU.EXACT("Torture") OR (slavery OR enslave* OR torture*) OR SU.EXACT("Prostitution") OR (prostitution* OR brothel*) OR (sex* NEAR/2 (exploit* OR traffick*)) OR SU.EXACT("Terrorism") OR SU.EXACT("Chemical Warfare" OR "Civil Warfare" OR "Humanitarian Intervention" OR "Military Intervention" OR "War") OR SU.EXACT("Genocide") OR (SU.EXACT("War Neuroses") OR SU.EXACT("War Imprisonment")) OR SU.EXACT("Persecution") OR (civil NEAR/1 (unrest OR conflict* OR disturbance* OR war OR wars OR warfare)) OR (persecution OR victimization OR victimisation) OR (captivity OR imprison*) OR SU.EXACT("Concentration Camps") OR (SU.EXACT("Avalanches" OR "Blizzards" OR "Drought" OR "Earthquakes" OR "Epidemics" OR "Epizootics" OR "Famine" OR "Floods" OR "Hurricanes" OR "Landslides" OR "Lightning" OR "Natural Disasters" OR "Tornadoes" OR "Tsunamis" OR "Volcanoes") OR SU.EXACT("Accidents" OR "Agent Orange" OR "Air Traffic Accidents" OR "Avalanches" OR "Blizzards" OR "Building Collapse" OR "Disasters" OR "Drought" OR "Earthquakes" OR "Epidemics" OR "Epizootics" OR "Explosions" OR "Famine" OR "Fires" OR "Floods" OR "Home Accidents" OR "Hurricanes" OR "Industrial Accidents" OR "Landmines" OR "Landslides" OR "Lightning" OR "Motor Traffic Accidents" OR "Natural Disasters" OR "Nuclear Accidents" OR "Nuclear Testing" OR "Oil Spills" OR "Pedestrian Accidents" OR "Railroad Accidents" OR "Ship Accidents" OR "Technological Disasters" OR "Tornadoes" OR "Toxic Contamination" OR "Tsunamis" OR "Volcanoes")) OR (humanitarian NEAR/1 (crisis OR crises)) OR (catastrophe OR catastrophic) OR SU.EXACT("Survivors") OR SU.EXACT("Asylum Seekers") OR "Refugees") OR ((forcibly OR internally) NEAR/1 (displace*) OR (displace* NEAR/1 (people OR person* OR civilian*)) OR (victim* NEAR/2 (crime* OR disaster*)) OR (SU.EXACT("Political Prisoners") OR SU.EXACT("Prisoners of War")) OR SU.EXACT("Military Personnel") OR ((expose* OR exposure) NEAR/2 (abuse OR assault* OR disaster* OR terror* OR torture* OR trauma* OR rape OR violen* OR war OR warfare)) OR (survivor* NEAR/2 (abuse OR assault* OR disaster* OR terror* OR torture* OR trauma* OR rape OR violen* OR war OR warfare)) OR (victim* NEAR/2 (abuse OR assault* OR crime OR disaster* OR rape OR terror* OR torture* OR trauma* OR violen* OR war OR warfare)) OR (witness* NEAR/2 (abuse OR assault* OR crime OR disaster* OR rape OR terror* OR torture* OR trauma* OR violen* OR war OR warfare)) AND (((cognitive N2 therap*) OR (cognitive N2 treat*) OR (cognitive N1 rescript*) OR (cognitive N1 restructur*) OR CPT OR CBT OR TFCBT OR (trauma N2 CBT)) OR ((behav* N2 therap*) OR (behav* N2 treat*) OR (behav* N2 modif*) OR biofeedback OR neurofeedback OR "sensory feedback" OR "eye movement desensitization reprocessing" OR "eye movement desensitisation reprocessing" OR EMDR) OR ((exposure N2 therap*) OR (exposure N2 treat*) OR "live exposure" OR "imaginal exposure" OR "imaginal flooding" OR "exposure inhibition therapy" OR (implosive N2 therap*) OR "image habituation" OR "inoculation training") OR ((acceptance N2 therap*) OR (commitment N2 therap*) OR hypnosis OR hypnotherap* OR mindfulness OR (supportive N2 therap*) OR (non-directive N2 counsel*) OR (nondirective N2 counsel*) OR psychotherapy OR "group therapy") OR ((psychodynamic N1 therap*) OR (interpersonal psychotherap*) OR IPT OR (compassion N2 therap*) OR "accelerated resolution" OR (sensorimotor N1 therap*) OR (schema N1 therap*)))) AND (SU.EXACT("Complex PTSD") OR SU.EXACT("PTSD"))</p> <p>Limits applied</p>	

TABLE 20 Search strategy for PILOTS via ProQuest (continued)

Set	Search	Results
Pharmacological interventions search strategy		
S1	(SU.EXACT("Dating Violence") OR SU.EXACT("Interpersonal Violence") OR SU.EXACT("Family Violence")) OR (batter* NEAR/2 (wife* OR wife* OR woman OR women OR men OR husband* OR partner*)) OR (physical* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR (emotional* NEAR/1 abus*) OR (SU.EXACT("Acquaintance Rape") OR SU.EXACT("Acquaintance Rape" OR "Partner Rape" OR "Rape") OR SU.EXACT("Partner Rape")) OR (sexual* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR SU.EXACT("Child Abuse") OR (child* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR (child* NEAR/2 (exploit* OR neglect* OR trauma*)) OR ("non accidental injur*" OR "non-accidental injur*" OR "nonaccidental injur*") OR SU.EXACT("Human Trafficking") OR ((human OR person OR people) NEAR/2 (traffick* OR exploit*)) OR ((forced OR exploit*) NEAR/2 labour) OR SU.EXACT("Slavery") OR SU.EXACT("Torture") OR (slavery OR enslave* OR torture*) OR SU.EXACT("Prostitution") OR (prostitution* OR brothel*) OR (sex* NEAR/2 (exploit* OR traffick*)) OR SU.EXACT("Terrorism") OR SU.EXACT("Chemical Warfare" OR "Civil Warfare" OR "Humanitarian Intervention" OR "Military Intervention" OR "War") OR SU.EXACT("Genocide") OR (SU.EXACT("War Neuroses") OR SU.EXACT("War Imprisonment")) OR SU.EXACT("Persecution") OR (civil NEAR/1 (unrest OR conflict* OR disturbance* OR war OR wars OR warfare)) OR (persecution OR victimization OR victimisation) OR (captivity OR imprison*) OR SU.EXACT("Concentration Camps") OR (SU.EXACT("Avalanches" OR "Blizzards" OR "Drought" OR "Earthquakes" OR "Epidemics" OR "Epizootics" OR "Famine" OR "Floods" OR "Hurricanes" OR "Landslides" OR "Lightning" OR "Natural Disasters" OR "Tornadoes" OR "Tsunamis" OR "Volcanoes") OR SU.EXACT("Accidents" OR "Agent Orange" OR "Air Traffic Accidents" OR "Avalanches" OR "Blizzards" OR "Building Collapse" OR "Disasters" OR "Drought" OR "Earthquakes" OR "Epidemics" OR "Epizootics" OR "Explosions" OR "Famine" OR "Fires" OR "Floods" OR "Home Accidents" OR "Hurricanes" OR "Industrial Accidents" OR "Landmines" OR "Landslides" OR "Lightning" OR "Motor Traffic Accidents" OR "Natural Disasters" OR "Nuclear Accidents" OR "Nuclear Testing" OR "Oil Spills" OR "Pedestrian Accidents" OR "Railroad Accidents" OR "Ship Accidents" OR "Technological Disasters" OR "Tornadoes" OR "Toxic Contamination" OR "Tsunamis" OR "Volcanoes")) OR (humanitarian NEAR/1 (crisis OR crises)) OR (catastrophe OR catastrophic) OR SU.EXACT("Survivors") OR SU.EXACT("Asylum Seekers" OR "Refugees") OR ((forcibly OR internally) NEAR/1 displace*) OR (displace* NEAR/1 (people OR person* OR civilian*)) OR (victim* NEAR/2 (crime* OR disaster*)) OR (SU.EXACT("Political Prisoners") OR SU.EXACT("Prisoners of War")) OR SU.EXACT("Military Personnel") OR ((expose* OR exposure) NEAR/2 (abuse OR assault* OR disaster* OR terror* OR torture* OR trauma* OR rape OR violen* OR war OR warfare)) OR (survivor* NEAR/2 (abuse OR assault* OR disaster* OR terror* OR torture* OR trauma* OR rape OR violen* OR war OR warfare)) OR (victim* NEAR/2 (abuse OR assault* OR crime OR disaster* OR rape OR terror* OR torture* OR trauma* OR violen* OR war OR warfare)) OR (witness* NEAR/2 (abuse OR assault* OR crime OR disaster* OR rape OR terror* OR torture* OR trauma* OR violen* OR war OR warfare))	43,537°
S12	SU.EXACT("Complex PTSD") OR SU.EXACT("PTSD")	18,871°
S13	((SU.EXACT("Dating Violence") OR SU.EXACT("Interpersonal Violence") OR SU.EXACT("Family Violence")) OR (batter* NEAR/2 (wife* OR wife* OR woman OR women OR men OR husband* OR partner*)) OR (physical* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR (emotional* NEAR/1 abus*) OR (SU.EXACT("Acquaintance Rape") OR SU.EXACT("Acquaintance Rape" OR "Partner Rape" OR "Rape") OR SU.EXACT("Partner Rape")) OR (sexual* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR SU.EXACT("Child Abuse") OR (child* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR (child* NEAR/2 (exploit* OR neglect* OR trauma*)) OR ("non accidental injur*" OR "non-accidental injur*" OR "nonaccidental injur*") OR SU.EXACT("Human Trafficking") OR ((human OR person OR people) NEAR/2 (traffick* OR exploit*)) OR ((forced OR exploit*) NEAR/2 labour) OR SU.EXACT("Slavery") OR SU.EXACT("Torture") OR (slavery OR enslave* OR torture*) OR SU.EXACT("Prostitution") OR (prostitution* OR brothel*) OR (sex* NEAR/2 (exploit* OR traffick*)) OR SU.EXACT("Terrorism") OR SU.EXACT("Chemical Warfare" OR "Civil Warfare" OR "Humanitarian Intervention" OR "Military Intervention" OR "War") OR SU.EXACT("Genocide") OR (SU.EXACT("War Neuroses") OR SU.EXACT("War Imprisonment")) OR SU.EXACT("Persecution") OR (civil NEAR/1 (unrest OR conflict* OR disturbance* OR war OR wars OR warfare)) OR (persecution OR victimization OR victimisation) OR (captivity OR imprison*) OR SU.EXACT("Concentration Camps") OR (SU.EXACT("Avalanches" OR "Blizzards" OR "Drought" OR "Earthquakes" OR "Epidemics" OR "Epizootics" OR "Famine" OR "Floods" OR "Hurricanes" OR "Landslides" OR "Lightning" OR "Natural Disasters" OR "Tornadoes" OR "Tsunamis" OR "Volcanoes") OR SU.EXACT("Accidents" OR "Agent Orange" OR "Air Traffic Accidents" OR "Avalanches" OR "Blizzards" OR "Building Collapse" OR "Disasters" OR "Drought" OR "Earthquakes" OR "Epidemics" OR "Epizootics" OR "Explosions" OR "Famine" OR "Fires" OR "Floods" OR "Home Accidents" OR "Hurricanes" OR "Industrial Accidents" OR "Landmines" OR "Landslides" OR "Lightning" OR "Motor Traffic Accidents" OR "Natural Disasters"	13,010°

continued

TABLE 20 Search strategy for PILOTS via ProQuest (continued)

Set	Search	Results
	OR "Nuclear Accidents" OR "Nuclear Testing" OR "Oil Spills" OR "Pedestrian Accidents" OR "Railroad Accidents" OR "Ship Accidents" OR "Technological Disasters" OR "Tornadoes" OR "Toxic Contamination" OR "Tsunamis" OR "Volcanoes")) OR (humanitarian NEAR/1 (crisis OR crises)) OR (catastrophe OR catastrophic) OR SU.EXACT("Survivors") OR SU.EXACT("Asylum Seekers" OR "Refugees") OR ((forcibly OR internally) NEAR/1 displace*) OR (displace* NEAR/1 (people OR person* OR civilian*)) OR (victim* NEAR/2 (crime* OR disaster*)) OR (SU.EXACT("Political Prisoners") OR SU.EXACT("Prisoners of War")) OR SU.EXACT("Military Personnel") OR ((expose* OR exposure) NEAR/2 (abuse OR assault* OR disaster* OR terror* OR torture* OR trauma* OR rape OR violen* OR war OR warfare)) OR (survivor* NEAR/2 (abuse OR assault* OR disaster* OR terror* OR torture* OR trauma* OR rape OR violen* OR war OR warfare)) OR (victim* NEAR/2 (abuse OR assault* OR crime OR disaster* OR rape OR terror* OR torture* OR trauma* OR violen* OR war OR warfare)) OR (witness* NEAR/2 (abuse OR assault* OR crime OR disaster* OR rape OR terror* OR torture* OR trauma* OR violen* OR war OR warfare))) AND (SU.EXACT("Complex PTSD") OR SU.EXACT("PTSD"))	
S14	alprazolam or amobarbital or azaperone or barbitol or bromisovalum or chloral hydrate or chloralose or chlordiazepoxide or chlormethiazole or dexmedetomidine or diazepam or diphenhydramine or eszopiclone or ethchlorvynol or etomidate or etorphine or flurazepam or glutethimide or hexobarbital or lorazepam or medazepam or medetomidine or mephobarbital or meprobamate or methapyrilene or methaqualone or midazolam or nitrazepam or oxazepam or paraldehyde or pentobarbital or phenobarbital or propofol or secobarbital or temazepam or thiamylal or thiopental or xylazine	77°
S15	bromazepam or buspirone or chlormezanone or clorazepate dipotassium or estazolam or flunitrazepam or fluvoxamine or nordazepam or ondansetron or oxprenolol or prazepam or pregabalin or ritanserin or tranlycypromine or trazodone or triazolam or zolazepam	84°
S16	benzodiazepines or benzodiazepinones or promethazine or benactyzine or clorgyline or deanol or desvenlafaxine succinate or duloxetine hydrochloride or iproniazid or isocarboxazid or lithium carbonate or lithium compounds or moclobemide or nialamide or phenelzine or pizotyline or rolipram or sertraline or tranlycypromine or vilazodone hydrochloride or Imipramine or mirtazapine	547°
S17	acepromazine or aripiprazole or azaperone or benperidol or butaclamol or chlorpromazine or chlorprothixene or clopenthixol or clozapine or droperidol or etazolate or flupenthixol or fluphenazine or fluspirilene or haloperidol or loxapine or lurasidone hydrochloride or mesoridazine or methiothepin or methotrimeprazine or molindone or ondansetron or paliperidone palmitate or penfluridol or perazine or perphenazine or pimozide or prochlorperazine or promazine or quetiapine fumarate or raclopride or remoxipride or reserpine or risperidone or ritanserin or spiperone or sulpiride or thioridazine or thiothixene or tiapride hydrochloride or trifluoperazine or trifluoperidol or triflupromazine or olanzapine	107°
S18	acetazolamide or bromides or carbamazepine or clonazepam or clorazepate dipotassium or diazepam or dimethadione or estazolam or ethosuximide or flunarizine or lorazepam or magnesium sulfate or medazepam or mephenytoin or mephobarbital or meprobamate or nitrazepam or paraldehyde or phenobarbital or phenytoin or pregabalin or primidone or riluzole or thiopental or tiletamine or trimethadione or valproic acid or vigabatrin or lithium chloride or lithium compounds or lamotrigine or topiramate	145°
S19	monoamine oxidase inhibitors or chlorphenamidine or clorgyline or cuprizone or furazolidone or harmaline or harmine or isocarboxazid or moclobemide or monocrotophos or pargyline or selegiline or tranlycypromine or Prazosin or N-Methyl-3,4-methylenedioxyamphetamine or MDMA or ecstasy	197°
S20	hypnotics OR (hypnotic drugs) OR sedatives OR (sedative drugs) OR "anti-anxiety drug*" OR "anti-anxiety agent*" OR "antidepressive agent*" OR "antidepressive drug*" OR "antipsychotic agent*" OR "antipsychotic drug*"	413°
S21	"antimanic agent*" OR "antimanic drug*" OR anticonvulsants OR "anticonvulsant drug*" OR "z drug*"	176°
S22	(alprazolam or amobarbital or azaperone or barbitol or bromisovalum or chloral hydrate or chloralose or chlordiazepoxide or chlormethiazole or dexmedetomidine or diazepam or diphenhydramine or eszopiclone or ethchlorvynol or etomidate or etorphine or flurazepam or glutethimide or hexobarbital or lorazepam or medazepam or medetomidine or mephobarbital or meprobamate or methapyrilene or methaqualone or midazolam or nitrazepam or oxazepam or paraldehyde or pentobarbital or phenobarbital or propofol or secobarbital or temazepam or thiamylal or thiopental or xylazine) OR (bromazepam or buspirone or chlormezanone or clorazepate dipotassium or estazolam or flunitrazepam or fluvoxamine or nordazepam or ondansetron or oxprenolol or prazepam or pregabalin or ritanserin or tranlycypromine or trazodone or triazolam or zolazepam) OR (benzodiazepines or benzodiazepinones or promethazine or benactyzine or clorgyline or deanol or desvenlafaxine succinate or duloxetine hydrochloride or iproniazid or isocarboxazid or lithium	1302°

TABLE 20 Search strategy for PILOTS via ProQuest (continued)

Set	Search	Results
	carbonate or lithium compounds or moclobemide or nialamide or phenelzine or pizotyline or rolipram or sertraline or tranlycypromine or vilazodone hydrochloride or Imipramine or mirtazapine) OR (acepromazine or aripiprazole or azaperone or benperidol or butaclamol or chlorpromazine or chlorprothixene or clopenthixol or clozapine or droperidol or etazolate or flupenthixol or fluphenazine or fluspirilene or haloperidol or loxapine or lurasidone hydrochloride or mesoridazine or methiothepin or methotrimeprazine or molindone or ondansetron or paliperidone palmitate or penfluridol or perazine or perphenazine or pimozide or prochlorperazine or promazine or quetiapine fumarate or raclopride or remoxipride or reserpine or risperidone or ritanserin or spiperone or sulphuride or thioridazine or thiothixene or tiapride hydrochloride or trifluoperazine or trifluoperidol or triflupromazine or olanzapine) OR (acetazolamide or bromides or carbamazepine or clonazepam or clorazepate dipotassium or diazepam or dimethadione or estazolam or ethosuximide or flunarizine or lorazepam or magnesium sulfate or medazepam or mephenytoin or mephobarbital or meprobamate or nitrazepam or paraldehyde or phenobarbital or phenytoin or pregabalin or primidone or riluzole or thiopental or tiletamine or trimethadione or valproic acid or vigabatrin or lithium chloride or lithium compounds or lamotrigine or topiramate) OR (monoamine oxidase inhibitors or chlorphenamide or clorgyline or cuprizone or furazolidone or harmaline or harmine or isocarboxazid or moclobemide or monocrotophos or pargyline or selegiline or tranlycypromine or Prazosin or N-Methyl-3,4-methylenedioxyamphetamine or MDMA or ecstasy) OR (hypnotics OR (hypnotic drugs) OR sedatives OR (sedative drugs) OR "anti-anxiety drug*" OR "anti-anxiety agent*" OR "antidepressive agent*" OR "antidepressive drug*" OR "antipsychotic agent*" OR "antipsychotic drug*" OR ("antimanic agent*" OR "antimanic drug*" OR anticonvulsants OR "anticonvulsant drug*" OR "z drug*"))	
S23	((SU.EXACT("Dating Violence") OR SU.EXACT("Interpersonal Violence") OR SU.EXACT("Family Violence")) OR (batter* NEAR/2 (wife* OR wive* OR woman OR women OR men OR husband* OR partner*)) OR (physical* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR (emotional* NEAR/1 abus*) OR (SU.EXACT("Acquaintance Rape") OR SU.EXACT("Acquaintance Rape") OR "Partner Rape" OR "Rape") OR SU.EXACT("Partner Rape")) OR (sexual* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR SU.EXACT("Child Abuse") OR (child* NEAR/2 (abus* OR assault* OR violen* OR aggress*)) OR (child* NEAR/2 (exploit* OR neglect* OR trauma*)) OR ("non accidental injur*" OR "non-accidental injur*" OR "nonaccidental injur*") OR SU.EXACT("Human Trafficking") OR ((human OR person OR people) NEAR/2 (traffick* OR exploit*)) OR ((forced OR exploit*) NEAR/2 labour) OR SU.EXACT("Slavery") OR SU.EXACT("Torture") OR (slavery OR enslave* OR torture*) OR SU.EXACT("Prostitution") OR (prostitution* OR brothel*) OR (sex* NEAR/2 (exploit* OR traffick*)) OR SU.EXACT("Terrorism") OR SU.EXACT("Chemical Warfare" OR "Civil Warfare" OR "Humanitarian Intervention" OR "Military Intervention" OR "War") OR SU.EXACT("Genocide") OR (SU.EXACT("War Neuroses") OR SU.EXACT("War Imprisonment")) OR SU.EXACT("Persecution") OR (civil NEAR/1 (unrest OR conflict* OR disturbance* OR war OR wars OR warfare) OR (persecution OR victimization OR victimisation) OR (captivity OR imprison*) OR SU.EXACT("Concentration Camps") OR (SU.EXACT("Avalanches" OR "Blizzards" OR "Drought" OR "Earthquakes" OR "Epidemics" OR "Epizootics" OR "Famine" OR "Floods" OR "Hurricanes" OR "Landslides" OR "Lightning" OR "Natural Disasters" OR "Tornadoes" OR "Tsunamis" OR "Volcanoes") OR SU.EXACT("Accidents" OR "Agent Orange" OR "Air Traffic Accidents" OR "Avalanches" OR "Blizzards" OR "Building Collapse" OR "Disasters" OR "Drought" OR "Earthquakes" OR "Epidemics" OR "Epizootics" OR "Explosions" OR "Famine" OR "Fires" OR "Floods" OR "Home Accidents" OR "Hurricanes" OR "Industrial Accidents" OR "Landmines" OR "Landslides" OR "Lightning" OR "Motor Traffic Accidents" OR "Natural Disasters" OR "Nuclear Accidents" OR "Nuclear Testing" OR "Oil Spills" OR "Pedestrian Accidents" OR "Railroad Accidents" OR "Ship Accidents" OR "Technological Disasters" OR "Tornadoes" OR "Toxic Contamination" OR "Tsunamis" OR "Volcanoes")) OR (humanitarian NEAR/1 (crisis OR crises)) OR (catastrophe OR catastrophic) OR SU.EXACT("Survivors") OR SU.EXACT("Asylum Seekers" OR "Refugees") OR ((forcibly OR internally) NEAR/1 displace*) OR (displace* NEAR/1 (people OR person* OR civilian*)) OR (victim* NEAR/2 (crime* OR disaster*)) OR (SU.EXACT("Political Prisoners") OR SU.EXACT("Prisoners of War")) OR SU.EXACT("Military Personnel") OR ((expose* OR exposure) NEAR/2 (abuse OR assault* OR disaster* OR terror* OR torture* OR trauma* OR rape OR violen* OR war OR warfare)) OR (survivor* NEAR/2 (abuse OR assault* OR disaster* OR terror* OR torture* OR trauma* OR rape OR violen* OR war OR warfare)) OR (victim* NEAR/2 (abuse OR assault* OR crime OR disaster* OR rape OR terror* OR torture* OR trauma* OR violen* OR war OR warfare)) OR (witness* NEAR/2 (abuse OR assault* OR crime OR disaster* OR rape OR terror* OR torture* OR trauma* OR violen* OR war OR warfare))) AND (SU.EXACT("Complex PTSD") OR SU.EXACT("PTSD")) AND ((alprazolam or amobarbital or azaperone or barbital or bromisovalum or chloral hydrate or chloralose or chlordiazepoxide or chlormethiazole or dexmedetomidine or diazepam or diphenhydramine or eszopiclone or ethchlorvynol or etomidate or etorphine or flurazepam or glutethimide or hexobarbital or lorazepam or medazepam or medetomidine or mephobarbital or meprobamate or methapyrilene or methaqualone or midazolam or nitrazepam or oxazepam or paraldehyde or pentobarbital or phenobarbital or propofol or secobarbital or temazepam or thiamylal or thiopental or xylazine) OR (bromazepam or buspirone or chlormezanone or clorazepate dipotassium or estazolam or flunitrazepam or fluvoxamine or	199*

continued

TABLE 20 Search strategy for PILOTS via ProQuest (continued)

Set	Search	Results
	nordazepam or ondansetron or oxprenolol or prazepam or pregabalin or ritanserin or tranlycypromine or trazodone or triazolam or zolazepam) OR (benzodiazepines or benzodiazepinones or promethazine or benactyzine or clorgyline or deanol or desvenlafaxine succinate or duloxetine hydrochloride or iproniazid or isocarboxazid or lithium carbonate or lithium compounds or moclobemide or nialamide or phenelzine or pizotyline or rolipram or sertraline or tranlycypromine or vilazodone hydrochloride or Imipramine or mirtazapine) OR (acepromazine or aripiprazole or azaperone or benperidol or butaclamol or chlorpromazine or chlorprothixene or clopenthixol or clozapine or droperidol or etazolate or flupenthixol or fluphenazine or fluspirilene or haloperidol or loxapine or lurasidone hydrochloride or mesoridazine or methiothepin or methotrimeprazine or molindone or ondansetron or paliperidone palmitate or penfluridol or perazine or perphenazine or pimozide or prochlorperazine or promazine or quetiapine fumarate or raclopride or remoxipride or reserpine or risperidone or ritanserin or spiperone or sulpiride or thioridazine or thiothixene or tiapride hydrochloride or trifluoperazine or trifluperidol or triflupromazine or olanzapine) OR (acetazolamide or bromides or carbamazepine or clonazepam or clorazepate dipotassium or diazepam or dimethadione or estazolam or ethosuximide or flunarizine or lorazepam or magnesium sulfate or medazepam or mephentoin or mephobarbital or meprobamate or nitrazepam or paraldehyde or phenobarbital or phenytoin or pregabalin or primidone or riluzole or thiopental or tiletamine or trimethadione or valproic acid or vigabatrin or lithium chloride or lithium compounds or lamotrigine or topiramate) OR (monoamine oxidase inhibitors or chlorphenamidine or clorgyline or cuprizone or furazolidone or harmaline or harmine or isocarboxazid or moclobemide or monocrotophos or pargyline or selegiline or tranlycypromine or Prazosin or N-Methyl-3,4-methylenedioxyamphetamine or MDMA or ecstasy) OR (hypnotics OR (hypnotic drugs) OR sedatives OR (sedative drugs) OR "anti-anxiety drug*" OR "anti-anxiety agent*" OR "antidepressive agent*" OR "antidepressive drug*" OR "antipsychotic agent*" OR "antipsychotic drug*" OR ("antimanic agent*" OR "antimanic drug*" OR anticonvulsants OR "anticonvulsant drug*" OR "z drug*"))	

PsycINFO via Ovid

Search date: 18 April 2017.

Records retrieved: 2658.

Date range searched: 1806 to April week 2 2017.

TABLE 21 Search strategy for PsycINFO via Ovid

1	exp Violence/ (66,551)
2	Exposure to Violence/ (509)
3	violence.ti,ab. (60,703)
4	Domestic Violence/ (10,282)
5	Intimate Partner Violence/ (5917)
6	Battered Females/ (3011)
7	Partner Abuse/ (4576)
8	(batter\$ adj2 (wife\$ or wive\$ or woman or women or men or husband\$ or partner\$)).ti,ab. (2311)
9	Physical Abuse/ (5465)
10	(physical\$ adj2 (abus\$ or assault\$ or violen\$ or aggress\$)).ti,ab. (14,559)
11	Emotional Abuse/ (2267)
12	(emotional\$ adj2 abus\$).ti,ab. (2704)

TABLE 21 Search strategy for PsycINFO via Ovid (continued)

13	Rape/ (5043)
14	rape.ti.ab. (7403)
15	(sexual\$ adj2 (abus\$ or assault\$ or violen\$ or aggress\$)).ti.ab. (30,943)
16	Child Abuse/ (26,161)
17	Sexual Abuse/ (18,589)
18	child\$ sexual abuse.ti.ab. (8393)
19	Incest/ (2526)
20	(child\$ adj2 exploit\$).ti.ab. (354)
21	Child Neglect/ (3628)
22	child neglect.ti.ab. (642)
23	(child\$ adj2 trauma).ti.ab. (4693)
24	(non accidental injur\$ or non-accidental injur\$ or nonaccidental injur\$).ti.ab. (48)
25	Human Trafficking/ (595)
26	((human or person or people) adj2 (traffick\$ or exploit\$)).ti.ab. (543)
27	((forced or exploit\$) adj2 labour).ti.ab. (40)
28	Slavery/ (215)
29	Torture/ (1151)
30	(slavery or torture\$ or enslave\$).ti.ab. (3946)
31	Prostitution/ (2998)
32	(prostitut\$ or brothel\$).ti.ab. (2805)
33	(sex\$ adj2 (exploit\$ or traffick\$)).ti.ab. (1080)
34	Terrorism/ (6711)
35	(terrorism or terrorist\$).ti.ab. (7151)
36	political terror\$.ti.ab. (71)
37	Torture/ (1151)
38	War/ (12,259)
39	Combat Experience/ (2479)
40	Genocide/ (899)
41	Holocaust/ (1199)
42	Mass Murder/ (84)
43	(civil adj (unrest or conflict\$ or disturbance\$ or war or wars or warfare)).ti.ab. (1682)
44	(persecution or victimization or victimisation).ti.ab. (15,549)
45	(captivity or imprison\$ or concentration camp\$).ti.ab. (5516)
46	exp Disasters/ (7760)
47	Natural Disasters/ (4227)
48	natural disaster\$.ti.ab. (2344)
49	(earthquake\$ or tsunami\$).ti.ab. (2820)
50	(humanitarian adj (crisis or crises)).ti.ab. (106)

continued

TABLE 21 Search strategy for PsycINFO via Ovid (continued)

51	(catastrophe\$ or catastrophic event\$ or catastrophic experience\$).ti,ab. (1943)
52	exp Survivors/ (11,959)
53	Holocaust Survivors/ (1105)
54	Refugees/ (4568)
55	(asylum seeker\$ or refugee\$ or migrant\$).ti,ab. (13,548)
56	((forcibly or internally) adj displace\$).ti,ab. (237)
57	(displace\$ adj (people or person\$ or civilian\$)).ti,ab. (408)
58	Crime Victims/ (4167)
59	Victimization/ (18,276)
60	Prisoners/ (9692)
61	"Prisoners of War"/ (472)
62	Slavery/ (215)
63	Military Veterans/ (10,341)
64	((expose\$ or exposure) adj2 (abuse or assault\$ or disaster\$ or terror\$ or torture\$ or trauma\$ or rape or violen\$ or war or warfare)).ti,ab. (9024)
65	(survivor\$ adj2 (abuse or assault\$ or disaster\$ or terror\$ or torture\$ or trauma\$ or rape or violen\$ or war or warfare)).ti,ab. (4321)
66	(victim\$ adj2 (abuse or assault\$ or crime or disaster\$ or rape or terror\$ or torture\$ or trauma\$ or violen\$ or war or warfare)).ti,ab. (9727)
67	(witness\$ adj2 (abuse or assault\$ or disaster\$ or rape or terror\$ or torture\$ or trauma\$ or violen\$ or war or warfare)).ti,ab. (1747)
68	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 57 or 58 or 59 or 60 or 61 or 62 or 63 or 64 or 65 or 66 or 67 (213,458)
69	exp Posttraumatic Stress Disorder/ (27,018)
70	Complex PTSD/ (123)
71	DESNOS/ (15)
72	"Disorders of Extreme Distress Not Otherwise Specified".ti,ab. (0)
73	(PTSD or CPTSD).ti,ab. (25,381)
74	posttrauma\$.ti,ab. (26,998)
75	post-trauma\$.ti,ab. (11,564)
76	"post trauma\$".ti,ab. (11,564)
77	post traumatic stress.ti,ab. (8923)
78	post traumatic stress.id. (2783)
79	combat stress\$.ti,ab. (497)
80	combat disorder\$.ti,ab. (12)
81	DESNOS.ti,ab. (54)
82	complex trauma\$.ti,ab. (515)
83	(complex adj2 trauma\$).ti,ab. (689)
84	traumatic stress.ti,ab. (11,630)
85	traumatic memor\$.ti,ab. (1290)

TABLE 21 Search strategy for PsycINFO via Ovid (continued)

86	traumatization.ti,ab. (1511)
87	traumatisation.ti,ab. (154)
88	(trauma adj2 (expos\$ or event\$ or experienc\$)).ti,ab. (6634)
89	69 or 70 or 71 or 72 or 73 or 74 or 75 or 76 or 77 or 78 or 79 or 80 or 81 or 82 or 83 or 84 or 85 or 86 or 87 or 88 (47,567)
90	68 and 89 (25,142)
91	exp Cognitive Therapy/ (12,639)
92	cognitive behaviour\$ therapy.ti,ab. (3854)
93	cognitive behavior\$ therapy.ti,ab. (13,015)
94	cognitive restructuring.ti,ab. (2074)
95	cognitive rescripting.ti,ab. (0)
96	cognitive processing therapy.ti,ab. (272)
97	CPT.ti,ab. (1922)
98	cognitive therapy.ti,ab. (5335)
99	cognitive behavioural treatment\$.ti,ab. (520)
100	cognitive behavioral treatment\$.ti,ab. (2997)
101	(CBT or TFEBT).ti,ab. (10,616)
102	cognitive trauma therapy.ti,ab. (8)
103	trauma focus\$ CBT.ti,ab. (57)
104	91 or 92 or 93 or 94 or 95 or 96 or 97 or 98 or 99 or 100 or 101 or 102 or 103 (33,767)
105	exp Behavior Therapy/ (18,509)
106	(behavior\$ adj2 (therap\$ or treat\$ or modif\$)).ti,ab. (41,822)
107	(behaviour\$ adj2 (therap\$ or treat\$ or modif\$)).ti,ab. (7365)
108	(dialectical behavio\$ therap\$ or dialectical behavio\$ treat\$).ti,ab. (1461)
109	DBT.ti,ab. (1135)
110	biofeedback, psychology/or feedback, sensory/or neurofeedback/ (1205)
111	(biofeedback or neurofeedback or sensory feedback).ti,ab. (6695)
112	desensitization, psychologic/or eye movement desensitization reprocessing/or implosive therapy/or virtual reality exposure therapy/ (421)
113	(psychological adj2 desensiti\$).ti,ab. (5)
114	Eye Movement Desensitization Therapy/ (1230)
115	eye movement desensiti?ation reprocessing.ti,ab. (61)
116	EMDR.ti,ab. (1346)
117	Exposure Therapy/ (1979)
118	(exposure adj (therap\$ or treat\$)).ti,ab. (2200)
119	prolonged exposure therap\$.ti,ab. (151)
120	live exposure.ti,ab. (22)
121	imaginal exposure.ti,ab. (280)
122	imaginal flooding.ti,ab. (35)

continued

TABLE 21 Search strategy for PsycINFO via Ovid (continued)

123	exposure inhibition therap\$.ti,ab. (1)
124	implosive therap\$.ti,ab. (143)
125	image habituation.ti,ab. (5)
126	inoculation training.ti,ab. (292)
127	105 or 106 or 107 or 108 or 109 or 110 or 111 or 112 or 113 or 114 or 115 or 116 or 117 or 118 or 119 or 120 or 121 or 122 or 123 or 124 or 125 or 126 (65,864)
128	(acceptance adj2 therap\$.ti,ab. (376)
129	(commitment adj2 therap\$.ti,ab. (1501)
130	Hypnosis/ (7091)
131	(hypnosis or hypnotherap\$.ti,ab. (11,623)
132	Mindfulness/ (6583)
133	mindfulness.ti,ab. (8091)
134	(supportive adj (therap\$ or psychotherap\$)).ti,ab. (1490)
135	(non-directive adj (counselling or counseling)).ti,ab. (81)
136	(nondirective adj (counselling or counseling)).ti,ab. (113)
137	(non directive adj (counselling or counseling)).ti,ab. (81)
138	psychodynamic therap\$.ti,ab. (1317)
139	inter personal psychotherap\$.ti,ab. (1)
140	interpersonal psychotherap\$.ti,ab. (1197)
141	interpersonal therapy.ti,ab. (512)
142	IPT.ti,ab. (974)
143	(compassion adj2 therap\$.ti,ab. (105)
144	accelerated resolution.ti,ab. (8)
145	sensorimotor therap\$.ti,ab. (11)
146	schema therapy.ti,ab. (312)
147	Stress Management/ (4566)
148	Supportive Psychotherapy/ (480)
149	Group Psychotherapy/ (18,367)
150	Counseling/ (21,293)
151	(non-directive counsel\$ or non directive counsel\$ or nondirective counsel\$).ti,ab. (197)
152	compassion therap\$.ti,ab. (4)
153	128 or 129 or 130 or 131 or 132 or 133 or 134 or 135 or 136 or 137 or 138 or 139 or 140 or 141 or 142 or 143 or 144 or 145 or 146 or 147 or 148 or 149 or 150 or 151 or 152 (71,049)
154	104 or 127 or 153 (140,028)
155	hypnotic drugs/or amobarbital/or apomorphine/or barbital/or chloral hydrate/or codeine/or flurazepam/or glutethimide/or hexobarbital/or meprobamate/or methaqualone/or nitrazepam/or pentobarbital/or phenobarbital/or secobarbital/or thalidomide/or thiopental/or triazolam/ (5588)
156	hypnotics.ti,ab. (1574)
157	hypnotic drug\$.ti,ab. (399)
158	z drug\$.ti,ab. (43)

TABLE 21 Search strategy for PsycINFO via Ovid (continued)

159	tranquilizing drugs/or amitriptyline/or benactyzine/or doxepin/or haloperidol/or meprobamate/or minor tranquilizers/or neuroleptic drugs/or phenothiazine derivatives/or pimozide/or thiothixene/ (27,445)
160	exp benzodiazepines/ (9874)
161	sedative antihistamine\$.ti,ab. (13)
162	promethazine.ti,ab. (184)
163	antidepressant drugs/or bupropion/or citalopram/or fluoxetine/or fluvoxamine/or iproniazid/or isocarboxazid/or lithium carbonate/or methylphenidate/or mianserin/or moclobemide/or molindone/or nefazodone/or nialamide/or nomifensine/or paroxetine/or phenelzine/or pheniprazine/or pipradrol/or serotonin norepinephrine reuptake inhibitors/or sertraline/or sulpiride/or tranylcypromine/or trazodone/or tricyclic antidepressant drugs/or venlafaxine/or zimeldine/ (31,904)
164	Imipramine.ti,ab. (3980)
165	mirtazapine.ti,ab. (1112)
166	neuroleptic drugs/or aripiprazole/or clozapine/or molindone/or nialamide/or olanzapine/or quetiapine/or reserpine/or risperidone/or spiroperidol/or sulpiride/or tetrabenazine/ (28,386)
167	mood stabilizers/or anticonvulsive drugs/or carbamazepine/or lithium/or valproic acid/ (13,520)
168	mood stabilisers.ti,ab. (141)
169	antiepileptics.ti,ab. (305)
170	lamotrigine.ti,ab. (1792)
171	topiramate.ti,ab. (1494)
172	valproate.ti,ab. (2781)
173	monoamine oxidase inhibitors/or iproniazid/or isocarboxazid/or moclobemide/or nialamide/or pargyline/or phenelzine/or pheniprazine/or tranylcypromine/ (2188)
174	antihypertensive drugs/or alpha methylparatyrosine/or captopril/or chlorpromazine/or clonidine/or guanethidine/or hexamethonium/or hydralazine/or mecamylamine/or methyl dopa/or phenoxybenzamine/or quinpirole/ (4387)
175	alpha blocker anti-hypertensive\$.ti,ab. (0)
176	alpha blocker antihypertensive\$.ti,ab. (0)
177	prazosin.ti,ab. (618)
178	Methylenedioxymethamphetamine/ (1923)
179	(mdma or ecstasy).ti,ab. (3061)
180	155 or 156 or 157 or 158 or 159 or 160 or 161 or 162 or 163 or 164 or 165 or 166 or 167 or 168 or 169 or 170 or 171 or 172 or 173 or 174 or 175 or 176 or 177 or 178 or 179 (99,763)
181	90 and 154 (2588)
182	90 and 180 (306)
183	181 or 182 (2861)
184	limit 183 to human (2798)
185	limit 184 to yr="1992 -Current" (2658)

Science Citation Index via Web of Science

Search date: 20 April 2017.

Records retrieved: 1066.

Date range searched: 1900 onwards.

TABLE 22 Search strategy for Science Citation Index via Web of Science

#16	1066	#15 OR #11 <i>Indexes=SCI-EXPANDED Timespan=1992-2017</i>
#15	204	#14 AND #7 <i>Indexes=SCI-EXPANDED Timespan=1992-2017</i>
#14	352,711	#13 OR #12 <i>Indexes=SCI-EXPANDED Timespan=1992-2017</i>
#13	188,961	TS=((hypnotic or sedative) NEAR/1 (drug\$ or agent\$)) OR TS=(hypnotics or sedatives) OR TS=(alprazolam or amobarbital or azaperone or barbitol or bromisovalum or "chloral hydrate" or chloralose or chlordiazepoxide or chlormethiazole or dexmedetomidine or diazepam or diphenhydramine or eszopiclone or ethchlorvynol or etomidate or etorphine or flurazepam or glutethimide or hexobarbital or lorazepam or medazepam or medetomidine or mephobarbital or meprobamate or methapyrilene or methaqualone or midazolam or nitrazepam or oxazepam or paraldehyde or pentobarbital or phenobarbital or propofol or secobarbital or temazepam or thiamylal or thiopental or xylazine) OR TS=("z drug\$") OR TS=("anti-anxiety agent\$" or "anti-anxiety drug\$") OR TS=("antianxiety agent\$" or "antianxiety drug\$") OR TS=("anti anxiety agent\$" or "anti anxiety drug\$") OR TS=("anxiolytic agent\$" or "anxiolytic drug\$" or anxiolytics) OR TS=(bromazepam or buspirone or chlormezanone or "clorazepate dipotassium" or estazolam or flunitrazepam or fluvoxamine or nordazepam or ondansetron or oxprenolol or prazepam or pregabalin or ritanserin or tranlycypromine or trazodone or triazolam or zolazepam or benzodiazepines or benzodiazepinones or "sedative antihistamine\$" or promethazine) OR TS=("antidepressive agent\$" or "antidepressive drug\$" or antidepressives) OR TS=("anti-depressive agent\$" or "anti-depressive drug\$" or antidepressives) OR TS=("anti depressive agent\$" or "anti depressive drug\$" or antidepressives) OR TS=(benactyzine or clorgyline or deanol or "desvenlafaxine succinate" or "duloxetine hydrochloride" or iproniazid or isocarboxazid or "lithium carbonate" or "lithium compounds" or moclobemide or nialamide or phenelzine or pizotyline or rolipram or sertraline or tranlycypromine or "vilazodone hydrochloride" or imipramine or mirtazapine) OR TS=("antipsychotic agent\$" or "antipsychotic drug\$" or antipsychotics) OR TS=("anti-psychotic agent\$" or "anti-psychotic drug\$" or anti-psychotics) OR TS=("anti psychotic agent\$" or "anti psychotic drug\$" or anti psychotics) OR TS=(acepromazine or aripiprazole or azaperone or benperidol or butaclamol or chlorpromazine or chlorprothixene or clopenthixol or clozapine or droperidol or etazolate or flupenthixol or fluphenazine or fluspirilene or haloperidol or loxapine or lurasidone hydrochloride or mesoridazine or methiothepin or methotrimeprazine or molindone or ondansetron or "paliperidone palmitate" or penfluridol or perazine or perphenazine or pimozide or prochlorperazine or promazine or quetiapine fumarate or raclopride or remoxipride or reserpine or risperidone or ritanserin or spiperone or sulpiride or thioridazine or thiothixene or "tiapride hydrochloride" or trifluoperazine or trifluoperidol or triflupromazine or olanzapine) <i>Indexes=SCI-EXPANDED Timespan=1992-2017</i>
#12	202,663	TS=("anticonvulsants agent\$" or "anticonvulsant drug\$" or anticonvulsants) OR TS=("anti-convulsants agent\$" or "anti-convulsant drug\$" or anti-convulsants) OR TS=("anti convulsants agent\$" or "anti convulsant drug\$" or anti convulsants) OR TS=(acetazolamide or bromides or carbamazepine or clonazepam or "clorazepate dipotassium" or diazepam or dimethadione or estazolam or ethosuximide or flunarizine or lorazepam or magnesium sulfate or medazepam or mephenytoin or mephobarbital or meprobamate or nitrazepam or paraldehyde or phenobarbital or phenytoin or pregabalin or primidone or riluzole or thiopental or tiletamine or trimethadione or "valproic acid" or vigabatrin) OR TS=("antimanic agent\$" or "antimanic drug\$") OR TS=("anti-manic agent\$" or "anti-manic drug\$") OR TS=("anti manic agent\$" or "anti manic drug\$") OR TS=("lithium chloride" or "lithium compounds" or lamotrigine or topiramate) OR TS=("monoamine oxidase inhibitors" or chlorphenamide or clorgyline or cuprizone or furazolidone or harmaline or harmine or isocarboxazid or moclobemide or monocrotophos or pargyline or selegiline or tranlycypromine or Prazosin or "N-Methyl-3 4-methylenedioxyamphetamine" or MDMA or ecstasy) <i>Indexes=SCI-EXPANDED Timespan=1992-2017</i>
#11	915	#10 AND #7 <i>Indexes=SCI-EXPANDED Timespan=1992-2017</i>

TABLE 22 Search strategy for Science Citation Index via Web of Science (continued)

#10	130,643	#9 OR #8 <i>Indexes=SCI-EXPANDED Timespan=1992-2017</i>
#9	75,396	TS=(acceptance NEAR/2 therap\$) OR TS=(commitment NEAR/2 therap\$) OR TS=(hypnosis or hypnotherap\$) OR TS=(mindfulness) OR TS=(“supportive therapy”) OR TS=(non-directive NEAR/1 (counselling or counseling)) OR TS=(nondirective NEAR/1 (counselling or counseling)) OR TS=(“non directive” NEAR/1 (counselling or counseling)) OR TS=(psychotherapy or “brief psychotherapy” or “group psychotherapy” or “psychodynamic psychotherapy”) OR TS=(“rational emotive psychotherapy”) OR TS=(“rational-emotive psychotherapy”) OR TS=(“psychodynamic therap\$”) OR TS=(“inter personal psychotherap\$” or “interpersonal psychotherap\$” or “inter-personal psychotherap\$”) OR TS=(compassion or schema or sensorimotor) NEAR/2 therap\$) OR TS=(counseling or counselling) OR TS=(“accelerated resolution”) <i>Indexes=SCI-EXPANDED Timespan=1992-2017</i>
#8	60,687	TS=(cognitive NEAR/3 (therap\$ or treat\$ or restructur\$ or rescript\$)) OR TS=(CBT or CPT or TFCBT) OR TS=(“trauma focus\$ CBT”) OR TS=(behavior\$ NEAR/2 (therap\$ or treat\$ or modif\$)) OR TS=(behaviour\$ NEAR/2 (therap\$ or treat\$ or modif\$)) OR TS=(biofeedback or neurofeedback or “sensory feedback”) OR TS=(“implosive therapy”) OR TS=(“virtual reality therapy”) OR TS=(psychological NEAR/2 desensiti\$) OR TS=(“eye movement desensitisation reprocessing” or “eye movement desensitization reprocessing”) OR TS=(EMDR) OR TS=(exposure NEAR/2 (imaginal or live or prolonged or therap\$ or treat\$)) OR TS=(“imaginal flooding”) OR TS=(“image habituation”) OR TS=(“inoculation training”) <i>Indexes=SCI-EXPANDED Timespan=1992-2017</i>
#7	9164	#6 AND #5 <i>Indexes=SCI-EXPANDED Timespan=1992-2017</i>
#6	29,452	TOPIC: (“posttraumatic stress disorder*”) OR TOPIC: (“post-traumatic stress disorder*”) OR TOPIC: (“post traumatic stress disorder*”) OR TOPIC: (“posttraumatic stress*”) OR TOPIC: (“post-traumatic stress*”) OR TOPIC: (“post-traumatic stress*”) OR TOPIC: (“post traumatic stress*”) OR TOPIC: (“traumatic stress*”) OR TOPIC: (posttrauma\$ or post-trauma\$ or “post trauma\$”) OR TOPIC: (“combat stress” or “combat disorder”) OR TOPIC: (DESNOS) OR TOPIC: (“extreme distress”) OR TOPIC: (“complex trauma”) OR TOPIC: (complex NEAR/3 trauma) OR TOPIC: (traumatic NEAR/2 (stress or memor\$)) OR TOPIC: (traumatization or traumatisatio) OR TOPIC: (trauma\$ NEAR/3 (expos\$ or event\$ or experienc\$)) <i>Indexes=SCI-EXPANDED Timespan=1992-2017</i>
#5	288,605	#4 OR #3 OR #2 OR #1 <i>Indexes=SCI-EXPANDED Timespan=1992-2017</i>
#4	29,766	TOPIC: (victim\$) OR TOPIC: (prisoner\$) OR TOPIC: (soldier\$ or veteran\$) AND TOPIC: ((expose\$ or exposure) NEAR/2 (abuse or assault\$ or disaster\$ or terror\$ or torture\$ or trauma\$ or rape or violen\$ or war or warfare)) AND TOPIC: (survivor\$ NEAR/2 (abuse or assault\$ or disaster\$ or terror\$ or torture\$ or trauma\$ or rape or violen\$ or war or warfare)) AND TOPIC: (victim\$ NEAR/2 (abuse or assault\$ or crime or disaster\$ or rape or terror\$ or torture\$ or trauma\$ or violen\$ or war or warfare)) AND TOPIC: (witness\$ NEAR/2 (abuse or assault\$ or disaster\$ or rape or terror\$ or torture\$ or trauma\$ or violen\$ or war or warfare)) <i>Indexes=SCI-EXPANDED Timespan=1992-2017</i>
#3	202,637	TOPIC: (disaster\$ or earthquake\$ or tsunami\$) OR TOPIC: (“natural disaster\$”) OR TOPIC: (humanitarian NEAR/2 (crisis or crises)) OR TOPIC: (catastrophe\$ or “catastrophic event\$” or “catastrophic experience\$”) OR TOPIC: (survivor*) OR TOPIC: (refugee\$ or “asylum seeker\$” or migrant\$) OR TOPIC: ((forcibly or internally) NEAR/2 displace\$) OR TOPIC: (displace\$ NEAR/2 (people or person\$ or civilian\$)) <i>Indexes=SCI-EXPANDED Timespan=1992-2017</i>

continued

TABLE 22 Search strategy for Science Citation Index via Web of Science (continued)

#2	25,515	<p>TOPIC: ("human rights abuse*") OR TOPIC: ((human or person or people) NEAR/2 (traffick\$ or exploit\$)) OR TOPIC: ((forced or exploit\$) NEAR/2 labour) OR TOPIC: ("organ traffick\$") OR TOPIC: (slavery or "slave trade\$" or enslave\$) OR TOPIC: (torture\$) OR TOPIC: (prostitution or "sex work\$" or brothel\$) OR TOPIC: (sex NEAR/2 (exploit\$ or traffick\$)) OR TOPIC: (terrorism or terrorist\$ or "political terror\$") OR TOPIC: (warfare or "war crime\$" or "armed conflict\$" or "civil conflict" or "civil war\$" or "civil unrest") OR TOPIC: ("ethnic conflict\$" or "ethnic unrest" or "ethnic cleans*" or genocide or holocaust) OR TOPIC: (persecution or victimization or victimisation) OR TOPIC: (imprison\$ or "concentration camp")</p> <p><i>Indexes=SCI-EXPANDED Timespan=1992-2017</i></p>
#1	47,352	<p>TS=(violence) OR TS=(batter* NEAR/2 (wife\$ or wife\$ or woman or women or men or husband\$ or partner\$)) OR TS=(physical\$ NEAR/2 (abus\$ or assault\$ or violen\$ or aggress\$)) OR TS=(emotional near/2 abus*) OR TS=(rape) OR TS=(sexual\$ NEAR/2 (abus\$ or assault\$ or violen\$ or aggress\$)) OR TS=(child\$ NEAR/2 (abus\$ or exploit or maltreat\$ or neglect\$ or trauma\$)) OR TS=("non accidental injur\$" or "non-accidental injur\$" or "nonaccidental injur\$")</p> <p><i>Indexes=SCI-EXPANDED Timespan=1992-2017</i></p>

Appendix 2 Literature search strategies for the qualitative acceptability review

The original searches were carried out in June 2017 using the following databases: CINAHL, EMBASE, MEDLINE and PsycINFO. Results were restricted to 1992 onwards.

The numbers of records identified in each database are as follows:

- CINAHL: 470
- EMBASE: 1749
- MEDLINE: 1151
- PsycINFO: 919.

The total number of records identified before de-duplication was 4289; after de-duplication, 3162 records were left.

This set was subsequently de-duplicated against the results of the effectiveness searches to leave a total of 1574 records.

CINAHL via EBSCOhost

Search date: 1 June 2017.

TABLE 23 Search strategy for CINAHL via EBSCOhost

Search terms	Search options
S1	(MH "Stress Disorders, Post-Traumatic+")
S2	TX (PTSD or CPTSD) OR TX posttrauma* OR TX post-trauma* OR TX "post trauma*" OR TX "post traumatic stress" OR TX "combat stress*" OR TX "combat disorder*" OR TX DESNOS OR TX "complex trauma*" OR TX "complex N3 trauma*" OR TX "traumatic stress" OR TX "traumatic memor*"
S3	TX traumatisation OR TX traumatization OR TX (trauma* N3 (expos* or event* or experienc*))
S4	S1 OR S2 OR S3
S5	(MH "Cognitive Therapy+") OR TX "cognitive behaviour* therap*" OR TX "cognitive behavior* therap*" OR TX "cognitive restructuring" OR TX "cognitive rescripting" OR TX "cognitive processing therap*" OR TX (CPT or CBT or TF CBT) OR TX "cognitive therap*" OR TX "cognitive behavioural treat*" OR TX "cognitive behavioral treat*" OR TX "cognitive trauma therap*" OR TX "trauma focus* CBT"
S6	(MH "Behavior Therapy") OR TX (behavior* N2 (therap* or treat* or modif*)) OR TX (behavior* N2 (therap* or treat* or modif*)) OR TX (("dialectical behavio*") N1 (therap* or treat*)) OR TX (biofeedback or neurofeedback or "sensory feedback") OR TX psychological N2 desensiti#ation OR TX "eye movement desensiti#ation reprocessing" OR TX EMDR OR TX (exposure N1 (therap* or treat*)) OR TX "live exposure" OR TX "imaginal exposure" OR TX "prolonged exposure therapy"
S7	TX "imaginal flooding" OR TX "exposure inhibition therap*" OR TX "implosive therap*" OR TX "image habituation" OR TX "inoculation training"
S8	((MH "Acceptance and Commitment Therapy")) OR TX acceptance N2 therap* OR TX commitment N2 therap*

continued

TABLE 23 Search strategy for CINAHL via EBSCOhost (continued)

Search terms	Search options
S9	(MH "Biofeedback")
S10	(MH "Feedback")
S11	(MH "Eye Movement Desensitization and Reprogramming")
S12	(MH "Virtual Reality Exposure Therapy")
S13	(MH "Hypnosis")
S14	TX hypnosis or hypnotherap*
S15	(MH "Mindfulness")
S16	TX mindfulness
S17	TX "supportive therap*" OR TX (non-directive N1 (counselling or counseling)) OR TX ("non directive" N1 (counselling or counseling))
S18	((MH "Psychotherapy") OR (MH "Psychotherapy, Brief") OR (MH "Psychotherapy, Group") OR (MH "Psychotherapy, Psychodynamic")) OR TX psychodynamic N1 therap* OR TX "inter personal psychotherap*" OR TX "interpersonal psychotherap*" OR TX IPT OR TX "compassion therap*" OR TX "accelerated resolution*" OR TX "sensorimotor therap*" OR TX "schema therap*" OR TX stress N2 manag*
S19	(MH "Counseling") OR TX "non-directive counsel*" OR TX "non directive counsel*" OR TX "nondirective counsel*" OR "compassion therap*"
S20	S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19
S21	((MH "Hypnotics and Sedatives")) OR TX (alprazolam or amobarbital or azaperone or barbital or bromisovalum or "chloral hydrate" or chloralose or chlordiazepoxide or chlormethiazole or dexmedetomidine or diazepam or diphenhydramine or eszopiclone or ethchlorvynol or etomidate or etorphine or flurazepam or glutethimide or hexobarbital or lorazepam or medazepam or medetomidine or mephobarbital or meprobamate or methapyrilene or methaqualone or midazolam or nitrazepam or oxazepam or paraldehyde o...
S22	(MH "Antianxiety Agents+") OR (bromazepam or buspirone or chlormezanone or "clorazepate dipotassium" or estazolam or flunitrazepam or fluvoxamine or nordazepam or ondansetron or oxprenolol or prazepam or pregabalin or ritanserine or tranlycypromine or trazodone or triazolam or zolazepam or benzodiazepines or benzodiazepinones or "sedative antihistamine*" or promethazine)
S23	(MH "Antidepressive Agents+") OR TX (benactyzine or clorgyline or deanol or "desvenlafaxine succinate" or "duloxetine hydrochloride" or iproniazid or isocarboxazid or "lithium carbonate" or "lithium compounds" or moclobemide or nialamide or phenelzine or pizotyline or rolipram or sertraline or tranlycypromine or "vilazodone hydrochloride" or Imipramine or mirtazapine)
S24	(MH "Antipsychotic Agents+") OR TX (acepromazine or aripiprazole or azaperone or benperidol or butaclamol or chlorpromazine or chlorprothixene or clopenthixol or clozapine or droperidol or etazolate or flupenthixol or fluphenazine or fluspirilene or haloperidol or loxapine or "lurasidone hydrochloride" or mesoridazine or methiothepin or methotrimeprazine or molindone or ondansetron or "paliperidone palmitate" or penfluridol or perazine or perphenazine or pimozide or prochlorperazine) OR TX (p...
S25	(MH "Anticonvulsants+") OR TX (anticonvulsants or acetazolamide or bromides or carbamazepine or clonazepam or "clorazepate dipotassium" or diazepam or dimethadione or estazolam or ethosuximide or flunarizine or lorazepam or "magnesium sulfate" or medazepam or mephenytoin or mephobarbital or meprobamate or nitrazepam or paraldehyde or phenobarbital or phenytoin or pregabalin or primidone or riluzole or thiopental or tiletamine or trimethadione or "valproic acid" or vigabatrin)
S26	(MH "Antimanic Agents+") OR TX ("lithium chloride" or "lithium compounds" or lamotrigine or topiramate)

TABLE 23 Search strategy for CINAHL via EBSCOhost (continued)

Search terms	Search options	
S27	(MH "Monoamine Oxidase Inhibitors+") OR TX (chlorphenamidine or clorgyline or cuprizone or furazolidone or harmaline or harmine or isocarboxazid or moclobemide or monocrotophos or pargyline or selegiline or tranlycypromine or Prazosin or N-Methyl-3, 4-methylenedioxyamphetamine or MDMA or ecstasy)	
S28	S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27	
S29	S4 AND S20	(3665)
S30	S4 AND S28	(820)
S31	S29 OR S30	(4259)
S32	(MH "Qualitative Studies")	(74,214)
S33	(MH "Interviews") OR (MH "Unstructured Interview") OR (MH "Semi-Structured Interview")	(156,659)
S34	(MH "Ethnographic Research")	(6044)
S35	(MH "Grounded Theory")	(11,936)
S36	(MH "Thematic Analysis")	(41,678)
S37	(MH "Observational Methods") OR (MH "Participant Observation")	(16,594)
S38	(MH "Field Notes")	(6623)
S39	(MH "Narratives")	(11,936)
S40	(MH "Field Studies")	(2485)
S41	(MH "Audiorecording")	(36,402)
S42	(MH "Focus Groups")	(31,284)
S43	(MH "Descriptive Research")	(60,598)
S44	(MH "Case Studies")	(16,717)
S45	(MH "Discourse Analysis")	(3490)
S46	(MH "Exploratory Research")	(29,405)
S47	(MH "Phenomenology")	(2577)
S48	(MH "Naturalistic Inquiry")	(929)
S49	(MH "Open-Ended Questionnaires")	(3206)
S50	(MH "Videorecording")	(22,181)
S51	(MH "Anthropology, Cultural")	(1713)
S52	"conversation* analysis" OR "comparative method*" OR hermeneutic* OR participatory OR in-depth OR key informant* OR narration*	(45,445)
S53	S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41 OR S42 OR S43 OR S44 OR S45 OR S46 OR S47 OR S48 OR S49 OR S50 OR S51 OR S52	(325,689)
S54	S31 AND S53	(470)

EMBASE via Ovid

Search date: 1 June 2017.

Date range searched: 1980 to 2017 week 22.

TABLE 24 Search strategy for EMBASE via Ovid

1	Posttraumatic Stress Disorder/ (45,884)
2	(PTSD or CPTSD).ti,ab. (22,707)
3	posttrauma\$.ti,ab. (34,058)
4	post-trauma\$.ti,ab. (30,965)
5	"post trauma\$".ti,ab. (30,965)
6	post traumatic stress.ti,ab. (12,036)
7	post traumatic stress.kw. (2854)
8	combat stress\$.ti,ab. (405)
9	combat disorder\$.ti,ab. (18)
10	DESNOS.ti,ab. (39)
11	"Disorders of Extreme Distress Not Otherwise Specified".ti,ab. (0)
12	complex trauma\$.ti,ab. (454)
13	(complex adj3 trauma\$).ti,ab. (1408)
14	traumatic stress.ti,ab. (14,416)
15	traumatic memor\$.ti,ab. (768)
16	traumatization.ti,ab. (1152)
17	traumatisation.ti,ab. (242)
18	(trauma\$ adj3 (expos\$ or event\$ or experienc\$)).ti,ab. (20,405)
19	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 (95,383)
20	exp Cognitive Therapy/ (42,280)
21	cognitive behaviour\$ therapy.ti,ab. (5626)
22	cognitive behavior\$ therapy.ti,ab. (10,664)
23	cognitive restructuring.ti,ab. (1093)
24	cognitive rescripting.ti,ab. (0)
25	cognitive processing therapy.ti,ab. (197)
26	CPT.ti,ab. (15,122)
27	cognitive therapy.ti,ab. (3508)
28	cognitive behavioural treatment\$.ti,ab. (571)
29	cognitive behavioral treatment\$.ti,ab. (1879)
30	(CBT or TFCBT).ti,ab. (11,500)
31	cognitive trauma therapy.ti,ab. (7)
32	trauma focus\$ CBT.ti,ab. (46)
33	20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 (64,373)
34	exp Behavior Therapy/ (40,674)
35	(behavior\$ adj2 (therap\$ or treat\$ or modif\$)).ti,ab. (33,760)

TABLE 24 Search strategy for EMBASE via Ovid (continued)

36	(behaviour\$ adj2 (therap\$ or treat\$ or modif\$)).ti,ab. (13,506)
37	(dialectical behavio\$ adj (therap\$ or treat\$)).ti,ab. (811)
38	biofeedback, psychology/or feedback, sensory/or neurofeedback/ (20,411)
39	(biofeedback or neurofeedback or sensory feedback).ti,ab. (10,762)
40	eye movement desensitization reprocessing/or implosive therapy/or virtual reality exposure therapy/ (438)
41	(psychological adj2 desensiti\$).ti,ab. (6)
42	eye movement desensiti?ation reprocessing.ti,ab. (38)
43	EMDR.ti,ab. (559)
44	(exposure adj (therap\$ or treat\$)).ti,ab. (2781)
45	live exposure.ti,ab. (16)
46	imaginal exposure.ti,ab. (180)
47	prolonged exposure therapy.ti,ab. (111)
48	imaginal flooding.ti,ab. (20)
49	exposure inhibition therap\$.ti,ab. (0)
50	implosive therap\$.ti,ab. (36)
51	image habituation.ti,ab. (4)
52	inoculation training.ti,ab. (115)
53	34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 (102,846)
54	"Acceptance and Commitment Therapy"/ (709)
55	(acceptance adj2 therap\$).ti,ab. (363)
56	(commitment adj2 therap\$).ti,ab. (838)
57	Hypnosis/ (12,985)
58	(hypnosis or hypnotherap\$).ti,ab. (8081)
59	Mindfulness/ (3457)
60	mindfulness.ti,ab. (5257)
61	supportive therap\$.ti,ab. (5309)
62	(non-directive adj (counselling or counseling)).ti,ab. (114)
63	(nondirective adj (counselling or counseling)).ti,ab. (50)
64	(non directive adj (counselling or counseling)).ti,ab. (114)
65	Psychotherapy/or Group Therapy/or Psychodynamic Psychotherapy/ (93,420)
66	psychodynamic therap\$.ti,ab. (627)
67	inter personal psychotherap\$.ti,ab. (1)
68	interpersonal psychotherap\$.ti,ab. (930)
69	IPT.ti,ab. (2387)
70	(compassion adj2 therap\$).ti,ab. (62)
71	accelerated resolution.ti,ab. (112)
72	sensorimotor therap\$.ti,ab. (22)
73	schema therapy.ti,ab. (174)
74	(stress adj2 manag\$).ti,ab. (6583)

continued

TABLE 24 Search strategy for EMBASE via Ovid (continued)

75	supportive therap\$.ti,ab. (5309)
76	Counseling/ (52,136)
77	(non-directive counsel\$ or non directive counsel\$ or nondirective counsel\$.ti,ab. (165)
78	compassion therap\$.ti,ab. (2)
79	54 or 55 or 56 or 57 or 58 or 59 or 60 or 61 or 62 or 63 or 64 or 65 or 66 or 67 or 68 or 69 or 70 or 71 or 72 or 73 or 74 or 75 or 76 or 77 or 78 (174,613)
80	33 or 53 or 79 (291,814)
81	19 and 80 (10,397)
82	hypnotic sedative agent/or alprazolam/or amobarbital/or azaperone/or barbital/or bromisovalum/or chloral hydrate/or chloralose/or chlordiazepoxide/or chlomethiazole/or dexmedetomidine/or diazepam/or diphenhydramine/or eszopiclone/or ethchlorvynol/or etomidate/or etorphine/or flurazepam/or glutethimide/or hexobarbital/or lorazepam/or medazepam/or medetomidine/or methylphenobarbital/or meprobamate/or methapyrilene/or methaqualone/or midazolam/or nitrazepam/or oxazepam/or paraldehyde/or pentobarbital/or phenobarbital/or propofol/or secobarbital/or temazepam/or thiamylal/or thiopental/or xylazine/ (276,213)
83	z drugs.ti,ab. (207)
84	anxiolytic agent/or bromazepam/or buspirone/or chlormezanone/or clorazepate dipotassium/or estazolam/or flunitrazepam/or fluvoxamine/or nordazepam/or ondansetron/or oxprenolol/or prazepam/or pregabalin/or ritanserin/or tranlycypromine/or trazodone/or triazolam/or zolazepam/ (91,974)
85	benzodiazepine derivative/ (36,147)
86	sedative antihistamine\$.ti,ab. (115)
87	promethazine/ (11,286)
88	antidepressive agent/or benactyzine/or clorgyline/or deanol/or desvenlafaxine/or duloxetine/or iproniazid/or isocarboxid/or lithium carbonate/or lithium derivative/or moclobemide/or nialamide/or phenelzine/or pizotifen/or rolipram/or sertraline/or tranlycypromine/or vilazodone/ (131,288)
89	Imipramine/ (29,724)
90	mirtazapine/ (10,727)
91	neuroleptic agent/or acepromazine/or aripiprazole/or azaperone/or benperidol/or butaclamol/or chlorpromazine/or chlorprothixene/or clopenthixol/or clozapine/or droperidol/or etazolate/or flupentixol/or fluphenazine/or fluspirilene/or haloperidol/or loxapine/or lurasidone/or mesoridazine/or metitepine/or methotrimeprazine/or molindone/or ondansetron/or paliperidone/or penfluridol/or perazine/or perphenazine/or pimozide/or prochlorperazine/or promazine/or quetiapine/or raclopride/or remoxipride/or reserpine/or risperidone/or ritanserin/or spiperone/or sulpiride/or thioridazine/or tiothixene/or tiapride/or trifluoperazine/or trifluoperidol/or triflupromazine/ (221,511)
92	olanzapine/ (29,757)
93	anticonvulsive agent/or acetazolamide/or bromides/or carbamazepine/or clonazepam/or clorazepate dipotassium/or diazepam/or dimethadione/or estazolam/or ethosuximide/or flunarizine/or lorazepam/or magnesium sulfate/or medazepam/or mephenytoin/or methylphenobarbital/or meprobamate/or nitrazepam/or paraldehyde/or phenobarbital/or phenytoin/or pregabalin/or primidone/or riluzole/or thiopental/or tiletamine/or trimethadione/or valproic acid/or vigabatrin/ (323,161)
94	tranquilizer/or lithium chloride/or lithium derivative/ (21,662)
95	lamotrigine/ (21,528)
96	topiramate/ (18,511)
97	monoamine oxidase inhibitor/or chlorphenamidine/or clorgyline/or cuprizone/or furazolidone/or harmaline/or harmine/or isocarboxid/or moclobemide/or monocrotophos/or pargyline/or selegiline/or tranlycypromine/(38,999)
98	Prazosin/ (21,809)
99	3,4 methylenedioxyamphetamine/ (1999)
100	(MDMA or ecstasy).ti,ab. (6408)
101	82 or 83 or 84 or 85 or 86 or 87 or 88 or 89 or 90 or 91 or 92 or 93 or 94 or 95 or 96 or 97 or 98 or 99 or 100 (796,293)

TABLE 24 Search strategy for EMBASE via Ovid (continued)

102	19 and 101 (6845)
103	81 or 102 (15,327)
104	qualitative research/ (44,728)
105	unstructured interview/or semi structured interview/or interview/ (180,660)
106	ethnography/ (1859)
107	grounded theory/ (4097)
108	thematic analysis/ (6983)
109	observational method/ (1260)
110	participant observation/ (4400)
111	narrative/ (5915)
112	field study/ (2893)
113	audio recording/ (1997)
114	descriptive research/ (14,116)
115	discourse analysis/ (760)
116	hermeneutics/ (167)
117	naturalistic inquiry/ (459)
118	phenomenology/ (8633)
119	participatory research/ (3550)
120	recording/ (41,930)
121	cultural anthropology/ (48,605)
122	case stud\$.ti,ab. (92,088)
123	comparative method\$.ti,ab. (2818)
124	field notes.ti,ab. (1743)
125	focus group\$.ti,ab. (39,224)
126	conversation\$ analysis.ti,ab. (506)
127	exploratory stud\$.ti,ab. (13,200)
128	open-ended.ti,ab. (12,795)
129	in-depth.ti,ab. (55,739)
130	key informant\$.ti,ab. (5832)
131	narration.ti,ab. (644)
132	104 or 105 or 106 or 107 or 108 or 109 or 110 or 111 or 112 or 113 or 114 or 115 or 116 or 117 or 118 or 119 or 120 or 121 or 122 or 123 or 124 or 125 or 126 or 127 or 128 or 129 or 130 or 131 (505,231)
133	103 and 132 (1259)
134	(accept\$ or adherence or attitude\$ or belief\$ or believ\$ or choice\$ or choos\$ or drop out\$ or experienc\$ or feasib\$ or opinion\$ or perceiv\$ or percept\$ or prefer\$ or uptake or view\$ or withdraw\$.ti. (761,456)
135	103 and 134 (637)
136	133 or 135 (1799)
137	limit 136 to yr="1992 -Current" (1749)

MEDLINE via Ovid

Search date: 1 June 2017.

Database: Ovid MEDLINE Epub Ahead of Print and In-Process & Other Non-Indexed Citations, Ovid MEDLINE Daily and Ovid MEDLINE.

Date range searched: 1946 to present.

TABLE 25 Search strategy for MEDLINE via Ovid

1	Stress Disorders, Post Traumatic/ (27,020)
2	(PTSD or CPTSD).ti,ab. (18,404)
3	posttrauma\$.ti,ab. (30,457)
4	post-trauma\$.ti,ab. (25,925)
5	"post trauma\$.ti,ab. (25,925)
6	post traumatic stress.ti,ab. (9454)
7	post traumatic stress.kw. (96)
8	combat stress\$.ti,ab. (348)
9	combat disorder\$.ti,ab. (15)
10	DESNOS.ti,ab. (30)
11	"Disorders of Extreme Distress Not Otherwise Specified".ti,ab. (0)
12	complex trauma\$.ti,ab. (409)
13	(complex adj3 trauma\$.ti,ab. (1224)
14	traumatic stress.ti,ab. (10,931)
15	traumatic memor\$.ti,ab. (594)
16	traumatization.ti,ab. (1004)
17	traumatisation.ti,ab. (192)
18	(trauma\$ adj3 (expos\$ or event\$ or experienc\$)).ti,ab. (16,547)
19	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 (75,969)
20	exp Cognitive Therapy/ (22,774)
21	cognitive behaviour\$ therapy.ti,ab. (4058)
22	cognitive behavior\$ therapy.ti,ab. (8246)
23	cognitive restructuring.ti,ab. (728)
24	cognitive rescripting.ti,ab. (0)
25	cognitive processing therapy.ti,ab. (181)
26	CPT.ti,ab. (10,875)
27	cognitive therapy.ti,ab. (2427)
28	cognitive behavioural treatment\$.ti,ab. (408)
29	cognitive behavioral treatment\$.ti,ab. (1406)
30	(CBT or TFCBT).ti,ab. (8178)
31	cognitive trauma therapy.ti,ab. (6)

TABLE 25 Search strategy for MEDLINE via Ovid (continued)

32	trauma focus\$ CBT.ti.ab. (31)
33	20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 (41,296)
34	exp Behavior Therapy/ (65,175)
35	(behavior\$ adj2 (therap\$ or treat\$ or modif\$)).ti.ab. (27,210)
36	(behaviour\$ adj2 (therap\$ or treat\$ or modif\$)).ti.ab. (9995)
37	(dialectical behavio\$ adj (therap\$ or treat\$)).ti.ab. (587)
38	biofeedback, psychology/or feedback, sensory/or neurofeedback/ (9410)
39	(biofeedback or neurofeedback or sensory feedback).ti.ab. (8547)
40	eye movement desensitization reprocessing/or implosive therapy/or virtual reality exposure therapy/ (1375)
41	(psychological adj2 desensiti\$).ti.ab. (4)
42	eye movement desensiti?ation reprocessing.ti.ab. (25)
43	EMDR.ti.ab. (376)
44	(exposure adj (therap\$ or treat\$)).ti.ab. (2318)
45	live exposure.ti.ab. (11)
46	imaginal exposure.ti.ab. (149)
47	prolonged exposure therapy.ti.ab. (101)
48	imaginal flooding.ti.ab. (13)
49	exposure inhibition therap\$.ti.ab. (0)
50	implosive therap\$.ti.ab. (43)
51	image habituation.ti.ab. (3)
52	inoculation training.ti.ab. (79)
53	34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 (91,074)
54	"Acceptance and Commitment Therapy"/ (187)
55	(acceptance adj2 therap\$).ti.ab. (262)
56	(commitment adj2 therap\$).ti.ab. (615)
57	Hypnosis/ (8767)
58	(hypnosis or hypnotherap\$).ti.ab. (7616)
59	Mindfulness/ (1406)
60	mindfulness.ti.ab. (4162)
61	supportive therap\$.ti.ab. (3938)
62	(non-directive adj (counselling or counseling)).ti.ab. (100)
63	(nondirective adj (counselling or counseling)).ti.ab. (54)
64	(non directive adj (counselling or counseling)).ti.ab. (100)
65	Psychotherapy/or Psychotherapy, Brief/or Psychotherapy, Group/or Psychotherapy, Multiple/or Psychotherapy, Psychodynamic/or Psychotherapy, Rational-emotive/ (66,081)
66	psychodynamic therap\$.ti.ab. (435)
67	inter personal psychotherap\$.ti.ab. (1)
68	interpersonal psychotherap\$.ti.ab. (788)
69	IPT.ti.ab. (1934)

continued

TABLE 25 Search strategy for MEDLINE via Ovid (continued)

70	(compassion adj2 therap\$.ti,ab. (41)
71	accelerated resolution.ti,ab. (86)
72	sensorimotor therap\$.ti,ab. (22)
73	schema therapy.ti,ab. (113)
74	(stress adj2 manag\$.ti,ab. (5239)
75	supportive therap\$.ti,ab. (3938)
76	Counseling/ (33,064)
77	(non-directive counsel\$ or non directive counsel\$ or nondirective counsel\$.ti,ab. (155)
78	compassion therap\$.ti,ab. (1)
79	54 or 55 or 56 or 57 or 58 or 59 or 60 or 61 or 62 or 63 or 64 or 65 or 66 or 67 or 68 or 69 or 70 or 71 or 72 or 73 or 74 or 75 or 76 or 77 or 78 (122,833)
80	33 or 53 or 79 (212,817)
81	"hypnotics and sedatives"/or alprazolam/or amobarbital/or azaperone/or barbital/or bromisovalum/or chloral hydrate/or chloralose/or chlordiazepoxide/or chlormethiazole/or dexmedetomidine/or diazepam/or diphenhydramine/or eszopiclone/or ethchlorvynol/or etomidate/or etorphine/or flurazepam/or glutethimide/or hexobarbital/or lorazepam/or medazepam/or medetomidine/or mephobarbital/or meprobamate/or methapyrilene/or methaqualone/or midazolam/or nitrazepam/or oxazepam/or paraldehyde/or pentobarbital/or phenobarbital/or propofol/or secobarbital/or temazepam/or thiamylal/or thiopental/or xylazine/ (115,279)
82	z drugs.ti,ab. (129)
83	anti-anxiety agents/or bromazepam/or buspirone/or chlormezanone/or clorazepate dipotassium/or estazolam/or flunitrazepam/or fluvoxamine/or nordazepam/or ondansetron/or oxprenolol/or prazepam/or pregabalin/or ritanserin/or tranlycypromine/or trazodone/or triazolam/or zolazepam/ (33,247)
84	benzodiazepines/or benzodiazepinones/ (23,792)
85	sedative antihistamine\$.ti,ab. (61)
86	promethazine.ti,ab. (2067)
87	antidepressive agents/or benactyzine/or clorgyline/or deanol/or desvenlafaxine succinate/or duloxetine hydrochloride/or iproniazid/or isocarboxid/or lithium carbonate/or lithium compounds/or moclobemide/or nialamide/or phenelzine/or pizotyline/or rolipram/or sertraline/or tranlycypromine/or vilazodone hydrochloride/ (55,863)
88	Imipramine/ (9836)
89	mirtazapine.ti,ab. (1789)
90	antipsychotic agents/or acepromazine/or aripiprazole/or azaperone/or benperidol/or butaclamol/or chlorpromazine/or chlorprothixene/or clopenthixol/or clozapine/or droperidol/or etazolate/or flupenthixol/or fluphenazine/or fluspirilene/or haloperidol/or loxapine/or lurasidone hydrochloride/or mesoridazine/or methiothepin/or methotrimeprazine/or molindone/or ondansetron/or paliperidone palmitate/or penfluridol/or perazine/or perphenazine/or pimozide/or prochlorperazine/or promazine/or quetiapine fumarate/or raclopride/or remoxipride/or reserpine/or risperidone/or ritanserin/or spiperone/or sulphiride/or thioridazine/or thiothixene/or tiapride hydrochloride/or trifluoperazine/or trifluoperidol/or triflupromazine/ (115,485)
91	olanzapine.ti,ab. (7626)
92	anticonvulsants/or acetazolamide/or bromides/or carbamazepine/or clonazepam/or clorazepate dipotassium/or diazepam/or dimethadione/or estazolam/or ethosuximide/or flunarizine/or lorazepam/or magnesium sulfate/or medazepam/or mephenytoin/or mephobarbital/or meprobamate/or nitrazepam/or paraldehyde/or phenobarbital/or phenytoin/or pregabalin/or primidone/or riluzole/or thiopental/or tiletamine/or trimethadione/or valproic acid/or vigabatrin/ (130,525)
93	antimanic agents/or lithium chloride/or lithium compounds/ (9289)
94	lamotrigine.ti,ab. (4677)
95	topiramate.ti,ab. (4081)

TABLE 25 Search strategy for MEDLINE via Ovid (continued)

96	monoamine oxidase inhibitors/or chlorphenamide/or clorgyline/or cuprizone/or furazolidone/or harmaline/or harmine/or isocarboxazid/or moclobemide/or monocrotophos/or pargyline/or selegiline/or tranylcypromine/ (18,012)
97	Prazosin/ (7586)
98	N-Methyl-3,4-methylenedioxyamphetamine/ (3654)
99	(MDMA or ecstasy).ti,ab. (5261)
100	81 or 82 or 83 or 84 or 85 or 86 or 87 or 88 or 89 or 90 or 91 or 92 or 93 or 94 or 95 or 96 or 97 or 98 or 99 (409,556)
101	19 and 80 (5684)
102	19 and 100 (1860)
103	101 or 102 (7197)
104	Qualitative Research/ (34,279)
105	interview/ (27,920)
106	Grounded Theory/ (570)
107	Personal Narratives/ (2920)
108	Focus Groups/ (23,242)
109	Hermeneutics/ (122)
110	Anthropology, Cultural/ (5645)
111	interview\$.ti,ab. (295,531)
112	ethnog\$.ti,ab. (8787)
113	case stud\$.ti,ab. (75,187)
114	grounded theory.ti,ab. (9150)
115	thematic analysis.ti,ab. (9942)
116	observational method\$.ti,ab. (584)
117	comparative method\$.ti,ab. (2606)
118	field notes.ti,ab. (1605)
119	participant observation.ti,ab. (2952)
120	narrative\$.ti,ab. (26,469)
121	field stud\$.ti,ab. (12,896)
122	audio recording.ti,ab. (240)
123	focus group\$.ti,ab. (34,349)
124	conversation\$ analysis.ti,ab. (454)
125	descriptive stud\$.ti,ab. (22,097)
126	discourse analysis.ti,ab. (1338)
127	exploratory stud\$.ti,ab. (11,645)
128	Hermeneutic.ti,ab. (2283)
129	naturalistic.ti,ab. (8879)
130	Phenomenolog\$.ti,ab. (21,696)
131	Participatory.ti,ab. (9369)
132	Open-ended.ti,ab. (10,984)
133	in-depth.ti,ab. (49,756)

continued

TABLE 25 Search strategy for MEDLINE via Ovid (continued)

134	semi-structured.ti,ab. (29,761)
135	key informant\$.ti,ab. (5436)
136	tape record\$.ti,ab. (3069)
137	narration.ti,ab. (467)
138	104 or 105 or 106 or 107 or 108 or 109 or 110 or 111 or 112 or 113 or 114 or 115 or 116 or 117 or 118 or 119 or 120 or 121 or 122 or 123 or 124 or 125 or 126 or 127 or 128 or 129 or 130 or 131 or 132 or 133 or 134 or 135 or 136 or 137 (546,383)
139	103 and 138 (951)
140	(accept\$ or adherence or attitude\$ or belief\$ or believ\$ or choice\$ or choos\$ or drop out\$ or experienc\$ or feasib\$ or opinion\$ or perceiv\$ or percept\$ or prefer\$ or uptake or view\$ or withdraw\$.ti. (680,726)
141	103 and 140 (344)
142	139 or 141 (1212)
143	limit 142 to yr="1992 -Current" (1151)

PsycINFO via Ovid

Search date: 1 June 2017.

Date range searched: 1987 to May Week 4 2017.

TABLE 26 Search strategy for PsycINFO via Ovid

1	exp Posttraumatic Stress Disorder/ (26,903)
2	Complex PTSD/ (130)
3	DESNOS/ (15)
4	"Disorders of Extreme Distress Not Otherwise Specified".ti,ab. (0)
5	(PTSD or CPTSD).ti,ab. (25,512)
6	posttrauma\$.ti,ab. (26,670)
7	post-trauma\$.ti,ab. (11,375)
8	"post trauma\$.ti,ab. (11,375)
9	post traumatic stress.ti,ab. (8922)
10	post traumatic stress.id. (2822)
11	combat stress\$.ti,ab. (450)
12	combat disorder\$.ti,ab. (12)
13	DESNOS.ti,ab. (54)
14	complex trauma\$.ti,ab. (527)
15	(complex adj2 trauma\$.ti,ab. (699)
16	traumatic stress.ti,ab. (11,652)
17	traumatic memor\$.ti,ab. (1271)
18	traumatization.ti,ab. (1431)
19	traumatisation.ti,ab. (155)

TABLE 26 Search strategy for PsycINFO via Ovid (continued)

20	(trauma adj2 (expos\$ or event\$ or experienc\$)).ti,ab. (6690)
21	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 (46,932)
22	exp Cognitive Therapy/ (11,610)
23	cognitive behaviour\$ therapy.ti,ab. (3892)
24	cognitive behavior\$ therapy.ti,ab. (12,974)
25	cognitive restructuring.ti,ab. (1765)
26	cognitive rescripting.ti,ab. (0)
27	cognitive processing therapy.ti,ab. (277)
28	CPT.ti,ab. (1871)
29	cognitive therapy.ti,ab. (5079)
30	cognitive behavioural treatment\$.ti,ab. (521)
31	cognitive behavioral treatment\$.ti,ab. (2909)
32	(CBT or TF CBT).ti,ab. (10,696)
33	cognitive trauma therapy.ti,ab. (8)
34	trauma focus\$ CBT.ti,ab. (57)
35	22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 (32,467)
36	exp Behavior Therapy/ (11,576)
37	(behavior\$ adj2 (therap\$ or treat\$ or modif\$)).ti,ab. (33,755)
38	(behaviour\$ adj2 (therap\$ or treat\$ or modif\$)).ti,ab. (6941)
39	(dialectical behavio\$ therap\$ or dialectical behavio\$ treat\$).ti,ab. (1477)
40	DBT.ti,ab. (1136)
41	biofeedback, psychology/or feedback, sensory/or neurofeedback/ (1224)
42	(biofeedback or neurofeedback or sensory feedback).ti,ab. (4469)
43	desensitization, psychologic/or eye movement desensitization reprocessing/or implosive therapy/or virtual reality exposure therapy/ (152)
44	(psychological adj2 desensiti\$).ti,ab. (3)
45	Eye Movement Desensitization Therapy/ (1241)
46	eye movement desensiti?ation reprocessing.ti,ab. (61)
47	EMDR.ti,ab. (1367)
48	Exposure Therapy/ (1988)
49	(exposure adj (therap\$ or treat\$)).ti,ab. (2129)
50	prolonged exposure therap\$.ti,ab. (153)
51	live exposure.ti,ab. (21)
52	imaginal exposure.ti,ab. (267)
53	imaginal flooding.ti,ab. (21)
54	exposure inhibition therap\$.ti,ab. (1)
55	implosive therap\$.ti,ab. (29)
56	image habituation.ti,ab. (5)
57	inoculation training.ti,ab. (226)

continued

TABLE 26 Search strategy for PsycINFO via Ovid (continued)

58	36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 57 (51,566)
59	(acceptance adj2 therap\$.ti,ab. (347)
60	(commitment adj2 therap\$.ti,ab. (1499)
61	Hypnosis/(3983)
62	(hypnosis or hypnotherap\$.ti,ab. (6655)
63	Mindfulness/ (6716)
64	mindfulness.ti,ab. (8233)
65	(supportive adj (therap\$ or psychotherap\$)).ti,ab. (1186)
66	(non-directive adj (counselling or counseling)).ti,ab. (40)
67	(nondirective adj (counselling or counseling)).ti,ab. (52)
68	(non directive adj (counselling or counseling)).ti,ab. (40)
69	psychodynamic therap\$.ti,ab. (1267)
70	inter personal psychotherap\$.ti,ab. (1)
71	interpersonal psychotherap\$.ti,ab. (1175)
72	interpersonal therapy.ti,ab. (502)
73	IPT.ti,ab. (963)
74	(compassion adj2 therap\$.ti,ab. (107)
75	accelerated resolution.ti,ab. (9)
76	sensorimotor therap\$.ti,ab. (9)
77	schema therapy.ti,ab. (321)
78	Stress Management/ (4239)
79	Supportive Psychotherapy/ (461)
80	Group Psychotherapy/ (12,925)
81	Counseling/ (15,966)
82	(non-directive counsel\$ or non directive counsel\$ or nondirective counsel\$.ti,ab. (92)
83	compassion therap\$.ti,ab. (4)
84	59 or 60 or 61 or 62 or 63 or 64 or 65 or 66 or 67 or 68 or 69 or 70 or 71 or 72 or 73 or 74 or 75 or 76 or 77 or 78 or 79 or 80 or 81 or 82 or 83 (53,717)
85	35 or 58 or 84 (108,582)
86	21 and 85 (5589)
87	hypnotic drugs/or amobarbital/or apomorphine/or barbital/or chloral hydrate/or codeine/or flurazepam/or glutethimide/or hexobarbital/or meprobamate/or methaqualone/or nitrazepam/or pentobarbital/or phenobarbital/or secobarbital/or thalidomide/or thiopental/or triazolam/ (3430)
88	hypnotics.ti,ab. (1260)
89	hypnotic drug\$.ti,ab. (286)
90	z drug\$.ti,ab. (44)
91	tranquilizing drugs/or amitriptyline/or benactyzine/or doxepin/or haloperidol/or meprobamate/or minor tranquilizers/or neuroleptic drugs/or phenothiazine derivatives/or pimozide/or thiothixene/ (21,857)
92	exp benzodiazepines/ (7742)
93	sedative antihistamine\$.ti,ab. (13)

TABLE 26 Search strategy for PsycINFO via Ovid (continued)

94	promethazine.ti,ab. (125)
95	antidepressant drugs/or bupropion/or citalopram/or fluoxetine/or fluvoxamine/or iproniazid/or isocarboxazid/or lithium carbonate/or methylphenidate/or mianserin/or moclobemide/or molindone/or nefazodone/or nialamide/or nomifensine/or paroxetine/or phenelzine/or pheniprazine/or pipradrol/or serotonin norepinephrine reuptake inhibitors/or sertraline/or sulphiride/or tranylcypromine/or trazodone/or tricyclic antidepressant drugs/or venlafaxine/or zimeldine/ (28,111)
96	Imipramine.ti,ab. (2559)
97	mirtazapine.ti,ab. (1118)
98	neuroleptic drugs/or aripiprazole/or clozapine/or molindone/or nialamide/or olanzapine/or quetiapine/or reserpine/or risperidone/or spiperidol/or sulphiride/or tetrabenazine/ (25,765)
99	mood stabilizers/or anticonvulsive drugs/or carbamazepine/or lithium/or valproic acid/ (11,793)
100	mood stabilisers.ti,ab. (144)
101	antiepileptics.ti,ab. (281)
102	lamotrigine.ti,ab. (1802)
103	topiramate.ti,ab. (1501)
104	valproate.ti,ab. (2716)
105	monoamine oxidase inhibitors/or iproniazid/or isocarboxazid/or moclobemide/or nialamide/or pargyline/or phenelzine/or pheniprazine/or tranylcypromine/ (1627)
106	antihypertensive drugs/or alpha methylparatyrosine/or captopril/or chlorpromazine/or clonidine/or guanethidine/or hexamethonium/or hydralazine/or mecamylamine/or methyl dopa/or phenoxybenzamine/or quinpirole/ (2481)
107	alpha blocker anti-hypertensive\$.ti,ab. (0)
108	alpha blocker antihypertensive\$.ti,ab. (0)
109	prazosin.ti,ab. (579)
110	Methylenedioxymethamphetamine/ (1926)
111	(mdma or ecstasy).ti,ab. (2879)
112	87 or 88 or 89 or 90 or 91 or 92 or 93 or 94 or 95 or 96 or 97 or 98 or 99 or 100 or 101 or 102 or 103 or 104 or 105 or 106 or 107 or 108 or 109 or 110 or 111 (83,790)
113	21 and 112 (1054)
114	86 or 113 (6545)
115	Qualitative Research/ (7366)
116	exp INTERVIEWS/ (9209)
117	exp ETHNOGRAPHY/ (7251)
118	exp Grounded Theory/ (3212)
119	exp Observation Methods/ (3079)
120	exp NARRATIVES/ (16,768)
121	exp Audiotapes/ (250)
122	exp Discourse Analysis/ (7393)
123	conversation/ (7816)
124	exp HERMENEUTICS/ (1857)
125	exp PHENOMENOLOGY/ (10,792)
126	exp Participation/ (11,842)
127	exp Informants/ (734)

continued

TABLE 26 Search strategy for PsycINFO via Ovid (continued)

128	anthropology/ (4659)
129	case stud\$.ti,ab. (74,204)
130	thematic analysis.ti,ab. (7137)
131	comparative method\$.ti,ab. (1958)
132	field notes.ti,ab. (3029)
133	audio recording.ti,ab. (214)
134	focus group\$.ti,ab. (27,182)
135	conversation\$ analysis.ti,ab. (1659)
136	descriptive study.ti,ab. (5331)
137	exploratory stud\$.ti,ab. (12,989)
138	naturalistic.ti,ab. (11,518)
139	(open-ended or in-depth).ti,ab. (52,099)
140	semi-structured.ti,ab. (26,340)
141	key informant\$.ti,ab. (2662)
142	tape record\$.ti,ab. (1949)
143	narration.ti,ab. (1417)
144	115 or 116 or 117 or 118 or 119 or 120 or 121 or 122 or 123 or 124 or 125 or 126 or 127 or 128 or 129 or 130 or 131 or 132 or 133 or 134 or 135 or 136 or 137 or 138 or 139 or 140 or 141 or 142 or 143 (271,473)
145	114 and 144 (652)
146	(accept\$ or adherence or attitude\$ or belief\$ or believ\$ or choice\$ or choos\$ or drop out\$ or experienc\$ or feasib\$ or opinion\$ or perceiv\$ or percept\$ or prefer\$ or uptake or view\$ or withdraw\$).ti. (288,349)
147	114 and 146 (346)
148	145 or 147 (947)
149	limit 148 to yr="1992 -Current" (919)

Appendix 3 List of studies excluded, with reasons

TABLE 27 Studies excluded at full-text screening stage, with reasons for exclusion

Authors (year)	Reason for exclusion
Abramowitz <i>et al.</i> (2008) ¹⁸⁸	Intervention did not meet criteria
Acierno <i>et al.</i> (2016) ¹⁸⁹	Intervention did not meet criteria
Aderka <i>et al.</i> (2013) ¹⁹⁰	Population did not meet criteria
Adler <i>et al.</i> (2009) ¹⁹¹	Intervention did not meet criteria
Alderman <i>et al.</i> (2009) ¹⁹²	Study design did not meet criteria
Alderman <i>et al.</i> (2009) ¹⁹³	Study design did not meet criteria
Allan <i>et al.</i> (2015) ¹⁹⁴	Study design did not meet criteria
Allon (2015) ¹⁹⁵	Population did not meet criteria
Alvarez <i>et al.</i> (2011) ¹⁹⁶	Study design did not meet criteria
Amin <i>et al.</i> (2013) ¹⁹⁷	Article is a conference abstract
Angelo <i>et al.</i> (2008) ¹⁹⁸	Study design did not meet criteria
Arntz <i>et al.</i> (2007) ¹⁹⁹	Population did not meet criteria
Ayoughi <i>et al.</i> (2012) ²⁰⁰	Study design did not meet criteria
Baños <i>et al.</i> (2011) ²⁰¹	Population did not meet criteria
Basharpoor <i>et al.</i> (2011) ²⁰²	Population did not meet criteria
Bass <i>et al.</i> (2013) ²⁰³	Population did not meet criteria
Batka <i>et al.</i> (2016) ²⁰⁴	Intervention did not meet criteria
Benedek (2011) ²⁰⁵	Study design did not meet criteria
Bensimon <i>et al.</i> (2012) ²⁰⁶	Intervention did not meet criteria
Betancourt <i>et al.</i> (2014) ²⁰⁷	Population did not meet criteria
Bisson (2003) ²⁰⁸	Study design did not meet criteria
Bisson (2007) ²⁰⁹	Population did not meet criteria
Blevins <i>et al.</i> (2011) ²¹⁰	Intervention did not meet criteria
Bohus <i>et al.</i> (2013) ²¹¹	Population did not meet criteria
Bolton <i>et al.</i> (2014) ²¹²	Population did not meet criteria
Bomyea <i>et al.</i> (2015) ²¹³	Population did not meet criteria
Bormann <i>et al.</i> (2008) ²¹⁴	Intervention did not meet criteria
Bormann <i>et al.</i> (2013) ²¹⁵	Intervention did not meet criteria
Bormann <i>et al.</i> (2014) ²¹⁶	Article is a conference abstract
Bradley and Follingstad (2003) ²¹⁷	Population did not meet criteria
Brady <i>et al.</i> (2000) ²¹⁸	Population did not meet criteria
Bremner <i>et al.</i> (2004) ²¹⁹	Study design did not meet criteria

continued

TABLE 27 Studies excluded at full-text screening stage, with reasons for exclusion (*continued*)

Authors (year)	Reason for exclusion
Bremner <i>et al.</i> (2011) ²²⁰	Article is a conference abstract
Brown <i>et al.</i> (2014) ²²¹	Intervention did not meet criteria
Bryan <i>et al.</i> (2016) ²²²	Study design did not meet criteria
Bui <i>et al.</i> (2016) ²²³	Article is a conference abstract
Byers <i>et al.</i> (2010) ²²⁴	Study design did not meet criteria
Byers (2010) ²²⁵	Study design did not meet criteria
Campbell <i>et al.</i> (2016) ²²⁶	Intervention did not meet criteria
Carlson <i>et al.</i> (1998) ¹⁵⁷	Duplicate article
Carr <i>et al.</i> (2012) ²²⁷	Intervention did not meet criteria
Castillo <i>et al.</i> (2016) ²²⁸	Population did not meet criteria
Cates <i>et al.</i> (2004) ²²⁹	Study design did not meet criteria
Celik <i>et al.</i> (2011) ⁶⁵	Duplicate article
Chemtob <i>et al.</i> (1997) ²³⁰	Population did not meet criteria
Chen <i>et al.</i> (2013) ²³¹	Outcomes did not meet criteria
Chesney <i>et al.</i> (2014) ²³²	Article is a conference abstract
Church <i>et al.</i> (2013) ²³³	Intervention did not meet criteria
Church (2014) ²³⁴	Study design did not meet criteria
Clark <i>et al.</i> (1999) ²³⁵	Study design did not meet criteria
Classen <i>et al.</i> (2011) ²³⁶	Population did not meet criteria
Cloitre and Koenen (2001) ²³⁷	Study design did not meet criteria
Cole <i>et al.</i> (2007) ²³⁸	Population did not meet criteria
Connolly and Sakai (2011) ²³⁹	Intervention did not meet criteria
Cort <i>et al.</i> (2014) ²⁴⁰	Study design did not meet criteria
Coulter (2010) ²⁴¹	Intervention did not meet criteria
Crespo and Arinero (2010) ²⁴²	Population did not meet criteria
David <i>et al.</i> (2006) ²⁴³	Study design did not meet criteria
Davidson <i>et al.</i> (1993) ²⁴⁴	Study design did not meet criteria
Davidson <i>et al.</i> (2001) ²⁴⁵	Population did not meet criteria
Davidson <i>et al.</i> (2001) ²⁴⁶	Population did not meet criteria
Davis <i>et al.</i> (2000) ²⁴⁷	Study design did not meet criteria
Davis <i>et al.</i> (2004) ⁷³	Duplicate article
Davis <i>et al.</i> (2008) ⁷²	Duplicate article
Davis <i>et al.</i> (2011) ²⁴⁸	Population did not meet criteria
Dawson <i>et al.</i> (2016) ²⁴⁹	Population did not meet criteria
Dempsey <i>et al.</i> (2014) ²³³	Article is a conference abstract
Dieperink <i>et al.</i> (2008) ²⁵⁰	Intervention did not meet criteria
Difede <i>et al.</i> (2014) ²⁵¹	Population did not meet criteria
Dorrepaal <i>et al.</i> (2012) ²⁵²	Population did not meet criteria

TABLE 27 Studies excluded at full-text screening stage, with reasons for exclusion (continued)

Authors (year)	Reason for exclusion
Dorrepaal <i>et al.</i> (2013) ²⁵³	Outcomes did not meet criteria
Doruk <i>et al.</i> (1999) ²⁵⁴	Non-English language article
Dougherty (2002) ²⁵⁵	Population did not meet criteria
Drozdek (1997) ²⁵⁶	Study design did not meet criteria
Droždek and Bolwerk (2010) ²⁵⁷	Intervention did not meet criteria
Droždek <i>et al.</i> (2012) ²⁵⁸	Intervention did not meet criteria
Duffy and Malloy (1994) ²⁵⁹	Study design did not meet criteria
Duffy <i>et al.</i> (2007) ²⁶⁰	Population did not meet criteria
Dunn <i>et al.</i> (2007) ²⁶¹	Population did not meet criteria
Durham <i>et al.</i> (2005) ²⁶²	Study design did not meet criteria
Echeburúa <i>et al.</i> (1997) ²⁶³	Population did not meet criteria
Echeburúa <i>et al.</i> (2014) ²⁶⁴	Comparator did not meet criteria
Edmond <i>et al.</i> (2004) ²⁶⁵	Outcomes did not meet criteria
Ekstrom <i>et al.</i> (2016) ²⁶⁶	Article is a conference abstract
Ekstrom <i>et al.</i> (2016) ²⁶⁷	Article is a conference abstract
Elkjaer <i>et al.</i> (2012) ²⁶⁸	Article is a conference abstract
Ertl <i>et al.</i> (2011) ²⁶⁹	Population did not meet criteria
Esala <i>et al.</i> (2017) ²⁷⁰	Intervention did not meet criteria
Falsetti <i>et al.</i> (2003) ²⁷¹	Population did not meet criteria
Farchi and Gidron (2010) ²⁷²	Intervention did not meet criteria
Fiorillo <i>et al.</i> (2017) ²⁷³	Study design did not meet criteria
Foa <i>et al.</i> (1991) ²⁷⁴	Population did not meet criteria
Foa <i>et al.</i> (1999) ²⁷⁵	Population did not meet criteria
Foa <i>et al.</i> (2005) ²⁷⁶	Population did not meet criteria
Forbes <i>et al.</i> (2001) ²⁷⁷	Study design did not meet criteria
Forbes <i>et al.</i> (2008) ²⁷⁸	Population did not meet criteria
Forbes <i>et al.</i> (2012) ²⁷⁹	Population did not meet criteria
Ford <i>et al.</i> (2011) ²⁸⁰	Population did not meet criteria
Fortney <i>et al.</i> (2015) ²⁸¹	Intervention did not meet criteria
Fortney <i>et al.</i> (2015) ²⁸²	Intervention did not meet criteria
Frommberger <i>et al.</i> (2004) ²⁸³	Population did not meet criteria
Galovski <i>et al.</i> (2009) ²⁸⁴	Study design did not meet criteria
Galovski <i>et al.</i> (2012) ²⁸⁵	Population did not meet criteria
Gamito <i>et al.</i> (2009) ²⁸⁶	Study design did not meet criteria
Garfield <i>et al.</i> (2001) ²⁸⁷	Study design did not meet criteria
Gatz <i>et al.</i> (2007) ²⁸⁸	Population did not meet criteria
Gebler and Maercker (2007) ²⁸⁹	Non-English language article

continued

TABLE 27 Studies excluded at full-text screening stage, with reasons for exclusion (*continued*)

Authors (year)	Reason for exclusion
Gelpin <i>et al.</i> (1996) ²⁹⁰	Population did not meet criteria
Gillin <i>et al.</i> (2001) ²⁹¹	Study design did not meet criteria
Ginsberg (2003) ²⁹²	Study design did not meet criteria
Ginzburg <i>et al.</i> (2009) ²⁹³	Outcomes did not meet criteria
Glover (1993) ²⁹⁴	Study design did not meet criteria
Glynn <i>et al.</i> (1999) ²⁹⁵	Intervention did not meet criteria
Goldberg <i>et al.</i> (2003) ²⁹⁶	Study design did not meet criteria
Gosselin <i>et al.</i> (2016) ²⁹⁷	Article is a conference abstract
Graham-Bermann and Miller (2013) ²⁹⁸	Intervention did not meet criteria
Gray <i>et al.</i> (2012) ²⁹⁹	Study design did not meet criteria
Gros <i>et al.</i> (2011) ³⁰⁰	Comparator did not meet criteria
Gros <i>et al.</i> (2011) ³⁰¹	Comparator did not meet criteria
Gutner <i>et al.</i> (2013) ³⁰²	Population did not meet criteria
Hall <i>et al.</i> (2014) ³⁰³	Outcomes did not meet criteria
Hamner (1996) ³⁰⁴	Article is a letter to the editor
Hamner <i>et al.</i> (2003) ³⁰⁵	Study design did not meet criteria
Harris <i>et al.</i> (2011) ³⁰⁶	Intervention did not meet criteria
Haynes <i>et al.</i> (2012) ³⁰⁷	Article is a conference abstract
Hébert and Bergeron (2007) ³⁰⁸	Population did not meet criteria
Held and Owens (2015) ³⁰⁹	Population did not meet criteria
Hensel-Dittmann <i>et al.</i> (2011) ³¹⁰	Population did not meet criteria
Hertzberg <i>et al.</i> (2000) ³¹¹	Population did not meet criteria
Hertzberg <i>et al.</i> (2002) ³¹²	Study design did not meet criteria
Hijazi <i>et al.</i> (2013) ³¹³	Article is a conference abstract
Hobfoll <i>et al.</i> (2016) ³¹⁴	Population did not meet criteria
Holliday <i>et al.</i> (2015) ³¹⁵	Population did not meet criteria
Hopton and Huta (2013) ³¹⁶	Population did not meet criteria
Hughes and Rasmussen (2010) ¹⁶²	Study design did not meet criteria
Igreja <i>et al.</i> (2004) ³¹⁷	Intervention did not meet criteria
Ironson <i>et al.</i> (2002) ³¹⁸	Population did not meet criteria
Ivarsson <i>et al.</i> (2014) ³¹⁹	Population did not meet criteria
Iverson <i>et al.</i> (2011) ³²⁰	Outcomes did not meet criteria
Jaberghaderi <i>et al.</i> (2002) ³²¹	Population did not meet criteria
Jain <i>et al.</i> (2012) ³²²	Intervention did not meet criteria
Jenkins <i>et al.</i> (2014) ³²³	Article is a conference abstract
Jerud <i>et al.</i> (2014) ³²⁴	Population did not meet criteria
Jetly <i>et al.</i> (2015) ³²⁵	Study design did not meet criteria
Johnson <i>et al.</i> (2011) ³²⁶	Population did not meet criteria

TABLE 27 Studies excluded at full-text screening stage, with reasons for exclusion (continued)

Authors (year)	Reason for exclusion
Kaiser <i>et al.</i> (2010) ³²⁷	Outcomes did not meet criteria
Karatzias <i>et al.</i> (2016) ³²⁸	Study design did not meet criteria
Kaslow <i>et al.</i> (2010) ³²⁹	Population did not meet criteria
Kelly <i>et al.</i> (2016) ³³⁰	Article is a conference abstract
Kelly and Garland (2016) ³³¹	Population did not meet criteria
Khazaie <i>et al.</i> (2016) ³³²	Population did not meet criteria
King <i>et al.</i> (2011) ³³³	Article is a conference abstract
King <i>et al.</i> (2016) ³³⁴	Population did not meet criteria
King <i>et al.</i> (2016) ³³⁵	Population did not meet criteria
Kip <i>et al.</i> (2013) ³³⁶	Population did not meet criteria
Kip <i>et al.</i> (2014) ³³⁷	Outcomes did not meet criteria
Kluepfel <i>et al.</i> (2013) ³³⁸	Population did not meet criteria
Koehn (2007) ³³⁹	Study design did not meet criteria
Kozarić-Kovacic <i>et al.</i> (2005) ³⁴⁰	Study design did not meet criteria
Kozaric-Kovacic and Pivac (2007) ³⁴¹	Study design did not meet criteria
Kozel <i>et al.</i> (2016) ³⁴²	Article is a conference abstract
Krakow <i>et al.</i> (2000) ³⁴³	Population did not meet criteria
Krakow <i>et al.</i> (2001) ³⁴⁴	Population did not meet criteria
Kreidler (2005) ³⁴⁵	Population did not meet criteria
Krüger <i>et al.</i> (2014) ³⁴⁶	Population did not meet criteria
Krystal <i>et al.</i> (2011) ⁹⁹	Population did not meet criteria
Kuckertz <i>et al.</i> (2014) ³⁴⁷	Population did not meet criteria
Labrador <i>et al.</i> (2006) ³⁴⁸	Non-English language article
Lampe <i>et al.</i> (2008) ³⁴⁹	Non-English language article
Lang <i>et al.</i> (2012) ³⁵⁰	Article is a study protocol
Lange <i>et al.</i> (2001) ³⁵¹	Population did not meet criteria
Lange <i>et al.</i> (2003) ³⁵²	Population did not meet criteria
Lange <i>et al.</i> (2003) ³⁵³	Population did not meet criteria
Largo-Marsh (1996) ³⁵⁴	Article is a dissertation
Liebling <i>et al.</i> (2016) ³⁵⁵	Intervention did not meet criteria
Liedl <i>et al.</i> (2011) ³⁵⁶	Retracted study
Lim <i>et al.</i> (2014) ³⁵⁷	Article is a conference abstract
Littleton <i>et al.</i> (2016) ³⁵⁸	Population did not meet criteria
Litz <i>et al.</i> (2007) ³⁵⁹	Population did not meet criteria
Litz <i>et al.</i> (2012) ³⁶⁰	Population did not meet criteria
Long <i>et al.</i> (2011) ³⁶¹	Study design did not meet criteria
Macdonald <i>et al.</i> (2011) ³⁶²	Population did not meet criteria

continued

TABLE 27 Studies excluded at full-text screening stage, with reasons for exclusion (*continued*)

Authors (year)	Reason for exclusion
Macklin <i>et al.</i> (2000) ³⁶³	Study design did not meet criteria
Manteghi <i>et al.</i> (2014) ³⁶⁴	Study design did not meet criteria
Margolies <i>et al.</i> (2013) ¹⁵⁹	Duplicate article
Martenyi <i>et al.</i> (2002) ³⁶⁵	Population did not meet criteria
Martenyi <i>et al.</i> (2006) ³⁶⁶	Study design did not meet criteria
Matud <i>et al.</i> (2016) ³⁶⁷	Non-English language article
Mauritz <i>et al.</i> (2016) ³⁶⁸	Article is a study protocol
McFall <i>et al.</i> (2005) ³⁶⁹	Intervention did not meet criteria
McGlinchey <i>et al.</i> (2014) ³⁷⁰	Intervention did not meet criteria
McWhirter (2011) ³⁷¹	Population did not meet criteria
Mehling <i>et al.</i> (2016) ³⁷²	Article is a conference abstract
Mehta <i>et al.</i> (2012) ³⁷³	Article is a conference abstract
Mello <i>et al.</i> (2009) ³⁷⁴	Article is a study protocol
Mithoefer <i>et al.</i> (2011) ³⁷⁵	Population did not meet criteria
Monson <i>et al.</i> (2006) ³⁷⁶	Population did not meet criteria
Monson <i>et al.</i> (2012) ³⁷⁷	Intervention did not meet criteria
Morland <i>et al.</i> (2010) ³⁷⁸	Comparator did not meet criteria
Morland <i>et al.</i> (2011) ³⁷⁹	Comparator did not meet criteria
Morland <i>et al.</i> (2014) ³⁸⁰	Comparator did not meet criteria
Morland <i>et al.</i> (2015) ³⁸¹	Comparator did not meet criteria
Moser <i>et al.</i> (2010) ³⁸²	Comparator did not meet criteria
Mughal <i>et al.</i> (2015) ³⁸³	Intervention did not meet criteria
Murray <i>et al.</i> (2016) ³⁸⁴	Outcomes did not meet criteria
Muzik <i>et al.</i> (2015) ³⁸⁵	Intervention did not meet criteria
Nacasch <i>et al.</i> (2011) ³⁸⁶	Population did not meet criteria
Nagy <i>et al.</i> (1993) ³⁸⁷	Study design did not meet criteria
Nakamura <i>et al.</i> (2011) ³⁸⁸	Intervention did not meet criteria
Neuner <i>et al.</i> (2010) ³⁸⁹	Population did not meet criteria
Neylan <i>et al.</i> (2001) ³⁹⁰	Study design did not meet criteria
Neylan <i>et al.</i> (2003) ³⁹¹	Study design did not meet criteria
Nijdam <i>et al.</i> (2012) ³⁹²	Population did not meet criteria
Niles <i>et al.</i> (2012) ¹⁶⁰	Article is a conference abstract
Niles <i>et al.</i> (2013) ³⁹³	Outcomes did not meet criteria
Nishith <i>et al.</i> (1999) ³⁹⁴	Population did not meet criteria
Nishith <i>et al.</i> (2015) ³⁹⁵	Study design did not meet criteria
Ochsner Margolies <i>et al.</i> (2012) ³⁹⁶	Article is a conference abstract
Oman and Bormann (2015) ³⁹⁷	Intervention did not meet criteria
Padala (2006) ³⁹⁸	Study design did not meet criteria

TABLE 27 Studies excluded at full-text screening stage, with reasons for exclusion (continued)

Authors (year)	Reason for exclusion
Padala <i>et al.</i> (2006) ³⁹⁹	Population did not meet criteria
Paivio <i>et al.</i> (2010) ⁴⁰⁰	Comparator did not meet criteria
Paunovic (2011) ⁴⁰¹	Population did not meet criteria
Peskind <i>et al.</i> (2003) ⁴⁰²	Study design did not meet criteria
Petty <i>et al.</i> (2001) ⁴⁰³	Study design did not meet criteria
Pigeon <i>et al.</i> (2009) ⁴⁰⁴	Study design did not meet criteria
Pigeon <i>et al.</i> (2015) ⁴⁰⁵	Article is a conference abstract
Pivac and Kozarić-Kovacic (2006) ⁴⁰⁶	Study design did not meet criteria
Pokhariyal <i>et al.</i> (2012) ⁴⁰⁷	Population did not meet criteria
Pollack <i>et al.</i> (2011) ⁴⁰⁸	Population did not meet criteria
Possemato <i>et al.</i> (2011) ⁴⁰⁹	Intervention did not meet criteria
Possemato <i>et al.</i> (2016) ⁴¹⁰	Comparator did not meet criteria
Price (2005) ⁴¹¹	Intervention did not meet criteria
Price (2006) ⁴¹²	Intervention did not meet criteria
Pruiksma <i>et al.</i> (2012) ⁴¹³	Article is a conference abstract
Pruiksma <i>et al.</i> (2013) ⁴¹⁴	Article is a conference abstract
Ragsdale <i>et al.</i> (1996) ⁴¹⁵	Population did not meet criteria
Rahman <i>et al.</i> (2016) ⁴¹⁶	Population did not meet criteria
Randall <i>et al.</i> (1995) ⁴¹⁷	Study design did not meet criteria
Raskind <i>et al.</i> (2003) ⁴¹⁸	Study design did not meet criteria
Raskind <i>et al.</i> (2012) ⁴¹⁹	Article is a conference abstract
Raskind <i>et al.</i> (2013) ¹²³	Duplicate article
Raskind (2014) ⁴²⁰	Article is a conference abstract
Rauch <i>et al.</i> (2014) ⁴²¹	Article is a conference abstract
Rauch <i>et al.</i> (2015) ⁴²²	Population did not meet criteria
Ready <i>et al.</i> (2006) ⁴²³	Study design did not meet criteria
Reed (2004) ⁴²⁴	Article is a dissertation
Renner <i>et al.</i> (2011) ⁴²⁵	Intervention did not meet criteria
Resick and Schnicke (1992) ⁴²⁶	Population did not meet criteria
Resick <i>et al.</i> (2002) ⁴²⁷	Population did not meet criteria
Resick <i>et al.</i> (2003) ⁴²⁸	Study design did not meet criteria
Resick <i>et al.</i> (2008) ⁴²⁹	Comparator did not meet criteria
Resick <i>et al.</i> (2017) ⁴³⁰	Comparator did not meet criteria
Rimane and Rosner (2013) ⁴³¹	Article is a study protocol
Robert <i>et al.</i> (2009) ⁴³²	Study design did not meet criteria
Rodgman <i>et al.</i> (2016) ⁴³³	Study design did not meet criteria
Rosenbaum <i>et al.</i> (2015) ⁴³⁴	Intervention did not meet criteria

continued

TABLE 27 Studies excluded at full-text screening stage, with reasons for exclusion (*continued*)

Authors (year)	Reason for exclusion
Rothbaum (1997) ⁴³⁵	Population did not meet criteria
Rothbaum <i>et al.</i> (2001) ⁴³⁶	Study design did not meet criteria
Rothbaum <i>et al.</i> (2005) ⁴³⁷	Population did not meet criteria
Rothbaum <i>et al.</i> (2008) ⁴³⁸	Study design did not meet criteria
Rothbaum <i>et al.</i> (2014) ¹²⁹	Study design did not meet criteria
Ryan <i>et al.</i> (2005) ⁴³⁹	Intervention did not meet criteria
Sachsse <i>et al.</i> (2006) ⁴⁴⁰	Study design did not meet criteria
Sack <i>et al.</i> (2017) ⁴⁴¹	Outcomes did not meet criteria
Salloum <i>et al.</i> (2015) ⁴⁴²	Intervention did not meet criteria
Sautter <i>et al.</i> (2015) ⁴⁴³	Intervention did not meet criteria
Schaal <i>et al.</i> (2009) ⁴⁴⁴	Comparator did not meet criteria
Schnurr <i>et al.</i> (2003) ⁴⁴⁵	Population did not meet criteria
Schnurr <i>et al.</i> (2007) ⁴⁴⁶	Population did not meet criteria
Schnurr <i>et al.</i> (2009) ⁴⁴⁷	Outcomes did not meet criteria
Schnurr and Lunney (2015) ⁴⁴⁸	Study design did not meet criteria
Schnurr and Lunney (2016) ⁴⁴⁹	Study design did not meet criteria
Seppälä <i>et al.</i> (2014) ⁴⁵⁰	Intervention did not meet criteria
Sezgin and Punamäki (2008) ⁴⁵¹	Study design did not meet criteria
Shearing <i>et al.</i> (2011) ⁴⁵²	Population did not meet criteria
Short (2005) ⁴⁵³	Study design did not meet criteria
Silver <i>et al.</i> (1995) ⁴⁵⁴	Study design did not meet criteria
Skinhoj <i>et al.</i> (2001) ⁴⁵⁵	Study design did not meet criteria
Smith <i>et al.</i> (2012) ⁴⁵⁶	Study design did not meet criteria
Spence <i>et al.</i> (2014) ⁴⁵⁷	Population did not meet criteria
Spiegel <i>et al.</i> (2004) ⁴⁵⁸	Study design did not meet criteria
Stade <i>et al.</i> (2015) ⁴⁵⁹	Intervention did not meet criteria
Stalker and Fry (1999) ⁴⁶⁰	Study design did not meet criteria
Steil <i>et al.</i> (2011) ⁴⁶¹	Article is a conference abstract
Stein <i>et al.</i> (2006) ⁴⁶²	Study design did not meet criteria
Steinert <i>et al.</i> (2017) ⁴⁶³	Population did not meet criteria
Steuwe <i>et al.</i> (2016) ⁴⁶⁴	Study design did not meet criteria
Stovall-McClough and Cloitre (2003) ⁴⁶⁵	Study design did not meet criteria
Su <i>et al.</i> (2007) ⁴⁶⁶	Non-English language article
Sulejmanpasic-Arslanagic and Bise Srebrenka (2015) ⁴⁶⁷	Article is a conference abstract
Surís <i>et al.</i> (2010) ⁴⁶⁸	Intervention did not meet criteria
Surís <i>et al.</i> (2013) ⁴⁶⁹	Population did not meet criteria
Swanson <i>et al.</i> (2009) ⁴⁷⁰	Study design did not meet criteria
Taing <i>et al.</i> (2011) ⁴⁷¹	Article is a conference abstract

TABLE 27 Studies excluded at full-text screening stage, with reasons for exclusion (continued)

Authors (year)	Reason for exclusion
Talbot <i>et al.</i> (2011) ⁴⁷²	Population did not meet criteria
Talbot <i>et al.</i> (2014) ⁴⁷³	Population did not meet criteria
Tan <i>et al.</i> (2011) ⁴⁷⁴	Comparator did not meet criteria
Tarquinio <i>et al.</i> (2012) ⁴⁷⁵	Population did not meet criteria
TARRIER and Sommerfield (2004) ⁴⁷⁶	Population did not meet criteria
Thomaes <i>et al.</i> (2015) ⁴⁷⁷	Non-English language article
Thorp <i>et al.</i> (2012) ⁴⁷⁸	Study design did not meet criteria
Tourigny <i>et al.</i> (2005) ⁴⁷⁹	Non-English language article
Truijens and Van Emmerik (2014) ⁴⁸⁰	Population did not meet criteria
van den Berg and van der Gaag (2012) ⁴⁸¹	Population did not meet criteria
van der Kolk <i>et al.</i> (2007) ⁴⁸²	Population did not meet criteria
van Emmerik <i>et al.</i> (2008) ⁴⁸³	Population did not meet criteria
Vera <i>et al.</i> (2011) ⁴⁸⁴	Population did not meet criteria
Villarreal <i>et al.</i> (2007) ⁴⁸⁵	Study design did not meet criteria
Villarreal <i>et al.</i> (2010) ⁴⁸⁶	Study design did not meet criteria
Vitriol <i>et al.</i> (2009) ⁴⁸⁷	Intervention did not meet criteria
Weine <i>et al.</i> (2008) ⁴⁸⁸	Intervention did not meet criteria
Wells and Colbear (2012) ⁴⁸⁹	Population did not meet criteria
Westbury and Tutty (1999) ⁴⁹⁰	Intervention did not meet criteria
Wood <i>et al.</i> (2011) ⁴⁹¹	Study design did not meet criteria
Yeh <i>et al.</i> (2011) ⁴⁹²	Population did not meet criteria
Yehua (2003) ⁴⁹³	Study design did not meet criteria
Yehuda <i>et al.</i> (2015) ⁴⁹⁴	Population did not meet criteria
Yuen <i>et al.</i> (2015) ⁴⁹⁵	Comparator did not meet criteria
Ziemba (<i>et al.</i> 2014) ⁴⁹⁶	Comparator did not meet criteria
Zimmermann <i>et al.</i> (2005) ⁴⁹⁷	Non-English language article
Zimmermann <i>et al.</i> (2007) ⁴⁹⁸	Study design did not meet criteria
Zisook <i>et al.</i> (2000) ⁴⁹⁹	Study design did not meet criteria
Zlotnick <i>et al.</i> (2011) ⁵⁰⁰	Population did not meet criteria
Zoellner <i>et al.</i> (1999) ⁵⁰¹	Population did not meet criteria
Zohar <i>et al.</i> (2002) ¹⁴⁷	Duplicate article

Appendix 4 Characteristics of randomised controlled trials included

TABLE 28 Intervention characteristics for the randomised controlled studies included comparing psychological interventions

Authors (year)	Intervention(s)	Intervention category; superordinate category	Control(s)	Intensity (duration, frequency and length of sessions)	Delivery (method, setting and type of professional)
Acarturk <i>et al.</i> (2015) ⁵³	EMDR	EMDR; SCTF	Waitlist	Duration: NR Frequency: NR Length of sessions: seven sessions, 90 minutes each	Face to face; community/refugee camp; Turkish psychologists trained at level 1 EMDR, supervised by EMDR institute accredited trainer
Acarturk <i>et al.</i> (2016) ⁵⁴	EMDR	EMDR; SCTF	Waitlist	Duration: 5 weeks Frequency: NR Length of sessions: NR	Face to face/online; community/refugee camp; psychologists trained in EMDR
Adenauer <i>et al.</i> (2011) ⁵⁵	NET	TFCBT; SCTF	Waitlist	Duration: NR Frequency: weekly or biweekly Length of sessions: 12 sessions, average length 108 minutes (SD 17 minutes)	Face to face; setting NR; clinical psychologists
Azad Marzabadi and Hashemi Zadeh (2014) ⁵⁷	MBSR	Mindfulness; SCNTF	Waitlist/continued treatment	Duration: 4 weeks Frequency: twice a week Length of sessions: eight sessions, 90 minutes each	Face to face; hospital; psychologist
Bichescu <i>et al.</i> (2007) ⁶¹	NET	TFCBT; MCTF	Psychoeducation	Duration: 5 weeks Frequency: weekly or biweekly Length of sessions: 120 minutes	Face to face, individual; setting NR; trained PhD psychology student

Authors (year)	Intervention(s)	Intervention category; superordinate category	Control(s)	Intensity (duration, frequency and length of sessions)	Delivery (method, setting and type of professional)
Beidel <i>et al.</i> (2011) ⁶⁰	Trauma management therapy with exposure	TFCBT; MCTF		Duration: 17 weeks Frequency: exposure three times per week; social and emotional rehabilitation twice a week (2 weeks), weekly for 10 weeks Length of sessions: 14 sessions of exposure, length NR. Social and emotional rehabilitation 90 minutes	Face to face, individual and group; setting NR; doctoral-level therapists
	Exposure-only therapy	Exposure only		Duration: 17 weeks Frequency: three times per week Length of sessions: 14 sessions of exposure, 14 sessions of psychoeducation	
Bolton <i>et al.</i> (2014) ⁶²	Behavioural activation treatment for depression	NTFCBT; SCNTF	Waitlist	Duration: NR Frequency: NR Length of sessions: 12 sessions, length NR	Face to face, individual; primary health clinics and one outpatient clinic; community mental health workers (nurses, pharmacist assistants or physician assistants) with a mental health background
	CPT	TFCBT; SCTF		Duration: NR Frequency: NR Length of sessions: 12 sessions, length NR	
Buhmann <i>et al.</i> (2016) ⁶³	CBT	TFCBT; NA	Waitlist	Duration: 6 months Frequency: weekly Length of sessions: 16 sessions, length NR	Face to face; mental health clinic; doctors and therapists with mental health background

continued

TABLE 28 Intervention characteristics for the randomised controlled studies included comparing psychological interventions (continued)

Authors (year)	Intervention(s)	Intervention category; superordinate category	Control(s)	Intensity (duration, frequency and length of sessions)	Delivery (method, setting and type of professional)
Carlson <i>et al.</i> (1997) ⁶⁴	EMDR biofeedback relaxation	EMDR; SCTF	Waitlist	Duration: 6 weeks Frequency: twice a week Length of sessions: 12 sessions, 60–75 minutes each	Face to face, individual; clinic based; experienced therapists, EMDR trained therapists with research and clinical backgrounds
	Biofeedback relaxation	NFCBT; SCNTF		Duration: 6 weeks Frequency: twice a week Length of sessions: 12 sessions, 40 minutes each	Face to face, individual; clinic based; experienced therapists with behavioural, psychodynamic and biofeedback backgrounds
Chard (2005) ⁶⁶	CPT for sexual abuse survivors	TFCBT; MCTF	Waitlist	Duration: 17 weeks Frequency: weekly individual and group sessions Length of sessions: group sessions 90 minutes, individual sessions 60 minutes	Face to face, individual and group; Centre for Traumatic Stress Studies; graduate psychology students with background in behavioural interventions and mental health
Classen <i>et al.</i> (2001) ⁶⁸	Trauma-focused therapy	NA; NA (data were presented together)	Waitlist	Duration: 24 weeks Frequency: weekly Length of sessions: 90 minutes	Face to face, group; setting NR; experienced group leaders supervised by an expert in trauma (therapists included psychologists and one licensed MFCC)
	Present-centred therapy			Duration: 24 weeks Frequency: weekly Length of sessions: 90 minutes	

Authors (year)	Intervention(s)	Intervention category; superordinate category	Control(s)	Intensity (duration, frequency and length of sessions)	Delivery (method, setting and type of professional)
Cloitre <i>et al.</i> (2002) ⁶⁹	STAIR-modified PE	DBT; MCTF	Minimal attention waitlist and support/exposure	Duration: 12 weeks Frequency: weekly STAIR/twice weekly modified PE Length of sessions: 16 sessions, STAIR 60 minutes, modified PE 90 minutes	Face to face, individual; setting NR; clinical psychologist
	STAIR/exposure	DBT; MCTF		Duration: 16 weeks Frequency: weekly Length of sessions: NR	Face to face, individual; setting NR; master's/doctorate psychologist/social work staff/expert clinicians with mental health backgrounds
	STAIR/support	DBT; MCNTF		Duration: 16 weeks Frequency: weekly Length of sessions: NR	Face to face, individual; setting NR; master's/doctorate psychologist/social work staff/expert clinicians with mental health backgrounds
Cook <i>et al.</i> (2010) ⁷¹	Imagery rehearsal therapy	TFCBT; MCTF		Duration: 6 weeks Frequency: weekly Length of sessions: 90 minutes	Face to face, group; setting NR; psychologists and psychiatric nurse
	Sleep and nightmare management			Duration: 6 weeks Frequency: weekly Length of sessions: 90 minutes	

continued

TABLE 28 Intervention characteristics for the randomised controlled studies included comparing psychological interventions (continued)

Authors (year)	Intervention(s)	Intervention category; superordinate category	Control(s)	Intensity (duration, frequency and length of sessions)	Delivery (method, setting and type of professional)
Devilley <i>et al.</i> (1998) ⁷⁴	EMDR	EMDR; SCTF	Standard psychiatric support	Duration: NR Frequency: NR Length of sessions: two sessions, 90 minutes	Face to face, individual; setting NR; active clinician trained by Shapiro ⁵⁰²
	Reactive eye dilatation desensitisation and reprocessing	EMDR; SCTF		Duration: NR Frequency: NR Length of sessions: two sessions, 90 minutes	
Edmond <i>et al.</i> (1999) ⁷⁶	EMDR	EMDR; SCTF	Delayed treatment	Duration: 6 weeks Frequency: weekly Length of sessions: 90 minutes	Face to face; setting NR; white female master's-level therapists
	Routine individual treatment			Duration: 6 weeks Frequency: weekly Length of sessions: 90 minutes	
Engel <i>et al.</i> (2015) ⁷⁸	Delivery of self training and education for stressful situations (DESTRESS-PC)	NTFCBT; SCNTF	Optimised usual care	Duration: 6 weeks Frequency: three times per week Length of sessions: 18 sessions, log in 15–30 minutes, homework 30 minutes	Computer/telephone; remote setting; online/nurse support
Feske (2008) ⁷⁹	PE	TFCBT; SCTF	Treatment as usual	Duration: 12 weeks Frequency: weekly Length of sessions: 9–12 total sessions, PE 90 minutes, treatment as usual 60 minutes	Face to face, individual (individual and group for controls); community clinic setting; trained master's-level social workers and a nurse with a mental health background

Authors (year)	Intervention(s)	Intervention category; superordinate category	Control(s)	Intensity (duration, frequency and length of sessions)	Delivery (method, setting and type of professional)
Franklin <i>et al.</i> (2017) ⁸¹	PE by iPhone (Apple Inc., Cupertino, CA, USA)	TFCBT; SCTF	Treatment as usual	Duration: 10 weeks Frequency: 10 sessions within 12 weeks Length of sessions: NR	iPhone-based video chat; teleconference at community VA centre; psychologists
	PE by computer-based teleconferencing	TFCBT; SCTF	Treatment as usual	Duration: 10 weeks Frequency: 10 sessions within 12 weeks Length of sessions: NR	Computer-based teleconference; teleconference at community VA centre; psychologists
Gamito <i>et al.</i> (2010) ⁸³	Virtual reality exposure therapy	TFCBT; SCTF	Waitlist	Duration: NR Frequency: NR Length of sessions: 12 sessions, length NR	Face to face, individual; setting NR; professional NR
	Exposure in imagination	TFCBT; SCTF		Duration: NR Frequency: NR Length of sessions: 12 sessions, length NR	Computer-based teleconference; teleconference at community VA centre; psychologists
Germain <i>et al.</i> (2012) ⁸⁴	Behavioural sleep intervention	TFCBT; MCTF	Placebo	Duration: 8 weeks Frequency: weekly Length of sessions: eight sessions, 45 minutes each	Face to face; setting NR; master's-level therapist with mental health background
Hermenau <i>et al.</i> (2013) ⁸⁶	NET for forensic offender rehabilitation (FORNET)	TFCBT; SCTF	No intervention	Duration: 2 weeks Frequency: approximately every other day Length of sessions: 1–2 hours	Face to face (individual and group); non-governmental organisation reintegration centre for war-affected young people; therapists with a mental health background

continued

TABLE 28 Intervention characteristics for the randomised controlled studies included comparing psychological interventions (continued)

Authors (year)	Intervention(s)	Intervention category; superordinate category	Control(s)	Intensity (duration, frequency and length of sessions)	Delivery (method, setting and type of professional)
Hijazi <i>et al.</i> (2014) ⁸⁷	Brief NET	TFCBT; SCTF	Waitlist	Duration: 3 weeks Frequency: weekly Length of sessions: 60–90 minutes	Face to face; private room setting according to participant preference (e.g. own home, church, community centre); therapists trained by a licensed psychologist with expertise in exposure therapies
Himmerich <i>et al.</i> (2016) ⁸⁸	Inpatient psychotherapy	EMDR; MCNTF	Outpatient clinical management	Duration: 6 weeks Frequency: NR Length of sessions: inpatient	Face to face; hospital; professionals NR, but with mental health background
Hinton <i>et al.</i> (2004) ⁹⁰	CBT	TFCBT; SCTF	Delayed treatment	Duration: 11 weeks Frequency: weekly Length of sessions: NR	Face to face, individual; setting NR; trained CBT therapist with cultural facilitators
Hinton <i>et al.</i> (2005) ⁸⁹	CBT	TFCBT; SCTF	Delayed treatment	Duration: 12 weeks Frequency: weekly Length of sessions: NR	Face to face, individual; setting NR; psychiatrist
Jensen (1994) ⁹¹	EMDR	EMDR; SCTF	Treatment as usual with option of delayed EMDR	Duration: NR Frequency: NR Length of sessions: NR	Face to face; setting NR; trained therapist with mental health background
Jung and Steil (2013) ⁹²	Cognitive restructuring and imagery modification	TFCBT; MCTF	Waitlist	Duration: NR Frequency: NR Length of sessions: two sessions, treatment 90 minutes, booster 50 minutes	Face to face/use of internet; specialist PTSD outpatient centres; one at university and two at large psychiatric hospitals; therapist supervised by senior therapist (both authors)

Authors (year)	Intervention(s)	Intervention category; superordinate category	Control(s)	Intensity (duration, frequency and length of sessions)	Delivery (method, setting and type of professional)
Katz <i>et al.</i> (2014) ⁹³	Holographic reprocessing	Other psychotherapy; MCNTF	Person-centred control	Duration: 10 weeks Frequency: weekly Length of sessions: NR	Face to face, individual; setting NR; psychologist, clinical social workers, psychology post-docs, marriage and family therapist trainees and psychiatry residents, with mental health backgrounds
	PE	TFCBT; SCTF	Waitlist		Face to face/use of internet; specialist PTSD outpatient centres; one at university and two at large psychiatric hospitals; therapist supervised by senior therapist (both authors)
Keane <i>et al.</i> (1989) ⁹⁴	Implosive (flooding) therapy	TFCBT; SCTF	Waitlist	Duration: NR Frequency: NR Length of sessions: 14 sessions (plus an additional two sessions if deemed appropriate by therapist), 90 minutes	Face to face (individual); VA medical centre; therapist with mental health background
Kearney <i>et al.</i> (2013) ⁹⁵	MBSR and treatment as usual	Mindfulness; SCNTF	Treatment as usual	Duration: 8 weeks Frequency: weekly Length of sessions: 2.5 hours (plus 7-hour retreat)	Face to face (group); VA medical centre; professional instructors with mental health backgrounds
King <i>et al.</i> (2013) ¹⁴⁸	Mindfulness-based cognitive therapy group		Treatment as usual (PTSD psychoeducation and skills group or imagery rehearsal therapy group)	Duration: 8 weeks Frequency: weekly Length of sessions: 8 hours	Face to face (group); PTSD outpatient clinic (for veterans); therapists with a mental health background, including clinical psychologists
Knaevelsrud <i>et al.</i> (2015) ⁹⁶	Internet-based CBT	TFCBT; SCTF	Waitlist	Duration: 5 weeks Frequency: twice a week Length of sessions: not fixed	Computer; remote (web-based) setting; psychotherapists or psychiatrists

continued

TABLE 28 Intervention characteristics for the randomised controlled studies included comparing psychological interventions (continued)

Authors (year)	Intervention(s)	Intervention category; superordinate category	Control(s)	Intensity (duration, frequency and length of sessions)	Delivery (method, setting and type of professional)
Krupnick <i>et al.</i> (2008) ⁹⁸	IPT	IPT; SCNTF	Waitlist	Duration: 16 weeks Frequency: weekly Length of sessions: 2 hours	Face to face, group; setting NR; clinical psychologists
Kubany <i>et al.</i> (2004) ¹⁰⁰	Cognitive trauma therapy for battered women	TFCBT; MCTF	Waitlist	Duration: 4 weeks Frequency: NR Length of sessions: 1.5 hours, 8.5 mean total sessions	Face to face (individual); setting NR; therapist
Kubany <i>et al.</i> (2004) ¹⁰¹	Cognitive trauma therapy for battered women	TFCBT; MCTF	Delayed treatment	Duration: 4–6 weeks Frequency: twice a week Length of sessions: 60 minutes, 8–11 total sessions	Face to face, individual; setting NR; professionals included clinical psychologist, advanced degree nurses, master's in counselling psychology, victim witness advocate, baccalaureate degree and several years of experience in domestic violence counselling
Lande <i>et al.</i> (2010) ¹⁰²	Biofeedback and treatment as usual	Biofeedback; NA	Treatment as usual	Duration: 3 weeks Frequency: twice a week Length of sessions: 20 minutes	Face to face (individual) via computer; specialist psychiatric outpatient clinic; computer, professional NR
Lau and Kristensen (2007) ¹⁰³	Analytic group psychotherapy Systemic group psychotherapy	Other psychotherapy; MCNTF Other psychotherapy; MCNTF	Treatment as usual	Duration: 52 weeks Frequency: weekly Length of sessions: 2.25 hours	Face to face (group); outpatient mental health services; therapists with a mental health background
Margolies <i>et al.</i> (2011) ¹⁰⁵	CBT for insomnia with imagery rehearsal therapy	TFCBT; MCTF	Minimal attention waitlist and waitlist	Duration: 8 weeks Frequency: NR Length of sessions: 60 minutes; four individual sessions, with break between second and third sessions	Face to face, individual; VA medical centre; clinical psychologist

Authors (year)	Intervention(s)	Intervention category; superordinate category	Control(s)	Intensity (duration, frequency and length of sessions)	Delivery (method, setting and type of professional)
McDonagh <i>et al.</i> (2005) ¹⁰⁶	CBT	TFCBT; SCTF	Minimal attention waitlist	Duration: 14 weeks Frequency: weekly Length of sessions: 2 hours for first seven sessions, 1.5 hours for final seven sessions	Face to face, individual; setting NR; psychologists and master's-level clinical social workers
	Present-centred therapy	Other psychotherapy; MCNTF		Duration: 14 weeks Frequency: weekly Length of sessions: 2 hours for first seven sessions, 1.5 hours for final seven sessions	
McLay <i>et al.</i> (2011) ¹⁰⁷	Virtual reality graded exposure therapy	TFCBT; SCTF	Waitlist	Duration: 10 weeks Frequency: up to twice a week, closer to weekly Length of sessions: NR	Face to face, individual; navy medical facilities; psychologist
Meffert <i>et al.</i> (2014) ¹⁰⁸	IPT	IPT; SCNTF	Waitlist	Duration: 3 weeks Frequency: twice a week Length of sessions: NR	Face to face; private rooms of community-based support organisation; members of Sudanese community without mental health background
Miyahira <i>et al.</i> (2012) ¹⁰⁹	Add-on virtual reality exposure	TFCBT; SCTF	Minimal attention	Duration: 5 weeks Frequency: twice a week Length of sessions: NR	Face to face; setting NR; therapist with training on manualised CBT treatment protocol with virtual reality exposure
Moradi <i>et al.</i> (2014) ¹¹¹	Memory specificity training	NTFCBT; SCNTF	Treatment as usual	Duration: 4 consecutive weeks Frequency: weekly Length of sessions: four sessions, one hour	Face to face/group/individual; specialist military hospital; clinical psychologist

continued

TABLE 28 Intervention characteristics for the randomised controlled studies included comparing psychological interventions (continued)

Authors (year)	Intervention(s)	Intervention category; superordinate category	Control(s)	Intensity (duration, frequency and length of sessions)	Delivery (method, setting and type of professional)
Neuner <i>et al.</i> (2008) ¹¹³	NET	TFCBT; SCTF	Monitoring	Duration: 3 weeks Frequency: twice a week Length of sessions: 2 hours	Face to face; setting NR; lay counsellors without mental health background
	Trauma counselling	TFCBT; SCTF		Duration: 3 weeks Frequency: twice a week Length of sessions: 2 hours	
Neuner <i>et al.</i> (2004) ¹¹⁴	NET	TFCBT; SCTF	Psychoeducation	Duration: 3 weeks Frequency: four sessions in 3 weeks Length of sessions: 90 minutes (up to 120 minutes in exceptional circumstances)	Face to face (individual); setting NR; doctoral-level psychologists or graduate students with experience in other therapies (e.g. counselling)
	Supportive counselling	TFCBT; SCTF		Duration: 3 weeks Frequency: four sessions in 3 weeks Length of sessions: 90 minutes (up to 120 minutes in exceptional circumstances)	
Niles <i>et al.</i> (2012) ¹¹⁵	Mindfulness	Mindfulness; SCNTF	Psychoeducation	Duration: 8 weeks Frequency: weekly Length of sessions: 45 minutes in-person sessions, 20 minutes telephone sessions	Remotely (individual); mostly home-based; two female clinicians with PhDs in clinical psychology served as therapists
Owens <i>et al.</i> (2001) ¹¹⁷	CPT for sexual abuse	TFCBT; SCTF	Minimal attention	Duration: 17 weeks Frequency: NR Length of sessions: NR	Face to face, individual and group; setting NR; professionals NR

Authors (year)	Intervention(s)	Intervention category; superordinate category	Control(s)	Intensity (duration, frequency and length of sessions)	Delivery (method, setting and type of professional)
Paunovic and Ost (2001) ¹¹⁹	CBT	TFCBT; SCTF	Minimal attention	Duration: 4–5 months Frequency: weekly Length of sessions: NR	Face to face, individual; setting NR; clinical psychology doctoral student
	Exposure-only therapy	Exposure only; SCTF		Duration: 4–5 months Frequency: weekly Length of sessions: 20 minutes	
Polusny <i>et al.</i> (2015) ¹²⁰	MBSR	Mindfulness; SCNTF		Duration: 9 weeks Frequency: weekly Length of sessions: 2.5 hours	Face to face, group; VA medical centre; instructors and doctoral-level clinicians
	Present-centred therapy	Other psychotherapy; SCNTF		Duration: 9 weeks Frequency: weekly Length of sessions: 1.5 hours	
Possemato <i>et al.</i> (2016) ¹²¹	Primary care brief mindfulness training	Mindfulness; SCNTF	Primary care treatment as usual	Duration: 4 weeks Frequency: weekly Length of sessions: 1.5 hours	Face to face individual/group; VA medical centre; physicians expert in MBSR practitioners and certified instructors

continued

TABLE 28 Intervention characteristics for the randomised controlled studies included comparing psychological interventions (continued)

Authors (year)	Intervention(s)	Intervention category; superordinate category	Control(s)	Intensity (duration, frequency and length of sessions)	Delivery (method, setting and type of professional)
Ready <i>et al.</i> (2010) ¹²⁴	Virtual reality exposure	TFCBT; SCTF		Duration: NR Frequency: NR Length of sessions: 90 minutes, 10 sessions	Face to face, individual; setting NR; professional NR
	Present-centred therapy	Other psychotherapy; SCNTF		Duration: NR Frequency: NR Length of sessions: 90 minutes, 10 sessions	
Reed and Enright (2006) ¹²⁵	Forgiveness therapy	Other psychotherapy; SCNTF	Alternative therapy	Duration: 5–12 months Frequency: weekly Length of sessions: 1 hour, average duration 7.95 months	Face to face, individual; setting NR; trained psychiatric nurse
Reger <i>et al.</i> (2016) ¹²⁶	Virtual reality exposure	TFCBT; SCTF	Waitlist	Duration: 5 weeks Frequency: weekly or twice weekly Length of sessions: 1.5–2 hours, 10 sessions in total	Face to face (individual); army military installation; doctoral-level clinicians
	PE	TCBT; SCTF		Duration: 5 weeks Frequency: weekly or twice weekly Length of sessions: 1.5–2 hours, 10 sessions in total	

Authors (year)	Intervention(s)	Intervention category; superordinate category	Control(s)	Intensity (duration, frequency and length of sessions)	Delivery (method, setting and type of professional)
Resick <i>et al.</i> (2015) ¹²⁸	CPT – cognitive-only version	TFCBT; SCTF		Duration: NR Frequency: twice a week Length of sessions: 90 minutes, 12 sessions in total	Face to face, group; setting NR; civilian therapists with mental health background
	Present-centred therapy	Other psychotherapy; SCNTF		Duration: NR Frequency: twice a week Length of sessions: 90 minutes, 12 sessions in total	
Rogers <i>et al.</i> (1999) ¹³⁰	EMDR	EMDR; SCTF		Duration: one session Frequency: once Length of sessions: 60–90 minutes	Face to face, individual; setting NR; trained therapist with mental health background
	Exposure (implosive flooding)	Exposure only; SCTF		Duration: one session Frequency: once Length of sessions: 60–90 minutes	
Sikkema <i>et al.</i> (2007) ¹³¹	HIV and trauma coping group	NTFCBT; SCNTF	Waitlist	Duration: 15 weeks Frequency: weekly Length of sessions: 90 minutes	Face to face; community clinics; clinical psychologists/clinical social workers
	Support group	NTFCBT; SCNTF		Duration: 15 weeks Frequency: weekly Length of sessions: 90 minutes	

continued

TABLE 28 Intervention characteristics for the randomised controlled studies included comparing psychological interventions (continued)

Authors (year)	Intervention(s)	Intervention category; superordinate category	Control(s)	Intensity (duration, frequency and length of sessions)	Delivery (method, setting and type of professional)
Sikkema <i>et al.</i> (2013) ¹³²	Coping skills programme	NTFCBT; SCNTF	HIV support group	Duration: 15 weeks Frequency: weekly Length of sessions: 90 minutes	Face to face (group); community health centre; therapists with a mental health background
Stenmark <i>et al.</i> (2013) ¹³⁶	NET	TFCBT; SCTF	Treatment as usual	Duration: 10 weeks Frequency: weekly Length of sessions: 90 minutes	Face to face, individual; setting NR; professionals included psychologists, psychiatrists, psychiatric nurses, occupational therapists, drama therapists, clinical social workers
Teng <i>et al.</i> (2008) ¹³⁷	Panic control treatment	NTFCBT; SCNTF	Psychoeducational supportive treatment (PE-SUP)	Duration: 10 weeks Frequency: weekly Length of sessions: 1 hour	Face to face (individual); VA hospital; master's-level clinicians
Ter Heide <i>et al.</i> (2011) ¹³⁸	EMDR	EMDR; SCTF		Duration: 11 weeks Frequency: weekly Length of sessions: 90 minutes (60 minutes dedicated to EMDR)	Face to face, individual; centre for psychotrauma; psychotherapists, psychiatrist, health-care psychologists
	Stabilisation	EMDR; SCNTF		Duration: 11 weeks Frequency: weekly Length of sessions: 60 minutes	Face to face, individual; centre for psychotrauma; clinical psychologist, physician/psychotherapist, physician, social-psychiatric nurses
Ter Heide <i>et al.</i> (2016) ¹³⁹	EMDR	EMDR; SCTF		Duration: 9 weeks Frequency: NR Length of sessions: 12 hours overall	Face to face (individual); treatment centre for CPTSD; clinical psychologists and psychotherapists
	Stabilisation as usual	Stabilisation; SCNTF		Duration: 9 weeks Frequency: NR Length of sessions: 12 hours overall	

Authors (year)	Intervention(s)	Intervention category; superordinate category	Control(s)	Intensity (duration, frequency and length of sessions)	Delivery (method, setting and type of professional)
Ulmer <i>et al.</i> (2011) ¹⁴⁰	Sleep intervention for PTSD	TFCBT; MCTF	Usual care	Duration: 12 weeks Frequency: fortnightly Length of sessions: 1 hour	Face to face, individual; setting NR; clinical psychologist
Wahbeh <i>et al.</i> (2016) ¹⁴²	Mindfulness meditation	Mindfulness; SCNTF	Sitting quietly	Duration: 6 weeks Frequency: weekly Length of sessions: 20 minutes	Face to face and remote, individual; setting NR; research assistant
	Slow breathing with biofeedback device (mindfulness meditation and slow breathing)	Biofeedback; SCNTF		Duration: 6 weeks Frequency: weekly Length of sessions: 20 minutes	
	Slow breathing	Other psychological intervention; SCNTF		Duration: 6 weeks Frequency: weekly Length of sessions: 20 minutes	
Wang <i>et al.</i> (2016) ¹⁴³	Biofeedback-supported CBT and group therapy (physiotherapy and exercises)	TFCBT; MCTF	Waitlist	Duration: 10 weeks Frequency: twice a week Length of sessions: group sessions 60–90 minutes, individual sessions 90 minutes (60 minutes for CBT intervention, 15- to 20-minute period of breathing training using a biofeedback device, 10–15 minutes for reviewing and note taking)	Face to face (individual and group); rehabilitation centre (for torture victims); therapists and physiotherapists with mental health backgrounds

continued

TABLE 28 Intervention characteristics for the randomised controlled studies included comparing psychological interventions (continued)

Authors (year)	Intervention(s)	Intervention category; superordinate category	Control(s)	Intensity (duration, frequency and length of sessions)	Delivery (method, setting and type of professional)
Weiss <i>et al.</i> (2015), trial 1: CETA ¹⁴⁴	CETA	TFCBT; MCTF	Waitlist	Duration: 8–12 weeks Frequency: weekly Length of sessions: 50–60 minutes, 8–12 sessions in total	Face to face, individual; community; community mental health workers
Weiss <i>et al.</i> (2015), trial 2: CPT ¹⁴⁴	CPT	TFCBT; SCTF	Waitlist	Duration: 12 weeks Frequency: weekly Length of sessions: NR	Face to face, individual; community; community mental health workers
Yeomans <i>et al.</i> (2010) ¹⁴⁵	Workshop with psychoeducation	Other psychotherapy; MCTF	Waitlist	Duration: 4 days Frequency: 3 consecutive days and 1-month follow-up Length of sessions: day long	Face to face, group; community; local facilitators without a mental health background
	Workshop without psychoeducation	Other psychotherapy; SCTF		Duration: 4 days Frequency: 3 consecutive days and 1-month follow-up Length of sessions: day long	
Zlotnick <i>et al.</i> (1997) ¹⁴⁶	Affect management		Waitlist	Duration: 15 weeks Frequency: weekly Length of sessions: 2 hours	Face to face (group); setting NR; therapist with mental health background

CETA, common elements treatment approach; CPT, cognitive processing therapy; MCTF, multicomponent trauma-focused; MCNTF, multicomponent non-trauma-focused; MFCC, Marriage, Family and Child Counsellor; NTFCBT, non-trauma-focused CBT; PE, prolonged exposure; SCNTF, single-component non-trauma-focused; SCTF, single-component trauma-focused; TFCBT, trauma-focused CBT; VA, veterans' affairs.

TABLE 29 Intervention characteristics for randomised controlled studies included comparing pharmacological interventions

Author (year)	Intervention(s)	Intervention category	Control(s)	Intensity (duration, frequency and dose)
Rezaei Ardani <i>et al.</i> (2017) ⁵⁶	Rivastigmine augmented therapy	Rivastigmine	Placebo (in combination with citalopram and sodium valproate)	Rivastigmine augmented therapy of citalopram and sodium valproate Duration: 12 weeks
			No intervention	Frequency: twice a day Dose: Weeks 1–4 1.5 mg twice a day, Week 5 3 mg twice a day in addition to citalopram 40 mg/day and sodium valproate 20 mg/kg/day
Bartzokis <i>et al.</i> (2005) ⁵⁸	Risperidone	Antipsychotic	Placebo	First 4 weeks delivered in conjunction with an inpatient psychosocial programme. The remainder of the intervention was delivered as an outpatient programme. Duration: 16 weeks Frequency: NR Dose: initiated at 1 mg, increased to 3 mg bedtime dose (over 2 weeks); maintained at 3 mg
Becker <i>et al.</i> (2007) ⁵⁹	Bupropion SR	Antidepressant	Placebo	Duration: 8 weeks Frequency: once or twice a day Dose: 100 mg/day for 2 weeks. Dose increased to 100 mg twice a day as indicated. No significant improvement at 4 weeks resulted in a maximum dose of 150 mg twice a day
Celik <i>et al.</i> (2011) ⁶⁵	Paroxetine	SSRI/antidepressant		Duration: 8 weeks Frequency: once a day Dose: initiated at 10 mg/day for Week 1, then increased to 20 mg for Weeks 2 and 3, 30 mg for Weeks 4 and 5, 40 mg for Weeks 6 and 7 and 60 mg for Weeks 8–12 (if tolerated/clinically indicated)
	Amitriptyline	Antidepressant		Duration: 8 weeks Frequency: once a day Dose: initiated at 75 mg/day for Weeks 1–3 (initial dose of 25 mg for Days 1–3, 50 mg for Days 4–7 and 75 mg for Days 8–21), then increased to 100 mg from Week 4 (as necessary) and up to 200 mg or down to 75 mg from Week 5 (as necessary)

continued

TABLE 29 Intervention characteristics for randomised controlled studies included comparing pharmacological interventions (continued)

Author (year)	Intervention(s)	Intervention category	Control(s)	Intensity (duration, frequency and dose)
Chung <i>et al.</i> (2004) ⁶⁷	Mirtazapine	Antidepressant		Duration: 6 weeks Frequency: daily Dose: initiated at mean dose of 19.1 ± 8.53 mg/day, Weeks 1–2 31.5 ± 9.13 mg/day, Weeks 2–6 38.5 ± 12.10 mg/day
	Sertraline	SSRI/antidepressant		Duration: 6 weeks Frequency: daily Dose: initiated at 58.2 ± 24.15 mg/day, Weeks 1–2 89.8 ± 23.89 mg/day and Weeks 2–6 115.3 ± 36.02 mg/day Mean daily dose: mirtazapine 34.1 mg, sertraline 101.5 mg
Davis <i>et al.</i> (2004) ⁷³	Nefazodone	Antidepressant	Placebo	Duration: 12 weeks Frequency: twice a day Dose: initiated at 100 mg, increased by 100 mg every 4 days as tolerated, up to a maximum benefit (not exceeding 600mg/day)
Davis <i>et al.</i> (2008) ⁷²	Divalproex	Anticonvulsant	Placebo	Duration: 8 weeks Frequency: twice a day Dose: initiated at 500 mg twice a day, increased by 500 mg as tolerated to a maximum of 3000 mg/day
Friedman <i>et al.</i> (2007) ⁸²	Sertraline	SSRI/antidepressant	Placebo	Duration: 12 weeks Frequency: daily Dose: initiated at 25 mg/day, Week 2 increased dose to 50 mg/day where dose-limiting adverse events did not present. Subjects who failed to respond received titrated weekly increment of 50 mg up to a maximum of 200 mg/day
Germain <i>et al.</i> (2012) ⁸⁴	Prazosin	Prazosin	Placebo	Duration: 8 weeks Frequency: daily Dose/length of sessions: initiated at 1 mg, increasing over the following weeks to 2 mg, 4 mg, 6 mg, 10 mg and 15 mg. Final mean dose 8.9 mg

TABLE 29 Intervention characteristics for randomised controlled studies included comparing pharmacological interventions (continued)

Author (year)	Intervention(s)	Intervention category	Control(s)	Intensity (duration, frequency and dose)
Hamner <i>et al.</i> (2003) ⁸⁵	Adjunctive risperidone	Antipsychotic	Placebo	Risperidone added to regimen of antidepressant treatment (fluoxetine, nefazadone, paroxetine, sertraline, bupropion) Duration: 5 weeks Frequency: daily Dose: initiated at 1 mg/day, increased to a maximum of 6 mg/day
Krystal <i>et al.</i> (2011) ⁹⁹	Adjunctive risperidone	Antipsychotic	Placebo	Adjunctive risperidone with ongoing pharmacotherapy Duration: 24 weeks Frequency: daily Dose: initiated at 1 mg at night. Increased by 1 mg/week to 3 mg. After 4 weeks, a further 1 mg increase could be made if tolerated and clinically indicated
Lindley <i>et al.</i> (2007) ¹⁰⁴	Topiramate	Anticonvulsant	Placebo	Duration: 7 weeks Frequency: daily Dose: initiated at 25 mg, increased by 50 mg each week until maximum toleration or 200 mg/day
Monnelly <i>et al.</i> (2003) ¹¹⁰	Risperidone	Antipsychotic	Placebo	Duration: 6 weeks Frequency: daily Dose: initiated at 0.5 mg, increased fortnightly to maximum 2 mg/day
Naylor <i>et al.</i> (2013) ¹¹²	Paroxetine	SSRI/antidepressant	Placebo	Duration: 12 weeks Frequency: daily Dose: flexible dosing 10–40 mg/day depending on tolerance and response
Otto <i>et al.</i> (2003) ¹¹⁶	Sertraline	SSRI/antidepressant	Compared with SSRI/antidepressant with TFCBT; see Table 30	Duration: NR Frequency: daily Dose/length of sessions: sertraline initiated at 25 mg, titrated 50 mg each week to maximum 200 mg. Mean final dose 125 mg/day
Panahi <i>et al.</i> (2011) ¹¹⁸	Sertraline	SSRI/antidepressant	Placebo	Duration: 10 weeks Frequency: daily Dose: initiated at 50 mg/day, flexible adjustment fortnightly to a maximum of 200 mg/day

continued

TABLE 29 Intervention characteristics for randomised controlled studies included comparing pharmacological interventions (*continued*)

Author (year)	Intervention(s)	Intervention category	Control(s)	Intensity (duration, frequency and dose)
Raskind <i>et al.</i> (2007) ¹²²	Prazosin	Prazosin	Placebo	Duration: 8 weeks Frequency: daily Dose: initiated at 1 mg/nightly for 3 days. Days 3–7 increased to 2 mg/day based on response. Persistence of traumatic nightmares increased dose to 2 mg per week up to 10 mg/day at Day 28. Persistent lack of response allowed additional 5 mg to a maximum of 15 mg/day. Mean daily dose of prazosin was 13 (3) mg and of placebo capsules was 14 (2) mg
Raskind <i>et al.</i> (2013) ¹²³	Prazosin	Prazosin	Placebo	Duration: 15 weeks Frequency: once or twice daily Dose: titrated 1–2 mg/day, depending on gender. Week 2: males (AM 1 mg, PM 4 mg), females (AM 1 mg, PM 2 mg); Week 3: males (AM 2 mg, PM 6 mg), females (AM 1 mg, PM 2 mg); Week 4: males (AM 2 mg, PM 10 mg), females (AM 2 mg, PM 6 mg); Week 5: males (AM 5 mg, PM 15 mg), females (AM 2 mg, PM 10 mg); Week 6: males (AM 5 mg, PM 20 mg), females (AM 2 mg, PM 10 mg)
Reich <i>et al.</i> (2004) ¹²⁷	Risperidone	Antipsychotic	Placebo	Duration: 8 weeks Frequency: daily (can be divided into two or three doses) Dose: initiated at 0.5 mg/day, increased to 1 mg/day at 3 days, then increased by 1 mg/day for 1 week up to target dose of 4 mg/day until symptom relief reported. Dosage increased to maximum of 8 mg/day if lack of response by Week 5
Smajkic <i>et al.</i> (2001) ¹³³	Paroxetine	SSRI/antidepressant		Duration: 6 weeks Frequency: daily Dose: 20 mg once daily for 14 days then, if tolerated at 2 weeks, the dosage was continued
	Sertraline	SSRI/antidepressant		Duration: 6 weeks Frequency: daily Dose: 50 mg once daily for 14 days then, if tolerated at 2 weeks, 100 mg once daily
	Venlafaxine	Antidepressant		Duration: 6 weeks Frequency: twice a day Dose: 37.5 mg twice daily for 14 days then, if tolerated at 2 weeks, 75 mg twice daily

TABLE 29 Intervention characteristics for randomised controlled studies included comparing pharmacological interventions (*continued*)

Author (year)	Intervention(s)	Intervention category	Control(s)	Intensity (duration, frequency and dose)
Stein <i>et al.</i> (2002) ¹³⁵	Adjunctive olanzapine	Antipsychotic	Placebo	Adjunctive olanzapine for subjects minimally responsive to SSRIs at maximally tolerated doses Duration: 8 weeks Frequency: daily Dose: initiated at 10 mg, increased to 20 mg after 2 weeks if clinically indicated and tolerated
van der Kolk <i>et al.</i> (1994) ¹⁴¹	Fluoxetine	SSRI/antidepressant	Placebo	Duration: 5 weeks Frequency: daily Dose: initiated at 20 mg/day, increased weekly to a maximum of 60 mg
Zohar <i>et al.</i> (2002) ¹⁴⁷	Sertraline	SSRI/antidepressant	Placebo	Duration: 10 weeks Frequency: daily Dose: initiated at 50 mg/day, flexible titration in 50 mg increments fortnightly up to a maximum of 200 mg

TABLE 30 Intervention characteristics for randomised controlled studies included comparing combined psychological and pharmacological interventions

Authors (year)	Intervention(s)	Intervention categories	Control(s)	Intensity (duration, frequency and strength of dose/length of sessions)	Delivery (method, setting and type of professional)
Buhmann <i>et al.</i> (2016) ⁶³	Sertraline, psychoeducation and CBT	SSRI/antidepressant and TFCBT	Waitlist	Duration: 6 months Frequency: psychoeducation and CBT weekly, sertraline daily Dose/length of sessions: 10 consultations and 16 sessions of CBT Sertraline increased by 25–50 mg to a maximum dose of 200 mg. Mianserin given at 10–30 mg, titrated weekly by 10 mg	Face to face; mental health clinic; doctors and therapists with mental health background
	Sertraline and psychoeducation	SSRI/antidepressant and other psychotherapy		Duration: 6 months Frequency: psychoeducation weekly, sertraline daily Dose/length of sessions: 10 sessions of psychoeducation, length NR	
Francišковиć <i>et al.</i> (2011) ⁶⁰	Tianeptine and group therapy	Antidepressant and other psychotherapy		Duration: 6 months Frequency: group therapy twice weekly, tianeptine daily Dose/length of sessions: 37.5 mg/day, NR for group therapy	Face to face; setting NR; psychiatrist and psychologist with mental health backgrounds Drugs prescribed by physician
	Fluoxetine and group therapy	SSRI/antidepressant and other psychotherapy		Duration: 6 months Frequency: group therapy twice weekly, fluoxetine daily Dose/length of sessions: 40 mg/day, NR for group therapy	

Authors (year)	Intervention(s)	Intervention categories	Control(s)	Intensity (duration, frequency and strength of dose/length of sessions)	Delivery (method, setting and type of professional)
Kosten <i>et al.</i> (1992) ⁹⁷	Phenelzine and psychotherapy	Antidepressant and TFCBT	Placebo and psychotherapy	Duration: NR Frequency: psychotherapy weekly, imipramine daily Dose/length of sessions: dose of drug and length of sessions NR. Mean maximal dose 68 ± 20 mg	Face to face; setting NR; master's-level psychologist with mental health background. Drug delivery NR
	Imipramine and psychotherapy	Antidepressant and TFCBT		Duration: NR Frequency: psychotherapy weekly, imipramine daily Dose/length of sessions: dose of drug and length of sessions NR. Mean maximal dose 225 ± 55 mg	
Otto <i>et al.</i> (2003) ¹¹⁶	CBT and sertraline	SSRI/antidepressant and TFCBT	Compared with SSRI/antidepressant; see <i>Table 29</i>	Duration: NR Frequency: CBT NR, sertraline daily Dose/length of sessions: CBT 10 sessions, length NR Sertraline initiated at 25 mg, titrated by 50 mg each week to a maximum of 200 mg. Mean final dose 100 mg/day	Face to face; otherwise NR. Drug delivery NR

continued

TABLE 30 Intervention characteristics for randomised controlled studies included comparing combined psychological and pharmacological interventions (continued)

Authors (year)	Intervention(s)	Intervention categories	Control(s)	Intensity (duration, frequency and strength of dose/length of sessions)	Delivery (method, setting and type of professional)
Rothbaum <i>et al.</i> (2014) ¹²⁹	D-cycloserine and virtual reality exposure therapy	D-cycloserine and TFCBT	Placebo and exposure therapy	Duration: 6 weeks Frequency: weekly Dose/length of sessions: introductory session, five therapeutic sessions, 90 minutes each D-cycloserine delivered at 50 mg 30 minutes before exposure	Face to face; setting NR; doctoral-level clinicians with a mental health background. Drug delivery supervised within sessions
	Alprazolam and virtual reality exposure therapy	Benzodiazepine and TFCBT		Duration: 6 weeks Frequency: weekly Dose/length of sessions: introductory session, five therapeutic sessions, 90 minutes each Alprazolam delivered at 0.25 mg 30 minutes before exposure	

Authors (year)	Intervention(s)	Intervention categories	Control(s)	Intensity (duration, frequency and strength of dose/length of sessions)	Delivery (method, setting and type of professional)
Sonne <i>et al.</i> (2016) ¹³⁴	Venlafaxine and CBT	Antidepressant and TFCBT		<p>Duration: 20–24 weeks</p> <p>Frequency: venlafaxine daily, CBT weekly</p> <p>Dose/length of sessions: 10 sessions with a psychiatrist, 16 sessions with a psychologist</p> <p>Venlafaxine initiated at 37.5–75 mg/day, increased weekly by 37.5–75 mg for 6 weeks. Rest of trial, monthly increases up to a maximum of 375 mg</p>	Face to face; psychiatry centre; psychiatrist
	Sertraline and CBT	SSRI/antidepressant and TFCBT		<p>Duration: 20–24 weeks</p> <p>Frequency: venlafaxine daily, CBT weekly</p> <p>Dose/length of sessions: 10 sessions with a psychiatrist, 16 sessions with a psychologist</p> <p>Sertraline initiated at 25–50 mg/day, increased weekly by 25–50 mg for 6 weeks. Rest of trial, monthly increases up to a maximum of 200 mg</p>	
TFCBT, trauma-focused CBT.					

Appendix 5 Population characteristics of included randomised controlled trials

TABLE 31 Population characteristics of the randomised studies of intervention effectiveness included

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Acarturk <i>et al.</i> (2015) ⁵³	Refugee	Turkey/Syria	I = 35.27 (13.21), C = 37.92 (9.06)	24.14	NR	NR	NR	No
Acarturk <i>et al.</i> (2016) ⁵⁴	Refugee	Turkey/Syria	I = 33.32, C = 34.04	26	NR	Syrian refugees (100%)	NR	Yes
Adenauer <i>et al.</i> (2011) ⁵⁵	Refugee	Germany	I = 30.3 (9.2), C = 36.4 (9.9)	I = 56.3, C = 55.6	I = Middle East (50%), Central East (13%), Africa (38%) C = Middle East (61%), Central East (6%), The Balkans (17%), Africa (11%)	Refugees and asylum seekers (100%)	Unclear (mention of depression)	Yes (100%)
Rezaei Ardani <i>et al.</i> (2017) ⁵⁶	Veterans	Iran	I = 50.08 (4.5), Placebo = 51.5 (6.4), No intervention = 49.08 (6.13)	100	NR	Veterans of the Iraq–Iran war (100%)	NR	Yes (100%)
Azad Marzabadi and Hashemi Zadeh (2014) ⁵⁷	War affected	Iran	Range: I = 35–45 (57.1%), 46–55 (35.8%), 56–60 (7.1%); C = 35–45 (35.7%), 46–55 (64.3%)	100	NR	War victims from the Iran–Iraq war	NR	
Bartzokis <i>et al.</i> (2005) ⁵⁸	Veteran	USA	51.6 (4.2)	100	White (n = 44), African American (n = 19), other (n = 2)	Veterans	NR	Yes
Becker <i>et al.</i> (2007) ⁵⁹	Veteran	USA	50.39 (7.46)	79	African American (64%), white (29%), other (7%)	War trauma (50%), domestic violence (7%), rape (3.5%), motor vehicle accident (7%), homicide (7%), medical illness (11%), death/suicide of a loved one (7%), childhood sexual or physical abuse (7%)	NR	Yes
Beidel <i>et al.</i> (2011) ⁶⁰	Veteran	USA	I = 58.93, C = 59.76	100	White (100%)	Veterans (100%)	NR	Yes (100%)
Bichescu <i>et al.</i> (2007) ⁶¹	War affected	Romania	I = 68.9 (4.4), C = 69.8 (6.0)	I = 100, C = 88.9	NR	Former political detainees (100%)	NR	Yes (100%)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Bolton <i>et al.</i> (2014) ⁶²	War affected	Iraqi Kurdistan	BADT = 36.9 (12.4), CPT = 41.5 (13.7), C = 42.3 (12.5)	BADT = 43, CPT = 42, C = 41	NR	Victims of systematic violence (including physical torture, imprisonment, gas attacks, other military attacks)	Depression: 100% (was a necessary condition of inclusion)	NR
Buhmann <i>et al.</i> (2016) ⁶³	Refugee	Denmark	Medication + psychoeducation + CBT = 45 (10), medication + psychoeducation = 43 (9), CBT = 46 (8), waitlist = 47 (8)	59	NR	Refugees (including those who had experienced torture, a refugee camp/asylum centre or were an ex-combatant)	Of completers (217), 94% had depression, 27% had a personality change (ICD-10 code F62.0), 9% were psychotic and 36% were in treatment for somatic disorder. About one-third reported a traumatic brain injury	Yes
Carlson <i>et al.</i> (1997) ⁶⁴	Veteran	USA	EMDR = 52.7 (8.6), RXT = 46.9 (4.0), C = 45.4 (3.5)	100	EMDR = white (60%), RXT = white (54%), C = white (50%)	Veterans (100%)	NR	Yes (100%)
Celik <i>et al.</i> (2011) ⁶⁵	Veteran	Turkey	I = 32.5 (4.7), C = 29.1 (7.4)	NR	NR	Veterans (100%)	On average, both groups met the cut-off for depression and anxiety based on baseline scores	Yes
Chard (2005) ⁶⁶	Childhood sexual abuse	USA	32.77 (8.87)	0	African American (14%), white (81.4%), Hispanic, Latin or Mexican (3.5%), other (1%)	Childhood sexual abuse (100%)	Current major depression (40%)	Yes (100%)
Chung <i>et al.</i> (2004) ⁶⁷	Veteran	South Korea	I = 59.1 (6.04), C = 60.59 (6.70)	100	NR	Veterans (100%)	Major depressive disorder: I = 11 (21.6%), C = 6 (14.3%) Dysthymia: I = 37 (72.6%), C = 42 (81.6%) Major depressive disorder and dysthymia: I = 3 (6.1%), C = 1 (2.04%)	Yes

continued

TABLE 31 Population characteristics of the randomised studies of intervention effectiveness included (continued)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Classen <i>et al.</i> (2001) ⁶⁸	Childhood sexual abuse	USA	38.4 (11.7)	0	White/European American (64%), Hispanic/Latina (15%), black/African American (8%), native American (4%), other (10%)	Childhood sexual abuse (100%)	NR	Yes
Cloitre <i>et al.</i> (2002) ⁶⁹	Childhood sexual abuse	USA	34 (7.22)	0	White (46%), African American (20%), Hispanic (15%), other (19%)	Childhood sexual/physical abuse (100%): sexual and physical abuse (48%), sexual abuse (39%), physical abuse (13%)	Major depression (45%), anxiety disorders (79%), generalised anxiety disorder (48%)	Yes (100%)
Cloitre <i>et al.</i> (2010) ⁷⁰	Childhood sexual abuse	USA	STAIR/exposure = 33.2, STAIR/support = 37.1, support/exposure = 38.7	0	STAIR/support = white (33–37%), African American (24%), Hispanic (30%), other (9%) STAIR/exposure = white (37%), African American (21%), Hispanic (29%), other (11%) Support/exposure = white (33%), African American (39%), Hispanic (18%), other (9%)	Childhood abuse (100%). The large majority also experienced interpersonal abuse as adults (including domestic violence, sexual abuse and other interpersonal abuse)	Axis I diagnosis: STAIR/support = 84.8%, STAIR/exposure = 92.1%, support/exposure = 87.9% Axis II diagnosis: STAIR/support = 48.5%, STAIR/exposure = 52.6%, support/exposure = 60.6%	Yes (100%)
Cook <i>et al.</i> (2010) ⁷¹	Veteran	USA	I = 59.79 (3.18), C = 59.06 (3.86)	100	I = white (44.3%), African American (49.2%), other (6.6%) C = white (39.7%), African American (54%), other (6.4%)	Vietnam veterans (100%)	I = depressive disorder (57.4%), anxiety disorder (57.4%) C = depressive disorder (55.6%), anxiety disorder (49.2%)	Yes (100%)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Davis <i>et al.</i> (2004) ⁷³	Veteran	USA	I = 53.8 (8.7), C = 53.8 (7.1)	97.6	I = white (54%), African American (46%) C = white (53%), African American (47%)	Combat (97.6%), sexual trauma (2.4%) I = combat (96%), sexual trauma (4%) C = combat (100%), sexual trauma (0%)	I = major depression (42%), dysthymia (27%), panic with agoraphobia (4%) C = major depression (40%), dysthymia (27%), panic without agoraphobia (13%)	Yes (100%)
Davis <i>et al.</i> (2008) ⁷²	Veteran	USA	55.2 (6.8)	98	NR	Combat-related trauma (95%)	NR	Yes (100%)
Devilly <i>et al.</i> (1998) ⁷⁴	Veteran	USA	50.1 (6.48)	100	NR	Veterans (100%)	NR	Yes (100%)
Edmond <i>et al.</i> (1999), ⁷⁶ Edmond and Rubin (2004) ⁷⁵	Childhood sexual abuse	USA	35; follow-up = 36 (range 18–51)	0	White (85%), follow-up = 83%	Childhood sexual abuse: 100%, childhood physical abuse 58%, adult re-victimisation (including domestic violence and rape 66%)	NR	NR
Engel <i>et al.</i> (2015) ⁷⁸	Veteran	USA	I = 36.2 (7.75), C = 36.7 (9.75)	I = 79.1, C = 83.8	I = white, not Hispanic (53.5%) C = white, not Hispanic (56.8%)	Recently deployed military service members and veterans	NR	Yes (100%)
Feske (2008) ⁷⁹	Mixed	USA	43.1 (range 29–55)	0	African American (95.2%), white (4.8%)	Multiple traumas (100%), including childhood sexual abuse (85.7%) Index traumas: adult sexual assault (47.6%), domestic violence (23.8%), child sexual abuse (19%), child physical abuse (4.8%), witnessed murder (4.8%)	Current comorbid Axis-I (95.2%) [including major depression (66.7%), panic disorder (38.1%), social phobia (28.6%), generalised anxiety disorder (23.8%), borderline personality disorder (52.4%)]	Yes (100%)

continued

TABLE 31 Population characteristics of the randomised studies of intervention effectiveness included (continued)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Francišković <i>et al.</i> (2011) ⁸⁰	Mixed	Croatia	Median = 48 (range 37–60)	100	NR	Veterans with combat experience from the Homeland War in Croatia (100%), torture and imprisonment (9.3%), refugees (6.9%)	NR	Yes (100%)
Franklin <i>et al.</i> (2017) ⁸¹	Veteran	USA	46.1 (15.5)	92.6	Euro-American (69.2%), African American (23.1%), 'other' (7.7%)	Veterans (7.4% reported as having no war zone experience)	NR	Yes (100%)
Friedman <i>et al.</i> (2007) ⁸²	Veteran	USA	I = 45, C = 46	I = 79, C = 81	White: I = 67%, C = 75%	Primary exposure: being in war or combat (I = men 85.3%, women 11.1%; C = men 88.1%, women 6.3%), physical or sexual assault (I = men 2.9%, women 66.7%; C = men 3%, women 62.5%)	Major depression: I = men (50%), women (56%); Anxiety disorder: I = men (22%), women (22%); C = men (13%) women (25%)	Yes
Gamito <i>et al.</i> (2010) ⁸³	Veteran	Portugal	NR	100	Unclear	Veterans of Portuguese Colonial War (100%)	NR	Yes (100%)
Germain <i>et al.</i> (2012) ⁸⁴	Veteran	USA	BSI = 40 (14.1), prazosin = 39.4 (11.9), C = 43.6 (14.0)	BSI = 82.4, prazosin = 88.9, placebo = 100	Caucasian: BSI = 70.6%, prazosin = 83.3%, placebo = 93.3%	Veterans of various wars (100%)	BSI = generalised anxiety disorder (5.9%), major depressive disorder (5.9%), insomnia (41.2%) Prazosin = generalised anxiety disorder (5.6%), insomnia (16.7%) Placebo = insomnia (33.3%)	Yes (BSI = 41.2%, prazosin = 72.2%, placebo = 60%)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Hamner <i>et al.</i> (2003) ⁸⁵	Veteran	USA	I = 50.8 (4.9), C = 53.7 (7.6)	100	I = white (53%), African American (47%) C = white (39%), African American (61%)	Veterans of the Vietnam war	Major depressive episodes 86%, other anxiety disorder 41%, number of psychotic symptoms: I = 3.7 (SD 1.6), C = 4.1 (SD 0.9)	Yes
Hermenau <i>et al.</i> (2013) ⁸⁶	War affected	Democratic Republic of the Congo	19 (2.02)	100	NR	Former child soldiers and ex-combatants	NR	NR
Hijazi <i>et al.</i> (2014) ⁸⁷	Refugee	USA	48.2 (8.9)	44.4	Iraqi (100%)	Oppressed because of race/ethnicity/religion (92.1%), combat exposure (92.1%), witnessed destruction of religious shrines (74.6%), witnessed murder (68.3%), witnessed someone physically harmed (66.7%), property looted/confiscated/destroyed (65.1%), murder/violent death of family or friends (65.1%), witnessed rotten corpses (60.3%), kidnapping of family/friends (58.7%), witnessed arrest/torture/execution of religious leaders (46%), witnessed torture (41.3%), physically harmed (38.1%), imprisoned arbitrarily (28.6%), witnessed mass execution (27%), kidnapped (27%), tortured (25.4%), serious physical injury from combat/mine (25.4%), taken hostage (17.5%), sexually abused/raped (6.3%)	NR	Yes

continued

TABLE 31 Population characteristics of the randomised studies of intervention effectiveness included (*continued*)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Himmerich <i>et al.</i> (2016) ⁸⁸	Veteran	Germany	I = 29 (7.62), C = 28.8 (3.4)	100	NR	Soldiers (100%)	NR	NR
Hinton <i>et al.</i> (2004) ⁹⁰	Refugee	USA	NR	I = 50, C = 50	Vietnamese (100%)	Refugees (100%). All men were ex-political detainees (former Southern Vietnamese military, police or political officials imprisoned by Northern Vietnamese)	NR	Yes (100%)
Hinton <i>et al.</i> (2005) ⁸⁹	Refugee	USA	I = 50.9 (6.11), C = 52.7 (7.43)	I = 40, C = 40	Cambodian refugees	Cambodian refugees living in the USA (100%)	NR	Yes (100%)
Jensen (1994) ⁹¹	Veteran	USA	43.1 (2.84)	100	NR	Veterans	40% had received a recent veteran's affairs diagnosis of alcohol abuse or alcohol dependence, but owing to 88% of subjects being in current receipt of inpatient, outpatient or domiciliary services, subjects were considered to not have ingested alcohol or other non-prescribed drugs during the study	Yes
Jung and Steil (2013) ⁹²	Childhood sexual abuse	Germany	37.18 (range: 19–61)	0	Total sample: white (89%), Asian (11%)	Childhood sexual abuse (100%)	Major depressive disorder (57.1%), eating disorders (32.1%), borderline personality disorder (32.1%)	Yes

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Katz <i>et al.</i> (2014) ⁹³	Mixed	USA	HR = 45, PE = 36, C = 42	0	HR = white (41%), African American (24%), Hispanic (6%), other/missing data (29%) PE = white (41%), African American (12%), Hispanic (12%), other/missing data (35%) C (control) = white (47%), African American (24%), Hispanic (17%), other/missing data (12%)	Sexual trauma history: veterans (100%) Military sexual trauma (HR = 82%, PE = 82%, PC = 94%) Domestic violence (HR = 76%, PE = 71%, C = 65%) Child abuse (HR = 100%, PE = 59%, C = 82%) Adult abuse (HR = 71%, PE = 47%, C = 41%)	NR	Yes (100%)
Keane <i>et al.</i> (1989) ⁹⁴	Veteran	USA	I = 34.7 (4.3), C = 34.5 (2.1)	100	I = white (91%), Hispanic (9%) C = white (69%), black (31%)	Veterans	NR	Yes
Kearney <i>et al.</i> (2013) ⁹⁵	Veteran	USA	I = 52 (13.4), C = 52 (11.7)	79	I = white (76%), African American (20%) C = white (59%), African American (9%), other (27%)	Veterans	NR	Yes
Knaevelsrud <i>et al.</i> (2015) ⁹⁶	War affected	Iraq/ Germany (remote)	28.1 (7.43)	28	Iraqi	War related (including bomb attacks and torture) and sexual abuse	Depression, anxiety	Yes
Kosten <i>et al.</i> (1992) ⁹⁷	Veteran	USA	39 (2.3)	100	Non-white (12%)	Vietnam veterans with PTSD (100%)	Minor depression (47.4%)	Yes (100%)
continued								

TABLE 31 Population characteristics of the randomised studies of intervention effectiveness included (continued)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Krupnick <i>et al.</i> (2008) ⁹⁸	Childhood sexual abuse	USA	32.1 (10.2)	0	African American (75%), Hispanic black (4.2%), Afro-Caribbean (2.1%), Latina (8.3%), non-Hispanic white (6.2%), Asian American (4.2%)	I = mean of 6.8 (SD = 4.2), different types of interpersonal traumas C = mean of 5.7 (SD = 3.5), different types of interpersonal traumas Sexual trauma (97.1%, of which 97.9% were before 12 years of age), physical assault before 12 years of age (95.9%)	NR	Yes (100%)
Krystal <i>et al.</i> (2011) ⁹⁹	Veteran	USA	I = 54.2 (10.8), C = 54.5 (10.6)	96.6	Means (SD) White (not Hispanic): I = 84 (63.2), C = 93 (69.4) Black (not Hispanic): I = 25 (18.8), C = 25 (18.7) Hispanic: I = 16 (12.0), C = 11 (8.2) Other: I = 8 (6), C = 5 (3.7)	Combat trauma (78.3%)	NR	Yes
Kubany <i>et al.</i> (2003) ¹⁰⁰	Domestic violence	USA	36.4 (9.1)	0	White (n = 18), Asian (n = 10), Pacific Islander (n = 6), black and Puerto Rican (n = 3)	Battered women (physical domestic abuse)	NR	Yes
Kubany <i>et al.</i> (2004) ¹⁰¹	Domestic violence	USA	42.2 (10.1)	0	White (52.8%), Native Hawaiian (8.8%), Filipino (7.2%), Japanese (6.4%), black (4.8%), Samoan (4.8%), American Indian (1.6%), other or mixed ethnicity (13.6%)	All physically, sexually and/or psychologically abused by intimate romantic partner. Physically hurt more than five times (68%), physically hurt by more than one intimate partner (51%)	NR	Yes (100%)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Lande <i>et al.</i> (2010) ¹⁰²	Veteran	USA	Range: 18–25 (35.9%), 26–35 (33.3%), ≥ 36 (30.7%)	85	NR	Veterans	NR	Yes
Lau and Kristensen (2007); ¹⁰³ Elkjaer <i>et al.</i> (2014) ⁷⁷	Childhood sexual abuse	Denmark	I = 34.2 (10.5), C = 32.4 (8.8)	0	NR	Childhood sexual abuse (intrafamilial)	Females aged 30–39 years: affective disorders Females aged 40–41 years: anxiety disorders Females aged 42 and 44–49 years: other nervous diseases Females aged 50–59 years: behavioural syndromes Females aged 60–62 years: personality disorders	Yes: I = 16%, C = 29%
Lindley <i>et al.</i> (2007) ¹⁰⁴	Veteran	USA	I = 52.9 (0.7), C = 53.9 (0.4)	100	White (62.5%), African American (17.5%), Hispanic (16%), other (5%)	Veterans (100%)	Most patients had comorbid depression	Yes (100%)
Margolies <i>et al.</i> (2011) ¹⁰⁵	Veteran	USA	I = 36.43 (9.3), C = 39.11 (8.9)	I = 90, C = 90	I = white (40%), black (60%) C = white (40%), black (60%)	Operation Enduring Freedom/ Operation Iraqi Freedom veterans	NR	Yes (100%)

continued

TABLE 31 Population characteristics of the randomised studies of intervention effectiveness included (*continued*)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
McDonagh <i>et al.</i> (2005) ¹⁰⁶	Childhood sexual abuse	USA	CBT = 39.8 (9.9), PCT = 39.6 (9.6), C = 42 (9.8)	0	<p>CBT = white (90%), African American (0%), Native American (10%), other (0%)</p> <p>PCT = white (95%), African American (5%), Native American (0%), other (0%)</p> <p>Waitlist = white (96%), African American (0%), Native American (0%), other (4%)</p>	<p>Childhood sexual abuse (100%), characteristics:</p> <p>CBT = life threat (34.5%), injured (41.4%), penetrated (72.4%), mean age at onset = 6.1(2)</p> <p>PCT = life threat (5%), injured (31.8%), penetrated (59.1%), mean age at onset = 7.6(2.8)</p> <p>Waitlist = life threat (26.1%), injured (27.3%), penetrated (56.5%), mean age at onset = 6.1(2.9)</p> <p>CBT = childhood physical abuse (82.8%), adult physical abuse (58.6%), adult sexual trauma (44.8%), mean number of trauma types = 3.3 (1)</p> <p>PCT = childhood physical abuse (81.8%), adult physical abuse (68.2%), adult sexual trauma (63.6%), mean number of trauma types = 3.1 (1.3)</p> <p>Waitlist = childhood physical abuse (73.9%), adult physical abuse (60.9%), adult sexual trauma (43.5%), mean number of trauma types = 3.4 (0.9)</p>	NR	Yes (100%)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
McLay <i>et al.</i> (2011) ¹⁰⁷	Veteran	USA	I = 28 (range: 22–43), C = 28.8 (range: 21–45)	I = 90, C = 100	NR	Active duty service members with PTSD (100%) I = shot (10%), ambush (20%), improvised explosive device blast (20%), mortar attack (20%), suicide bomber (10%), firefight (10%), military medical trauma (10%) C = improvised explosive device blast (30%), close combat (10%), firefight (20%), suicide bomber (10%), civilian casualties (20%), bridge collapse (10%)	NR	Yes (100%)
Meffert <i>et al.</i> (2014) ¹⁰⁸	Refugee	Egypt	I = 31.3, C = 30.4	19	Sudanese	Refugees (no further detail)	NR	Yes
Miyahira <i>et al.</i> (2012) ¹⁰⁹	War affected	USA	NR	NR	NR	Returning war fighters from Iraq or Afghanistan	NR	Yes
Monnelly <i>et al.</i> (2003) ¹¹⁰	Veteran	USA	I = 48.9 (8.3), C = 53.5 (3.0)	100	White (80%), black (13.3%), Hispanic (6.7%)	Combat (100%)	I = major depression (26.7%), dysthymic disorder (6.7%), generalised anxiety disorder (13.3%), panic disorder (6.7%) C = major depression (40%), dysthymia (6.7%), generalised anxiety disorder (6.7%)	Yes (100%)
Moradi <i>et al.</i> (2014) ¹¹¹	Veteran	Iran	I = 45.25 (3.86), C = 45.33 (3.80)	100	Iranian	War trauma (mixed)	NR	Yes

continued

TABLE 31 Population characteristics of the randomised studies of intervention effectiveness included (continued)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Naylor <i>et al.</i> (2013) ¹¹²	Veteran	USA	I = 39.21 (4.7), C = 35.86 (9.69)	NR	NR	Combat-related (41.6%), non-combat related with a history of combat (41.6%) and non-combat related with no combat experience (16.7%)	C = obsessive compulsive disorder, generalised anxiety disorder and agoraphobia (8.3%), major depressive episode (8.3%), agoraphobia (8.3%)	Yes (partial PTSD = 100%)
Neuner <i>et al.</i> (2004) ¹¹⁴	Refugee	Uganda	NET = 31.9 (6.7), supportive counselling = 33.8 (7.9), psychoeducation = 34.2 (6.9)	37	Sudanese	Refugees (including those who had witnessed killings and experienced torture)	NR	Yes
Neuner <i>et al.</i> (2008) ¹¹³	Refugee	Uganda	NET = 34.4 (12.2), trauma counselling = 35.2 (12.8), C = 35.6 (14.0)	48.7	Somalian (45.1%), Rwandan (54.9%)	13.1–14.5 types of traumatic events in groups. Majority of the refugees in Nakivale fled civil conflict	NR	NR
Niles <i>et al.</i> (2012) ¹¹⁵	Veteran	USA	52.0 (13.0)	100	White, not Hispanic (76%, <i>n</i> = 25), black, not Hispanic (15%, <i>n</i> = 5), white, Hispanic (6%, <i>n</i> = 2) and 'other' (3%, <i>n</i> = 1)	Veterans	NR	Yes
Otto <i>et al.</i> (2003) ¹¹⁶	Refugee	USA	47.2	0	Cambodian (100%)	Refugees (100%)	High unreported psychiatric comorbidity	Yes (100%)
Owens <i>et al.</i> (2001) ¹¹⁷	Childhood sexual abuse	USA	33 (9.15)	0	African American (11%), white (87%), Hispanic/Latino/Mexican American (2%)	Childhood sexual abuse (100%). Sexual abuse events reported: vaginal and/or anal penetration, kissing, fondling and oral sexual contact	NR	Yes (100%)
Panahi <i>et al.</i> (2011) ¹¹⁸	Veteran	Iran	I = 46.5 (5.4), C = 44.6 (5.1)	100	NR	Iranian Iran–Iraq war veterans (100%)	NR	Yes (100%)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Paunovic and Ost (2001) ¹¹⁹	Refugee	Sweden	37.9 (7.6)	85	NR	Refugees (100%). Experienced more than one traumatic event (70%). Primary traumatic events (assumed to be based on 16 completers): torture = 6, combat = 6, physical assault in civilian life = 5, witnessing murder of significant others = 4, witnessing massacre = 3, assault with weapon in civilian life = 2, transportation accident = 2, witnessing physical assault in civilian life = 2, witnessing assault with weapon in civilian life = 2, witnessing sudden violent death = 2, witnessing murder of strangers = 2, death threats against family = 2, threat of torture = 1, sexual assault = 1, exposure to toxic substance = 1, death threats with a weapon in civilian life = 1	NR	Yes (100%)
Polusny <i>et al.</i> (2015) ¹²⁰	Veteran	USA	I = 57.6 (10.4), C = 59.4 (9.2)	MBSR = 79, PCT = 90	MBSR = white (81%), black (5%), other (4%), mixed (10%) PCT = white (86%), black (10%), other (4%), mixed (0%)	Veterans (100%), lifetime traumas: I = combat exposure (68%), sexual trauma (37%), physical assault (68%), disaster exposure (44%), serious injury event (67%), life-threatening illness/injury (60%), other (97%) C = combat exposure (80%), sexual trauma (19%), physical assault (63%), disaster exposure (43%), serious injury event (61%), life-threatening illness/injury (56%), other (93%)	I = mood disorder (44.8%) C = mood disorder (39.7%) No other comorbidities reported as measured	Yes (full PTSD = 97.4%, subthreshold PTSD = 2.6%). Per group: full PTSD (I = 98.3%, C = 96.6%), subthreshold PTSD (I = 1.7%, C = 3.4%)

continued

TABLE 31 Population characteristics of the randomised studies of intervention effectiveness included (continued)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Possemato <i>et al.</i> (2016) ¹²¹	Veteran	USA	I = 46.3 (16.4), C = 47.4 (16.2)	87.1	White (82.3%)	Veterans	NR	Yes (48.4%)
Raskind <i>et al.</i> (2007) ¹²²	Veteran	USA	56 (9)	95	White (n = 26), African American (n = 11), Asian American (n = 1), Hispanic (n = 1) and Native American (n = 1) Overall (40)	Veterans	Depression	Yes
Raskind <i>et al.</i> (2013) ¹²³	Veteran	USA	I = 30.0 (6.6), C = 30.8 (6.5)	I = 81, C = 89	I = African American (13%), Asian (3%), Caucasian (66%), Hispanic (16%), other (3%) C = African American (14%), Caucasian (60%), Hispanic (9%), Native American (6%), other (11%)	Active duty soldiers returned from Afghanistan and Iraq (100%) I = mean number of deployments 2.6 (SD 4.0), combat experiences scale score 10.9 (SD 3.8) C = mean number of deployments 1.9 (SD 1.2), combat experiences scale score 11.9 (SD 3.6)	I = major depression (34%), C = major depression (43%)	Yes (100%)
Ready <i>et al.</i> (2010) ¹²⁴	Veteran	USA	Virtual reality exposure = 57 (range: 53–61), PCT = 58 (range: 55–62)	100	White (54.5%), African American (45.5%)	Vietnam veterans	NR	Yes (100%)
Reed and Enright (2006) ¹²⁵	Domestic violence	USA	44.95 (7.01)	100	European Americans (90%), Hispanic American (5%), Native American (5%)	Romantic partner emotional abuse: criticising (90%), ridiculing (100%), jealous control (75%), purposeful ignoring (100%), threats of abandonment (25%), threats of personal harm (30%), threats of harm to property or pets (20%), sexual abuse (30%: n = 5 ridicule followed by demands for sexual favours, n = 1 threats of physical harm combined with demands for sexual favours)	NR	NR

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Reger <i>et al.</i> (2016) ¹²⁶	Veteran	USA	Virtual reality exposure = 29.52 (6.47), PE = 30.89 (7.09), C = 30.39 (6.45)	> 95	White (59.9%), black (9.3%), Hispanic (17.3%)	Veterans	NR	Yes
Reich <i>et al.</i> (2004) ¹²⁷	Childhood sexual abuse	USA	I = 30.6, C = 24.2	0	White: I = 75%, C = 100% African American: I = 16.7%, C = 0% Asian American: I = 8.3%, C = 0%	Trauma related to childhood: emotional (I = 66.7%, C = 54.5%), verbal (I = 50%, C = 77.8%), physical (I = 50%, C = 44.4%), sexual abuse (I = 83.3%, C = 66.7%)	Major depression (I = 66.6%, C = 55.5%) Dysthymia (I = 8.3%, C = 0%) Panic disorder (I = 25%, C = 11.1%) Agoraphobia with panic disorder (I = 16.6%, C = 0%) Agoraphobia without panic disorder (I = 8.3%, C = 0%) Generalised anxiety disorder (I = 8.3%, C = 22.2%) Simple phobia (I = 25%, C = 0%) Social phobia (I = 0%, C = 11.1%) Eating disorder not otherwise specified (I = 8.3%, C = 0%) Obsessive-compulsive disorder (I = 0%, C = 11.1%) Somatisation disorder (I = 8.3%, C = 0%)	Yes

continued

TABLE 31 Population characteristics of the randomised studies of intervention effectiveness included (*continued*)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Resick <i>et al.</i> (2015) ¹²⁸	Veteran	USA	I = 31.8 (7.3), C = 32.4 (7.9)	CPT-C = 93, PCT = 92	CPT-C = black (20%), Hispanic (9%), white (63%), other (9%) PCT = black (21%), Hispanic (19%), white (52%), other (8%)	Active duty military with criterion A traumatic event (100%)	NR	Yes (100%)
Rogers <i>et al.</i> (1999) ¹³⁰	Veteran	USA	Range: 47–53	100	NR	Vietnam veterans (100%)	NR	Yes (100%)
Rothbaum <i>et al.</i> (2014) ¹²⁹	Veteran	USA	D-cycloserine + PE = 34.9, alprazolam + PE = 36.2, C = 34.3	95	Black (50.6%), white (41.6%), Hispanic (5%)	Veterans	27.5% had a comorbid mood disorder	Yes
Sikkema <i>et al.</i> (2007) ¹³¹	Childhood sexual abuse	USA	Female = 43.18 (6.99), male = 41.75 (6.99)	46	Total sample: white (11.3%), African American (68.6%), Hispanic-Latino (16%), other (4.1%)	Primarily childhood sexual abuse. 62% of women and 43% of men also experienced rape as adults	HIV-positive sero-status; meets DSM-IV criteria for PTSD: women (37%), men (43%)	Yes
Sikkema <i>et al.</i> (2013) ¹³²	Childhood sexual abuse	USA	42.3 (6.8)	47	Overall: African American (68%), Hispanic (17%), white (10%)	Childhood sexual abuse	NR	Yes (40%)
Smajkic <i>et al.</i> (2001) ¹³³	Refugee	USA	51.34 (10.11)	Venlafaxine = 100, sertraline = 40, paroxetine = 25	Bosnian (100%)	Refugees (100%)	NR	Yes (100%)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Sonne <i>et al.</i> (2016) ¹³⁴	Refugee	Denmark	I = 43.2 (9.6), C = 44 (9.7)	Venlafaxine = 62.2, sertraline = 58.3	Origin: venlafaxine = ex-Yugoslavia (11.2%), Iran (13.3%), Iraq (34.7%), Afghanistan (10.2%), Lebanon (12.6%), other (18.4%); sertraline = ex-Yugoslavia (8.3%), Iran (13.9%), Iraq (34.4%), Afghanistan (16.7%), Lebanon (13%), other (13.9%)	Refugees (100%): venlafaxine = imprisonment (58.8%), torture (55.1%), refugee camp (22.9%); sertraline = imprisonment (48.6%), torture (41.7%), refugee camp (27.5%)	Venlafaxine = depression (97.96%), enduring personality change after catastrophic experience (41.3%), other psychiatric disorder (12.24%); sertraline = depression (99.08%), enduring personality change after catastrophic experience (40.38%), other psychiatric disorder (11.1%)	Yes (100%)
Stein <i>et al.</i> (2002) ¹³⁵	Veteran	USA	I = 55.2 (6.6), C = 51.1 (8.1)	100	NR	Military veterans (n = 3 Vietnam-related)	All subjects had depression and pronounced sleep problems	Yes
Stenmark <i>et al.</i> (2013) ¹³⁶	Refugee	Germany	I = 34.5 (11.1), C = 36.6 (11.0)	I = 67, C = 73	Region of origin: I = Afghanistan (14%), Iraq (29%), Middle East (remaining countries) (16%), Africa (25%), other countries (16%); C = Afghanistan (17%), Iraq (23%), Middle East (remaining countries) (17%), Africa (26%), other countries (17%)	Refugees and asylum seekers with PTSD (100%). Mean number of traumatic events: I = 8.3 (2.2), C = 7.9 (2.9)	NR	Yes (100%)

continued

TABLE 31 Population characteristics of the randomised studies of intervention effectiveness included (continued)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Teng <i>et al.</i> (2008) ¹³⁷	Veteran	USA	I = 52.00 (8.13), C = 51.87 (9.07)	86	African American (42.9%), white (42.9%), Hispanic (14.2%)	Veterans	Panic disorder (13.3%), panic disorder with agoraphobia (86.7%), specific phobia (23.3%), obsessive-compulsive disorder (13.3%), acute stress disorder (3.3%), generalised anxiety disorder (26.7%), major depressive disorder (60.0%), dysthymic disorder (30.0%)	Yes
Ter Heide <i>et al.</i> (2016) ¹³⁹	Refugee	The Netherlands	I = 43.1 (10.7), C = 39.8 (11.9)	69	The vast majority of refugees came from Iraq, Afghanistan or countries in Africa (ethnicities were NR). Other origin countries included Former Yugoslavia and other Middle-Eastern countries	Refugees (including asylum seekers and illegal immigrants)	77.8% had comorbid depression	Yes
Ter Heide <i>et al.</i> (2011) ¹³⁸	Refugee	The Netherlands	I = 40 (9.31), C = 43 (7.93)	I = 50, C = 70	Origin: Afghanistan (20%), Algeria (5%), Bosnia (20%), Iran (10%), Iraq (30%), Lebanon (5%), Turkey (5%)	Asylum seekers and refugees. Experienced 10 separate events, on average, including: murder/unnatural death of family or friend (95%), physical or psychological torture (70%)	Depression (I = 80%, C = 50%)	NR
Ulmer <i>et al.</i> (2011) ¹⁴⁰	Veteran	USA	I = 47.0 (9.5), C = 50.2 (11.6)	I = 66.7, C = 55.6	I = African American (33.3%), white (33.3%), other (33.3%) C = African American (33.3%), white (33.3%), other (33.3%)	Veterans with PTSD	NR	Yes (100%)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
van der Kolk <i>et al.</i> (1994) ¹⁴¹	Mixed	USA	I = 40.8 (6.4), C = 39.9 (7.8)	30	NR	31/64 were veterans, 33 were non-veterans (20/33 had experienced childhood sexual abuse)	Depression (54.8%)	Yes
Wahbeh <i>et al.</i> (2016) ¹⁴²	Veteran	USA	MM = 53.3 (12.6), SB = 52.2 (12.5), MM + SB = 50 (12.8), SQ = 53 (11.8)	MM = 93, SB = 92, MM + SB = 96, SQ = 96	White (MM = 85%, SB = 88%, MM + SB = 88%, SQ = 84%)	Combat veterans with PTSD (100%) Combat exposure: MM = 24.1 (9.4), SB = 22.5 (8.5), MM + SB = 26.6 (10.3), SQ = 25.8 (9.8) Lifetime trauma (Life Events Checklist): MM = 32.2 (7.8), SB = 33.7 (5.7), MM + SB = 32.7 (6.3), SQ = 31.3 (8.1)	NR	Yes (100%)
Wang <i>et al.</i> (2016) ¹⁴³	War affected	Kosovo	I = 46.8 (10.4), C = 48.8 (10.9)	55	NR	Victims of torture and war (civilians)	Depression = 92.9%, anxiety disorders = 89.3%	Yes (50%)
Weiss <i>et al.</i> (2015), trial 1: CETA ¹⁴⁴	War affected	Iraq	I = 41.6 (11.3), C = 45.16 (11.1)	Male: I = (67.7), C = (32.3)	NR	Survivors of systemic violence: having witnessed or experienced physical torture or militant attacks	NR	NR
Weiss <i>et al.</i> (2015), trial 2: CPT ¹⁴⁴	War affected	Iraq	I = 40 (12.3), C = 41 (9.5)	I = 67.4, C = 62.5	NR	Survivors of systemic violence: having witnessed or experienced physical torture or militant attacks	NR	NR

continued

TABLE 31 Population characteristics of the randomised studies of intervention effectiveness included (continued)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline (yes/no)
Yeomans <i>et al.</i> (2010) ¹⁴⁵	War affected	Burundi	38.6 (12.8)	65.6	Hutu (52.4%), Tutsi (47.6%)	Witnessed: mixed (e.g. rape, serious injury owing to combat) Experienced: combat (98.8%), forced to hide (97.1%), unnatural death of family member (96.7%), lack of food/water (95%), narrowly escaping death (91.7%), lack of shelter (90.4%), ill health without medical care (86.2%), loss of personal property (81.9%), confined indoors owing to danger (79.5%), betrayed and placed at risk of death (41.7%), serious physical injury from combat (35%), forced to hide among the dead (27.5%), imprisonment (23.8%); other	NR	NR
Zlotnick <i>et al.</i> (1997) ¹⁴⁶	Childhood sexual abuse	USA	39 (9.59)	0	99% white (n = 1: Native American)	Childhood sexual abuse	Extreme stress (100%)	Yes
Zohar <i>et al.</i> (2002) ¹⁴⁷	Veteran	Israel	I = 41 (6), C = 38 (9)	I = 83, C = 95	NR	Veterans (100%)	NR	Yes (100%)

BATD, Behavioural Activation Treatment for Depression; BSI, Brief Symptom Inventory; CETA, common elements treatment approach; C, control; CPT, cognitive processing therapy; HR, holographic reprocessing; I, intervention; MM, mindfulness meditation; PCT, person-centred therapy; PE, prolonged exposure; RXT, relaxation; SB, slow breathing; SQ, sitting quietly.

Appendix 6 Characteristics of included non-randomised controlled studies

TABLE 32 Characteristics of the interventions in the non-randomised controlled studies of intervention effectiveness included

Authors (year)	Intervention(s)	Control(s)	Intensity (duration, frequency and strength of dose/length of sessions)	Delivery (method, setting and type of professional)
King <i>et al.</i> (2013) ¹⁴⁸	Mindfulness-based cognitive therapy	Treatment as usual	Duration: 8 weeks Frequency: weekly Dose/length of sessions: 8 hours Unclear for treatment as usual group	Face to face (group); outpatient veterans' affairs clinic; doctoral- and master's-level clinicians with mental health backgrounds
Kruse <i>et al.</i> (2009) ¹⁴⁹	Trauma-focused psychotherapy	Treatment as usual	Duration: NR Frequency: weekly (first 3 months), fortnightly (remainder) Dose/length of sessions: 50 minutes, 25 hours total	Face to face (individual); setting NR; trained psychotherapists
Levi <i>et al.</i> (2016) ¹⁵⁰	CBT		Duration: 24 weeks Frequency: weekly Dose/length of sessions: NR	Face to face (individual); army PTSD treatment centre; psychiatrists, clinical psychologists and social workers
	Psychodynamic psychotherapy		Duration: 50 weeks Frequency: weekly Dose/length of sessions: NR	
Lundqvist <i>et al.</i> (2006) ¹⁵¹	Group therapy	Waitlist	Duration: 2 years (phase 1, 5 months; phase 2, 4 months; phase 3, 1 year) Frequency: twice a week (phase 1), weekly (phase 2), monthly (phase 3) Dose/length of sessions: NR	Face to face (group); hospital psychiatric outpatient unit; female group leaders, unknown training
	Short-term focused therapy		Duration: 2 years (phase 1, 5 months; phase 2, 4 months; phase 3, 1 year) Frequency: twice a week (phase 1), weekly (phase 2), monthly (phase 3) Dose/length of sessions: NR	

continued

TABLE 32 Characteristics of the interventions in the non-randomised controlled studies of intervention effectiveness included (continued)

Authors (year)	Intervention(s)	Control(s)	Intensity (duration, frequency and strength of dose/length of sessions)	Delivery (method, setting and type of professional)
Morgan and Cummings (1999) ¹⁵²	Group psychotherapy	No intervention	Duration: 20 weeks Frequency: weekly Dose/length of sessions: NR	Face to face (group); community social services; psychotherapists
Narimani <i>et al.</i> (2008) ¹⁵³	EMDR	Waitlist	Duration: 70 days (typically) Frequency: NR Dose/length of sessions: 90 minutes	Face to face (individual); setting NR; trained therapists
	CBT		Duration: 70 days Frequency: NR Dose/length of sessions: 60–120 minutes	
Pivac <i>et al.</i> (2004) ¹⁵⁴	Olanzapine		Duration: 6 weeks Frequency: once or twice daily Dose/length of sessions: 5–10 mg	Drug intervention; delivered by hospital for PTSD; psychiatrists
	Fluphenazine		Duration: 6 weeks Frequency: once or twice daily Dose/length of sessions: 5–10 mg	
Salo <i>et al.</i> (2008) ¹⁵⁵	Individual therapy	No intervention	Duration: 1 year Frequency: weekly Dose/length of sessions: NR	Face to face (individual); setting NR; master's-level social workers and psychologists
	Group therapy		Duration: 1 year Frequency: weekly Dose/length of sessions: NR	
Saxe and Johnson (1999) ¹⁵⁶	'Victim to survivor' group therapy	Waitlist	Duration: 20 weeks Frequency: weekly Dose/length of sessions: NR	Face to face (group); community mental health agency; experienced mental health social workers

Appendix 7 Population characteristics of included non-randomised controlled studies

TABLE 33 Population characteristics of the non-randomised studies of intervention effectiveness included

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline?
King <i>et al.</i> (2013) ¹⁴⁸	Veteran	USA	I = 60.1 (9.7), C = 58.3 (8.3)	NR	NR	Veterans	65% of participants from the treatment group and 76% from the control had a current major depressive disorder	Yes
Kruse <i>et al.</i> (2009) ¹⁴⁹	Refugee	Germany	I = 44.7 (9.0), C = 44.3 (12.2)	I = 35.3%, C = 30%	Bosnian (100%)	Bosnian refugees (100%). Highly stressful war-related events: I = close to death (97%), forced separation (82.3%), murder of family/friends (70.6%), murder of strangers (67.7%), physical torture (70.6%), combat situation (50%), rape/sexual abuse (41.2%), brainwashed (85.3%), lack of food/water (67.7%), unnatural death of friends (58.8%), lost/kidnapped (64.7%), lack of medical care (70.6%), no shelter (79.4%), imprisoned (55.9%), serious injury (70.6%), isolation (41.2%); number of events 10.7 (SD 4.4) C = close to death (100%), forced separation (93.3%), murder of family/friends (83.3%), murder of strangers (83.3%), physical torture (93.4%), combat situation (63.4%), rape/sexual abuse (50%), brainwashed (96.7%), lack of food/water (86.6%), unnatural death of friends (80%), lost/kidnapped (86.6%), lack of medical care (70%), no shelter (96.7%), imprisoned (80%), serious injury (90%), isolation (66.7%); number of events 13.5 (SD 3.2)	NR	Yes (100%)

Authors (year)	Trauma experience category	Country	Age of males, years (SD)	Gender (% male)	Ethnicity	Type(s) of trauma experienced	Current comorbidities	PTSD diagnosis at baseline?
Levi <i>et al.</i> (2016) ¹⁵⁰	Veteran	Israel	I = 30.8 (11.4), C = 33.4 (11.45)	100%	NR	Veterans	NR	Yes
Lundqvist <i>et al.</i> (2006) ¹⁵¹	Childhood sexual abuse	Sweden	Group therapy = 34 (range: 20–54), short-term focused therapy = 39 (range: 25–54), C = 41 (range: 28–55)	0% (100% female)	NR	Childhood sexual abuse	NR	NR
Morgan and Cummings (1999) ¹⁵²	Childhood sexual abuse	Canada	I = 36.92 (8.01), C = 33.05 (10.27)	0% (100% female)	NR	Childhood sexual abuse	NR	NR
Narimani <i>et al.</i> (2008) ¹⁵³	War affected	Iran	Overall: 47.95 (5.07)	NR	Iranian (100%)	Combatants afflicted and hospitalised at psychiatric/psychological hospital (100%)	NR	NR
Pivac <i>et al.</i> (2004) ¹⁵⁴	Veteran	Croatia	I = 37.2 (4.5), C = 38.1 (4.8)	100%	NR	Veterans	All participants had comorbid psychotic symptoms: 37 (68%) had psychotic depression with auditory hallucinations or auditory and visual hallucinations; 18 (37%) had delusional paranoid symptoms	Yes
Salo <i>et al.</i> (2008) ¹⁵⁵	War affected	Palestine	Individual treatment = 32.36 (1.44), group treatment = 30.45 (1.40), C = 30.82 (0.72)	100%	Palestinian (100%)	Former political prisoners (100%). Most common experiences of torture/ill treatment: different types of beatings such as by gun or baton (87.8%), psychological abuse such as sham execution (75.5%); classic torture methods less common: burning with cigarettes (13.8%), pain by electricity (11%)	NR	NR
Saxe and Johnson (1999) ¹⁵⁶	Childhood sexual abuse	Canada	NR	0% (100% female)	NR	Childhood sexual abuse (incest)	NR	NR

C, control; I, intervention; SD, standard deviation.

Appendix 8 Risk-of-bias gradings of included randomised controlled trials

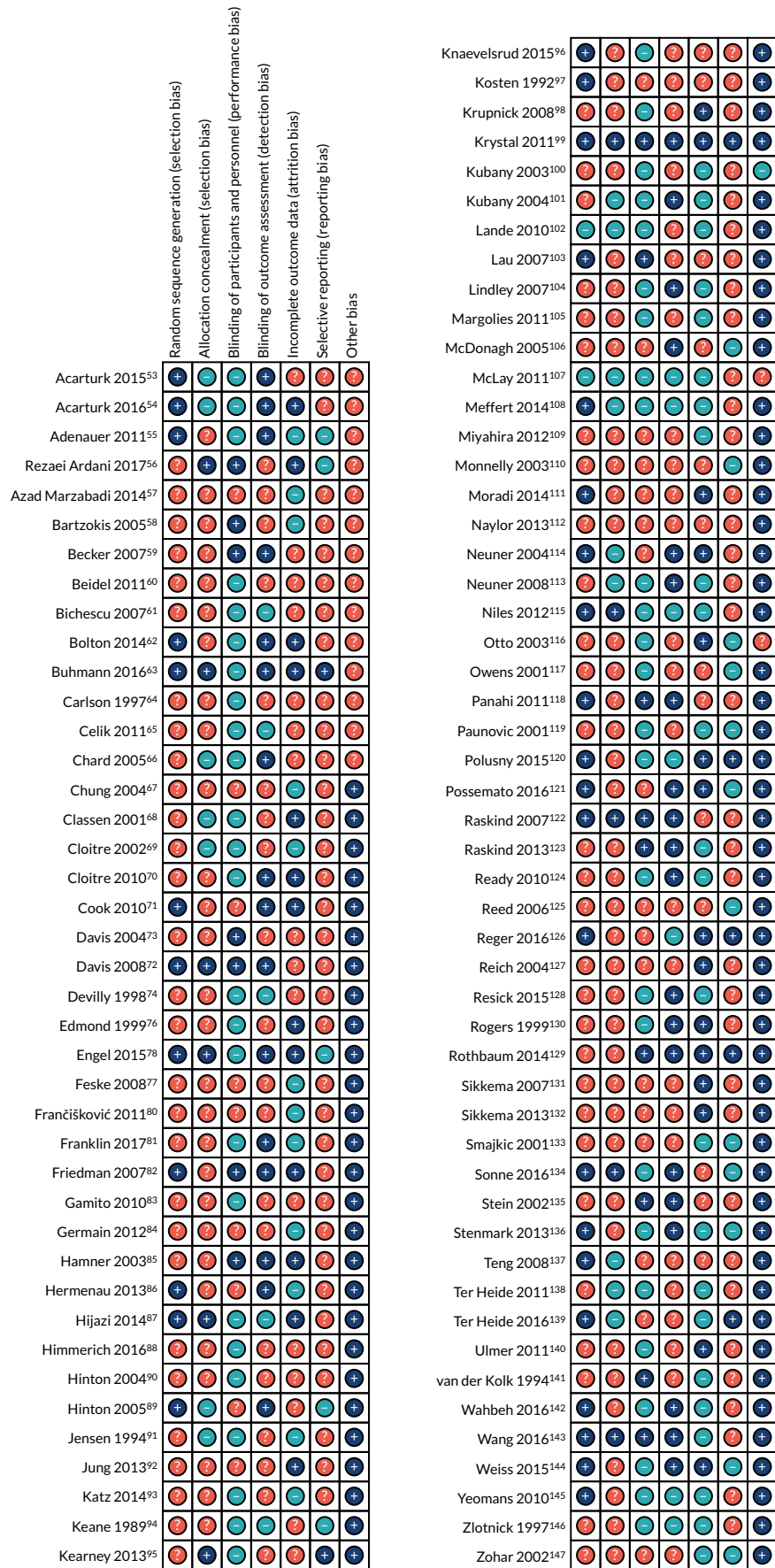


FIGURE 26 Risk-of-bias ratings across the domains of the Cochrane tool for all included RCTs.

Appendix 9 Summary tables of clinical effectiveness analyses

Effectiveness of psychological interventions across all populations

Post-traumatic stress disorder outcomes

TABLE 34 Effectiveness of psychological interventions on PTSD outcomes for all trauma populations

Psychological interventions vs. control	Control		Active control	
	Post treatment	Follow-up after < 6 months	Post treatment	Follow-up after < 6 months
All	SMD -0.90 (95% CI -1.14 to -0.66), $I^2 = 85.3%$, number of trials = 39, $n = 2506$	SMD -0.45 (95% CI -0.82 to -0.08), $I^2 = 79.4%$, number of trials = 10, $n = 738$	SMD -0.35 (95% CI -0.72, 0.03), $I^2 = 47.0%$, number of trials = 6, $n = 259$	-
Trauma-focused CBT	SMD -1.09 (95% CI -1.44 to -0.75), $I^2 = 86%$, number of trials = 21, $n = 1283$	SMD -0.64 (95% CI -1.10 to -0.18), $I^2 = 44.9%$, number of trials = 4, $n = 206$	-	-
EMDR	SMD -1.07 (95% CI -1.65 to -0.50), $I^2 = 75.4%$, number of trials = 7, $n = 244$	-	SMD -0.15 (95% CI -0.62, 0.32), $I^2 = 0%$, number of trials = 2, $n = 71$	-
IPT	SMD -1.41 (95% CI -1.97 to -0.85), $I^2 = 0%$, number of trials = 2, $n = 66$	-	-	-
Mindfulness	SMD -0.26 (95% CI -0.55, 0.04), $I^2 = 0%$, number of trials = 3, $n = 183$	SMD -0.08 (95% CI -0.68, 0.52), $I^2 = 59%$, number of trials = 2, $n = 109$	-	-
Non-trauma-focused CBT	SMD -0.05 (95% CI -0.23, 0.13), $I^2 = 0%$, number of trials = 3, $n = 548$	SMD -0.02 (95% CI -0.25, 0.20), $I^2 = 0%$, number of trials = 2, $n = 305$	-	-
Single-component and trauma-focused interventions	SMD -1.16 (95% CI -1.52 to -0.81), $I^2 = 86.2%$, number of trials = 23, $n = 1264$	SMD -0.94 (95% CI -1.56 to -0.32), $I^2 = 77.6%$, number of trials = 5, $n = 276$	-	-
Multicomponent and trauma-focused interventions	SMD -0.73 (95% CI -1.11 to -0.35), $I^2 = 62.3%$, number of trials = 7, $n = 385$	-	-	-
Single-component non-trauma-focused interventions	SMD -0.39 (95% CI -0.66 to -0.12), $I^2 = 69.6%$, number of trials = 11, $n = 936$	SMD -0.05, (95% CI -0.23, 0.14), $I^2 = 0%$, number of trials = 5, $n = 462$	SMD -0.64 (95% CI -1.82, 0.53), $I^2 = 76.9%$, number of trials = 2, $n = 62$	-
Phase-based interventions	Effect size -1.13 (95% CI -1.54 to -0.73), $I^2 = 35.9%$, number of trials = 6, $n = 190$	-	-	-

Complex post-traumatic stress disorder outcomes

TABLE 35 Effectiveness of psychological interventions on CPTSD outcomes for all trauma populations

CPTSD symptom cluster	Psychological interventions vs. control	Control		Active control	
		End of treatment	Follow-up after < 6 months	End of treatment	Follow-up after < 6 months
Emotional dysregulation	All	SMD -0.38 (95% CI -0.88 to 0.12), $I^2 = 74.5%$, number of trials = 7, $n = 289$	SMD -0.42 (95% CI -1.53 to 0.69), $I^2 = 72.3%$, number of trials = 2, $n = 51$	-	-
	Trauma-focused CBT	SMD -0.17 (95% CI -0.82 to 0.49), $I^2 = 60.6%$, number of trials = 3, $n = 103$	SMD -0.42 (95% CI -1.53 to 0.69), $I^2 = 72.3%$, number of trials = 2, $n = 51$	-	-
	Single-component and trauma-focused interventions	-	-	-	-
	Multicomponent and trauma-focused interventions	-	-	-	-
	Single-component and non-trauma-focused interventions	SMD -0.04 (95% CI -0.41 to 0.33), $I^2 = 23.9%$, number of trials = 4, $n = 163$	-	-	-
	Phase-based interventions	SMD -0.76 (95% CI -1.79 to 0.27), $I^2 = 83.4%$, number of trials = 3, $n = 118$	-	-	-
Interpersonal problems	All	SMD -0.59 (95% CI -1.28 to 0.11), $I^2 = 61.9%$, number of trials = 2, $n = 94$	-	-	-
	Trauma-focused CBT	-	-	-	-
	Single-component and trauma-focused interventions	-	-	-	-
	Multicomponent and trauma-focused interventions	-	-	-	-
	Single-component and non-trauma-focused interventions	-	-	-	-
	Phase-based interventions	SMD -0.59 (95% CI -1.28 to 0.11), $I^2 = 61.9%$, number of trials = 2, $n = 94$	-	-	-

continued

TABLE 35 Effectiveness of psychological interventions on CPTSD outcomes for all trauma populations (continued)

CPTSD symptom cluster	Psychological interventions vs. control	Control		Active control	
		End of treatment	Follow-up after < 6 months	End of treatment	Follow-up after < 6 months
Negative self-concept	All	SMD 1.81 (95% CI 0.73 to 2.89), $I^2 = 90%$, number of trials = 5, $n = 215$	-	-	-
	Trauma-focused CBT	SMD 2.22 (95% CI 0.75 to 3.70), $I^2 = 90.4%$, number of trials = 3, $n = 145$	-	-	-
	Single-component and trauma-focused interventions	-	-	-	-
	Multicomponent and trauma-focused interventions	SMD 2.93 (95% CI 2.40 to 3.45), $I^2 = 0%$, number of trials = 2, $n = 117$	-	-	-
	Single-component and non-trauma-focused interventions	SMD 1.14 (95% CI 0.01 to 2.27), $I^2 = 72.6%$, number of trials = 2, $n = 70$	-	-	-
	Phase-based interventions	-	-	-	-

Depression

TABLE 36 Effectiveness of psychological interventions on depression outcomes for all trauma populations

Psychological interventions vs. control	Control		Active control	
	Post treatment	Follow-up after < 6 months	Post treatment	Follow-up after < 6 months
All	SMD -0.89 (95% CI -1.15 to -0.64), $I^2 = 81.3%$, number of trials = 30, $n = 1793$	SMD -0.51 (95% CI -0.80 to -0.22), $I^2 = 48%$, number of trials = 9, $n = 410$	SMD -0.32 (95% CI -1.23 to 0.59), $I^2 = 47.8%$, number of trials = 2, $n = 72$	-
Trauma-focused CBT	SMD -0.91 (95% CI -1.31 to -0.51), $I^2 = 87.3%$, number of trials = 14, $n = 1042$	SMD -0.72 (95% CI -1.43 to -0.01), $I^2 = 56.6%$, number of trials = 3, $n = 104$	-	-
EMDR	SMD -1.12 (95% CI -1.68 to -0.55), $I^2 = 65.2%$, number of trials = 5, $n = 182$	-	SMD -0.32 (95% CI -1.23 to 0.59), $I^2 = 47.8%$, number of trials = 2, $n = 72$	-
IPT	SMD -1.17 (95% CI -1.71 to -0.62), $I^2 = 0%$, number of trials = 2, $n = 66$	-	-	-
Mindfulness	SMD -0.43 (95% CI -0.73 to -0.13), $I^2 = 0%$, number of trials = 3, $n = 186$	SMD -0.41 (95% CI -0.79 to -0.02), $I^2 = 0%$, number of trials = 2, $n = 109$	-	-
Non-trauma-focused CBT	SMD -0.05 (95% CI -0.48 to 0.39), $I^2 = 10%$, number of trials = 2, $n = 93$	-	-	-
Single-component and trauma-focused interventions	SMD -1.14 (95% CI -1.54 to -0.74), $I^2 = 86.6%$, number of trials = 17, $n = 1034$	SMD -0.85 (95% CI -1.42 to -0.29), $I^2 = 62.5%$, number of trials = 4, $n = 174$	-	-
Multicomponent and trauma-focused interventions	SMD -0.75 (95% CI -1.22 to -0.29), $I^2 = 58.6%$, number of trials = 5, $n = 267$	-	-	-
Single-component non-trauma-focused interventions	SMD -0.48 (95% CI -0.72 to -0.25), $I^2 = 42.0%$, number of trials = 10, $n = 594$	SMD -0.30, (95% CI -0.56 to -0.04), $I^2 = 0%$, number of trials = 5, $n = 236$	-	-
Phase-based interventions	Effect size -1.03 (95% CI -1.43 to -0.63), $I^2 = 10.9%$, number of trials = 4, $n = 133$	-	-	-

Anxiety

TABLE 37 Effectiveness of psychological interventions on anxiety outcomes for all trauma populations

Psychological interventions vs. control	Control		Active control	
	Post treatment	Follow-up after < 6 months	Post treatment	Follow-up after < 6 months
All	SMD -0.81 (95% CI -1.18 to -0.46), <i>I</i> ² = 83.4%, number of trials = 13, <i>n</i> = 1136	-	-	-
Trauma-focused CBT	SMD -0.60 (95% CI -1.01 to -0.19), <i>I</i> ² = 85.5%, number of trials = 8, <i>n</i> = 832	-	-	-
EMDR	SMD -1.05 (95% CI -1.50 to -0.61), <i>I</i> ² = 9.2%, number of trials = 4, <i>n</i> = 102	-	-	-
IPT	-	-	-	-
Mindfulness	-	-	-	-
Non-trauma-focused CBT	-	-	-	-
Single-component and trauma-focused interventions	SMD -0.76 (95% CI -1.15 to -0.37), <i>I</i> ² = 81.5%, number of trials = 10, <i>n</i> = 757	-	-	-
Multicomponent and trauma-focused interventions	SMD -0.85 (95% CI -1.60 to -0.10), <i>I</i> ² = 80.4%, number of trials = 3, <i>n</i> = 223	-	-	-
Single-component non-trauma-focused interventions	SMD -0.18 (95% CI -0.53 to 0.17), <i>I</i> ² = 26.9%, number of trials = 2, <i>n</i> = 225	-	-	-
Phase-based interventions	-	-	-	-

Quality of life

TABLE 38 Effectiveness of psychological interventions on quality-of-life outcomes for all trauma populations

Psychological interventions vs. control	Control		Active control	
	Post treatment	Follow-up after < 6 months	Post treatment	Follow-up after < 6 months
All	SMD 0.28 (95% CI -0.15 to 0.71), $I^2 = 65.5%$, number of trials = 5, $n = 307$	-	-	-
Trauma-focused CBT	SMD 0.23 (95% CI -0.33 to 0.79), $I^2 = 73.9%$, number of trials = 4, $n = 260$	-	-	-
EMDR	-	-	-	-
IPT	-	-	-	-
Mindfulness	-	-	-	-
Non-trauma-focused CBT	-	-	-	-
Single-component and trauma-focused interventions	-	-	-	-
Multicomponent and trauma-focused interventions	-	-	-	-
Single-component non-trauma-focused interventions	-	-	-	-
Phase-based interventions	-	-	-	-

Sleep quality

TABLE 39 Effectiveness of psychological interventions on sleep quality outcomes for all trauma populations

Psychological interventions vs. control	Control		Active control	
	Post treatment	Follow-up after < 6 months	Post treatment	Follow-up after < 6 months
All	SMD -1.00 (95% CI -1.49 to -0.51), $I^2 = 28.8%$, number of trials = 3, $n = 111$	-	-	-
Trauma-focused CBT	SMD -1.30 (95% CI -1.87 to -0.73), $I^2 = 0%$, number of trials = 2, $n = 59$	-	-	-
EMDR	-	-	-	-
IPT	-	-	-	-
Mindfulness	-	-	-	-
Non-trauma-focused CBT	-	-	-	-
Single-component and trauma-focused interventions	-	-	-	-
Multicomponent and trauma-focused interventions	-	-	-	-
Single-component non-trauma-focused interventions	-	-	-	-
Phase-based interventions	-	-	-	-

Effectiveness of psychological interventions by trauma exposure

Veterans

TABLE 40 Effectiveness of psychological interventions for veteran populations

Outcome	Psychological interventions vs. control	Control		Active control	
		Post treatment	Follow-up after < 6 months	Post treatment	Follow-up after < 6 months
PTSD symptoms	All	SMD -0.48 (95% CI -0.72 to -0.24), $I^2 = 41.7%$, number of trials = 14, $n = 502$	SMD -0.20 (95% CI -0.72 to 0.33), $I^2 = 63.1%$, number of trials = 4, $n = 180$	SMD -0.44 (95% CI -0.98 to 0.10), $I^2 = 64%$, number of trials = 4, $n = 188$	-
	Trauma-focused CBT	SMD -0.77 (95% CI -1.20 to -0.33), $I^2 = 44.6%$, number of trials = 5, $n = 199$	-	SMD -0.26 (95% CI -0.88 to 0.35), $I^2 = 51.1%$, number of trials = 2, $n = 126$	-
	EMDR	SMD -0.58 (95% CI -1.00 to -0.16), $I^2 = 11.1%$, number of trials = 4, $n = 106$	-	-	-
	IPT	-	-	-	-
	Mindfulness	SMD -0.26 (95% CI -0.55 to 0.04), $I^2 = 0%$, number of trials = 3, $n = 186$	SMD -0.08 (95% CI -0.68 to 0.52), $I^2 = 59%$, number of trials = 2, $n = 109$	-	-
	Non-trauma-focused CBT	-	-	-	-
	Single-component and trauma-focused interventions	SMD -0.51 (95% CI -0.79 to -0.23), $I^2 = 0%$, number of trials = 7, $n = 219$	-	-	-
	Multicomponent and trauma-focused interventions	SMD -1.05 (95% CI -1.80 to -0.30), $I^2 = 59.4%$, number of trials = 3, $n = 86$	-	-	-
	Single-component non-trauma-focused interventions	SMD -0.16 (95% CI -0.42 to 0.10), $I^2 = 0%$, number of trials = 4, $n = 244$	SMD 0.01 (95% CI -0.36 to 0.36), $I^2 = 28.1%$, number of trials = 3, $n = 167$	-	-
	Phase-based interventions	-	-	-	-

continued

TABLE 40 Effectiveness of psychological interventions for veteran populations (continued)

Outcome	Psychological interventions vs. control	Control		Active control	
		Post treatment	Follow-up after < 6 months	Post treatment	Follow-up after < 6 months
Depression symptoms	All	SMD -0.56 (95% CI -0.84 to -0.28), $I^2 = 46.8%$, number of trials = 11, $n = 445$	SMD -0.38 (95% CI -0.78 to 0.01), $I^2 = 42.3%$, number of trials = 5, $n = 201$	-	-
	Trauma-focused CBT	SMD -1.02 (95% CI -1.72 to -0.32), $I^2 = 51%$, number of trials = 3, $n = 112$	-	-	-
	EMDR	SMD -0.91 (95% CI -2.28 to 0.47), $I^2 = 77.7%$, number of trials = 2, $n = 44$	-	-	-
	IPT	-	-	-	-
	Mindfulness	SMD -0.43 (95% CI -0.73 to -0.13), $I^2 = 0%$, number of trials = 3, $n = 186$	SMD -0.41 (95% CI -0.79 to -0.02), $I^2 = 0%$, number of trials = 2, $n = 109$	-	-
	Non-trauma-focused CBT	-	-	-	-
	Single-component and trauma-focused interventions	SMD -0.87 (95% CI -1.50 to -0.24), $I^2 = 56%$, number of trials = 4, $n = 133$	-	-	-
	Multicomponent and trauma-focused interventions	SMD -0.86 (95% CI -1.89 to 0.17), $I^2 = 61.4%$, number of trials = 2, $n = 44$	-	-	-
	Single-component non-trauma-focused interventions	SMD -0.33 (95% CI -0.61 to -0.05), $I^2 = 20.7%$, number of trials = 5, $n = 268$	SMD -0.27 (95% CI -0.56 to 0.02), $I^2 = 0%$, number of trials = 4, $n = 188$	-	-
Phase-based interventions	-	-	-	-	

Outcome	Psychological interventions vs. control		Control		Active control	
			Post treatment	Follow-up after < 6 months	Post treatment	Follow-up after < 6 months
Anxiety symptoms	All		SMD -0.74 (95% CI -1.29 to -0.18), I ² = 54%, number of trials = 5, n = 153	-	-	-
	Trauma-focused CBT		SMD -0.63 (95% CI -1.83 to 0.57), I ² = 71.3%, number of trials = 2, n = 90	-	-	-
	EMDR		SMD -0.89 (95% CI -1.45 to -0.33), I ² = 10.6%, number of trials = 3, n = 63	-	-	-
	IPT		-	-	-	-
	Mindfulness		-	-	-	-
	Non-trauma-focused CBT		-	-	-	-
	Single-component and trauma-focused interventions		-	-	-	-
	Multicomponent and trauma-focused interventions		-	-	-	-
	Single-component non trauma-focused interventions		-	-	-	-
	Phase-based interventions		-	-	-	-

War-affected populations

TABLE 41 Effectiveness of psychological interventions for war-affected populations

Outcome	Psychological interventions vs. control	Control		Active control	
		Post treatment	Follow-up after < 6 months	Post treatment	Follow-up after < 6 months
PTSD symptoms	All	SMD -0.46 (95% CI -0.68 to -0.25), $I^2 = 50.4%$, number of trials = 8, $n = 933$	-	-	-
	Trauma-focused CBT	SMD -0.48 (95% CI -0.82 to -0.15), $I^2 = 74.8%$, number of trials = 6, $n = 713$	-	-	-
	EMDR	-	-	-	-
	IPT	-	-	-	-
	Mindfulness	-	-	-	-
	Non-trauma-focused CBT	-	-	-	-
	Single-component and trauma-focused interventions	SMD -0.51 (95% CI -0.80 to -0.23), $I^2 = 55.9%$, number of trials = 5, $n = 566$	-	-	-
	Multicomponent and trauma-focused interventions	SMD -0.41 (95% CI -0.80 to -0.02), $I^2 = 48.3%$, number of trials = 3, $n = 253$	-	-	-
	Single-component non-trauma-focused interventions	-	-	-	-
	Phase-based interventions	-	-	-	-

Outcome	Psychological interventions vs. control	Control		Active control	
		Post treatment	Follow-up after < 6 months	Post treatment	Follow-up after < 6 months
Depression symptoms	All	-	-	-	-
	Trauma-focused CBT	SMD -0.48 (95% CI -0.82 to -0.15), <i>I</i> ² = 74.8%, number of trials = 6, <i>n</i> = 827	-	-	-
	EMDR	-	-	-	-
	IPT	-	-	-	-
	Mindfulness	-	-	-	-
	Non-trauma-focused CBT	-	-	-	-
	Single-component and trauma-focused interventions	SMD -0.47 (95% CI -0.89 to -0.05), <i>I</i> ² = 79.1%, number of trials = 4, <i>n</i> = 536	-	-	-
	Multicomponent and trauma-focused interventions	SMD -0.44 (95% CI -1.34 to 0.45), <i>I</i> ² = 79.1%, number of trials = 2, <i>n</i> = 177	-	-	-
	Single-component non-trauma-focused interventions	-	-	-	-
Anxiety symptoms	Phase-based interventions	-	-	-	-
	All	-	-	-	-
	Trauma-focused CBT	SMD -0.64 (95% CI -1.18 to -0.10), <i>I</i> ² = 90.4%, number of trials = 5, <i>n</i> = 691	-	-	-
	EMDR	-	-	-	-
	IPT	-	-	-	-
	Mindfulness	-	-	-	-
	Non-trauma-focused CBT	-	-	-	-
	Single-component and trauma-focused interventions	SMD -0.70 (95% CI -1.48 to 0.08), <i>I</i> ² = 94.3%, number of trials = 3, <i>n</i> = 514	-	-	-
	Multicomponent and trauma-focused interventions	SMD -0.52 (95% CI -1.53 to 0.50), <i>I</i> ² = 83.7%, number of trials = 2, <i>n</i> = 177	-	-	-
Single-component non-trauma-focused interventions	-	-	-	-	
Phase-based interventions	-	-	-	-	

Childhood sexual abuse

TABLE 42 Effectiveness of psychological interventions for childhood sexual abuse populations

Outcome	Psychological interventions vs. control	Control		Active control	
		Post treatment	Follow-up after < 6 months	Post treatment	Follow-up after < 6 months
PTSD symptoms	All	SMD -0.90 (95% CI -1.43 to -0.37), $I^2 = 89.6%$, number of trials = 9, $n = 687$	SMD -0.27 (95% CI -0.71, 0.17), $I^2 = 53.6%$, number of trials = 3, $n = 323$	-	-
	Trauma-focused CBT	SMD -1.22 (95% CI -2.40 to -0.05), $I^2 = 90.3%$, number of trials = 3, $n = 153$	-	-	-
	EMDR	-	-	-	-
	IPT	-	-	-	-
	Mindfulness	-	-	-	-
	Non-trauma-focused CBT	SMD 0.01 (95% CI -0.20 to 0.21), $I^2 = 0%$, number of trials = 2, $n = 368$	-	-	-
	Single-component and trauma-focused interventions	SMD -1.19 (95% CI -2.04 to -0.35), $I^2 = 85.5%$, number of trials = 4, $n = 192$	-	-	-
	Multicomponent and trauma-focused interventions	-	-	-	-
	Single-component non-trauma-focused interventions	SMD -0.54 (95% CI -1.05 to -0.03), $I^2 = 83.4%$, number of trials = 5, $n = 494$	SMD -0.08 (95% CI -0.31 to 0.15), $I^2 = 0%$, number of trials = 2, $n = 295$	-	-
Phase-based interventions	-	-	-	-	

Outcome	Psychological interventions vs. control	Control		Active control	
		Post treatment	Follow-up after < 6 months	Post treatment	Follow-up after < 6 months
Depression symptoms	All	SMD -0.82 (95% CI -1.10 to -0.55), $I^2 = 0\%$, number of trials = 5, $n = 234$	SMD -0.52 (95% CI -0.99 to -0.04), $I^2 = 0\%$, number of trials = 2, $n = 76$	-	-
	Trauma-focused CBT	SMD -0.50 (95% CI -0.95 to -0.05), $I^2 = 0\%$, number of trials = 2, $n = 79$	-	-	-
	EMDR	-	-	-	-
	IPT	-	-	-	-
	Mindfulness	-	-	-	-
	Non-trauma-focused CBT	-	-	-	-
	Single-component and trauma-focused interventions	SMD -0.58 (95% CI -0.95 to -0.21), $I^2 = 0\%$, number of trials = 3, $n = 118$	-	-	-
	Multicomponent and trauma-focused interventions	-	-	-	-
	Single-component non-trauma-focused interventions	SMD -0.92 (95% CI -1.36 to -0.48), $I^2 = 0\%$, number of trials = 2, $n = 93$	-	-	-
Anxiety symptoms	Phase-based interventions	-	-	-	-
	All	-	-	-	-
	Trauma-focused CBT	-	-	-	-
	EMDR	-	-	-	-
	IPT	-	-	-	-
	Mindfulness	-	-	-	-
	Non-trauma-focused CBT	-	-	-	-
	Single-component and trauma-focused interventions	SMD -0.87 (95% CI -1.76 to 0.03), $I^2 = 75.2\%$, number of trials = 2, $n = 90$	-	-	-
	Multicomponent and trauma-focused interventions	-	-	-	-
Single-component non-trauma-focused interventions	-	-	-	-	
Phase-based interventions	-	-	-	-	

Refugee populations

TABLE 43 Effectiveness of psychological interventions for refugee populations

Outcome	Psychological interventions vs. control	Control		Active control	
		Post treatment	Follow-up after < 6 months	Post treatment	Follow-up after < 6 months
PTSD symptoms	All	SMD -1.84 (95% CI -2.18 to -1.49), $I^2 = 0\%$, number of trials = 6, $n = 188$	SMD -0.66 (95% CI -1.22 to -0.09), $I^2 = 72.7\%$, number of trials = 3, $n = 235$	-	-
	Trauma-focused CBT	SMD -2.12 (95% CI -2.71 to -1.53), $I^2 = 0\%$, number of trials = 3, $n = 71$	SMD -0.40 (95% CI -0.87 to 0.06), $I^2 = 40.1\%$, number of trials = 2, $n = 165$	-	-
	EMDR	SMD -1.72 (95% CI -2.19 to -1.26), $I^2 = 0\%$, number of trials = 2, $n = 99$	-	SMD -0.15 (95% CI -0.62 to 0.32), $I^2 = 0\%$, number of trials = 2, $n = 71$	SMD -0.15 (95% CI -0.80 to 0.49), $I^2 = 22.4\%$, number of trials = 2, $n = 71$
	IPT	-	-	-	-
	Mindfulness	-	-	-	-
	Non-trauma-focused CBT	-	-	-	-
	Single-component and trauma-focused interventions	SMD -1.87 (95% CI -2.24 to -1.51), $I^2 = 0\%$, number of trials = 5, $n = 170$	SMD -0.67 (95% CI -1.65 to 0.32), $I^2 = 86.3\%$, number of trials = 2, $n = 133$	-	-
	Multicomponent and trauma-focused interventions	-	-	-	-
	Single-component non-trauma-focused interventions	-	-	-	-
Phase-based interventions	-	-	-	-	

Outcome	Psychological interventions vs. control	Control		Active control	
		Post treatment	Follow-up after < 6 months	Post treatment	Follow-up after < 6 months
Depression symptoms	All	SMD -1.56 (95% CI -1.93 to -1.16), $I^2 = 0\%$, number of trials = 5, $n = 148$	SMD -0.73 (95% CI -1.57 to 0.10), $I^2 = 81.3\%$, number of trials = 2, $n = 133$	-	-
	Trauma-focused CBT	SMD -2.03 (95% CI -2.92 to -1.13), $I^2 = 0\%$, number of trials = 2, $n = 31$	SMD -0.73 (95% CI -1.57 to 0.10), $I^2 = 81.3\%$, number of trials = 2, $n = 133$	-	-
	EMDR	SMD -1.46 (95% CI -1.90 to -1.01), $I^2 = 0\%$, number of trials = 2, $n = 99$	-	SMD -0.32 (95% CI -1.23 to 0.59), $I^2 = 47.8\%$, number of trials = 2, $n = 72$	SMD -0.01 (95% CI -0.47 to 0.45), $I^2 = 0\%$, number of trials = 2, $n = 73$
	IPT	-	-	-	-
	Mindfulness	-	-	-	-
	Non-trauma-focused CBT	-	-	-	-
	Single-component and trauma-focused interventions	SMD -1.57 (95% CI -1.97 to -1.17), $I^2 = 0\%$, number of trials = 4, $n = 130$	SMD -0.73 (95% CI -1.57 to 0.10), $I^2 = 81.3\%$, number of trials = 2, $n = 133$	-	-
	Multicomponent and trauma-focused interventions	-	-	-	-
	Single-component non-trauma-focused interventions	-	-	-	-
Phase-based interventions	-	-	-	-	

continued

TABLE 43 Effectiveness of psychological interventions for refugee populations (continued)

Outcome	Psychological interventions vs. control	Control		Active control	
		Post treatment	Follow-up after < 6 months	Post treatment	Follow-up after < 6 months
Anxiety symptoms	All	-	-	-	-
	Trauma-focused CBT	-	-	-	-
	EMDR	-	-	-	-
	IPT	-	-	-	-
	Mindfulness	-	-	-	-
	Non-trauma-focused CBT	-	-	-	-
	Single-component and trauma-focused interventions	-	-	-	-
	Multicomponent and trauma-focused interventions	-	-	-	-
	Single-component non-trauma-focused interventions	-	-	-	-
Phase-based interventions	-	-	-	-	

Domestic violence

TABLE 44 Effectiveness of psychological interventions for domestic violence populations

Outcome	Psychological interventions vs. control	Control		Active control	
		Post treatment	Follow-up after < 6 months	Post treatment	Follow-up after < 6 months
PTSD symptoms	All	-	-	-	-
	Trauma-focused CBT	SMD -2.92 (95% CI -3.45 to -2.39), $I^2 = 0%$, number of trials = 2, $n = 117$	-	-	-
	EMDR	-	-	-	-
	IPT	-	-	-	-
	Mindfulness	-	-	-	-
	Non-trauma-focused CBT	-	-	-	-
	Single-component and trauma-focused interventions	-	-	-	-
	Multicomponent and trauma-focused interventions	-	-	-	-
	Single-component non-trauma-focused interventions	-	-	-	-
Phase-based interventions	-	-	-	-	
Depression symptoms	All	-	-	-	-
	Trauma-focused CBT	SMD -3.24 (95% CI -4.40 to -2.09), $I^2 = 66.6%$, number of trials = 2, $n = 117$	-	-	-
	EMDR	-	-	-	-
	IPT	-	-	-	-
	Mindfulness	-	-	-	-
	Non-trauma-focused CBT	-	-	-	-

continued

TABLE 44 Effectiveness of psychological interventions for domestic violence populations (continued)

Outcome	Psychological interventions vs. control	Control		Active control	
		Post treatment	Follow-up after < 6 months	Post treatment	Follow-up after < 6 months
Anxiety symptoms	Single-component and trauma-focused interventions	-	-	-	-
	Multicomponent and trauma-focused interventions	-	-	-	-
	Single-component non-trauma-focused interventions	-	-	-	-
	Phase-based interventions	-	-	-	-
	All	-	-	-	-
	Trauma-focused CBT	-	-	-	-
	EMDR	-	-	-	-
	IPT	-	-	-	-
	Mindfulness	-	-	-	-
	Non-trauma-focused CBT	-	-	-	-
	Single-component and trauma-focused interventions	-	-	-	-
	Multicomponent and trauma-focused interventions	-	-	-	-
	Single-component non-trauma-focused interventions	-	-	-	-
Phase-based interventions	-	-	-	-	

Pharmacological interventions

All studies included in analyses were conducted in veteran populations.

Post-traumatic stress disorder

TABLE 45 Effectiveness of pharmacological interventions on PTSD outcomes for veteran populations

Pharmacological interventions vs. placebo	Placebo	
	Post treatment	Follow-up after < 6 months
All	–	–
Antidepressants	SMD -0.50 (95% CI -1.22 to 0.22), $I^2 = 87%$, number of trials = 6, $n = 338$	–
SSRIs	SMD -0.61 (95% CI -1.64 to 0.41), $I^2 = 92.2%$, number of trials = 4, $n = 293$	–
Antipsychotics	SMD -0.45 (95% CI -0.85 to -0.05), $I^2 = 51.2%$, number of trials = 5, $n = 365$	–
Anticonvulsants	SMD -0.16 (95% CI -0.77 to 0.45), $I^2 = 45.5%$, number of trials = 2, $n = 106$	–
Prazosin	SMD -0.52 (95% CI -1.03 to -0.02), $I^2 = 41.4%$, number of trials = 3, $n = 110$	–

Depression

TABLE 46 Effectiveness of pharmacological interventions on depression outcomes for veteran populations

Pharmacological interventions vs. placebo	Placebo	
	Post treatment	Follow-up after < 6 months
All	–	–
Antidepressants	SMD 0.07 (95% CI -0.20 to 0.34), $I^2 = 0%$, number of trials = 3, $n = 220$	–
SSRIs	–	–
Antipsychotics	SMD -0.71 (95% CI -1.44 to 0.03), $I^2 = 58.3%$, number of trials = 2, $n = 266$	–
Anticonvulsants	SMD 0.02 (95% CI -0.37 to 0.40), $I^2 = 0%$, number of trials = 2, $n = 106$	–
Prazosin	SMD -0.37 (95% CI -1.21 to 0.47), $I^2 = 68.5%$, number of trials = 2, $n = 76$	–

Psychosis

TABLE 47 Effectiveness of pharmacological interventions on psychosis outcomes for veteran populations

Outcome	Pharmacological interventions vs. placebo	Placebo	
		Post treatment	Follow-up after < 6 months
PANSS-positive	All	-	-
	Antidepressants	-	-
	SSRIs	-	-
	Antipsychotics ^a	Mean difference -1.75 (95% CI -4.04 to 0.54), <i>I</i> ² = 76.9%, number of trials = 3, <i>n</i> = 329	-
	Anticonvulsants	-	-
	Prazosin	-	-
PANSS-negative	All	-	-
	Antidepressants	-	-
	SSRIs	-	-
	Antipsychotics ^a	Mean difference 0.54 (95% CI -0.14 to 1.22), <i>I</i> ² = 0%, number of trials = 2, <i>n</i> = 284	-
	Anticonvulsants	-	-
	Prazosin	-	-
PANSS: total	All	-	-
	Antidepressants	-	-
	SSRIs	-	-
	Antipsychotics ^a	Mean difference 0.04 (95% CI -2.08 to 2.16), <i>I</i> ² = 0%, number of trials = 2, <i>n</i> = 284	-
	Anticonvulsants	-	-
	Prazosin	-	-
PANSS: general psychopathology	All	-	-
	Antidepressants	-	-
	SSRIs	-	-
	Antipsychotics ^a	Mean difference -0.18 (95% CI -1.39 to 1.03), <i>I</i> ² = 0%, number of trials = 2, <i>n</i> = 284	-
	Anticonvulsants	-	-
	Prazosin	-	-

a All antipsychotics were risperidone.

Sleep quality

TABLE 48 Effectiveness of pharmacological interventions on sleep quality outcomes for veteran populations

Pharmacological interventions vs. placebo	Placebo	
	Post treatment	Follow-up after < 6 months
All	-	-
Antidepressants	-	-
SSRIs	-	-
Antipsychotics	-	-
Anticonvulsants	-	-
Prazosin	SMD -0.73 (95% CI -1.12 to -0.34), $I^2 = 0\%$, number of trials = 3, $n = 109$	-

Appendix 10 Forest plots of results of effectiveness meta-analyses

Psychological interventions versus control in all trauma populations

Post-traumatic stress disorder symptoms

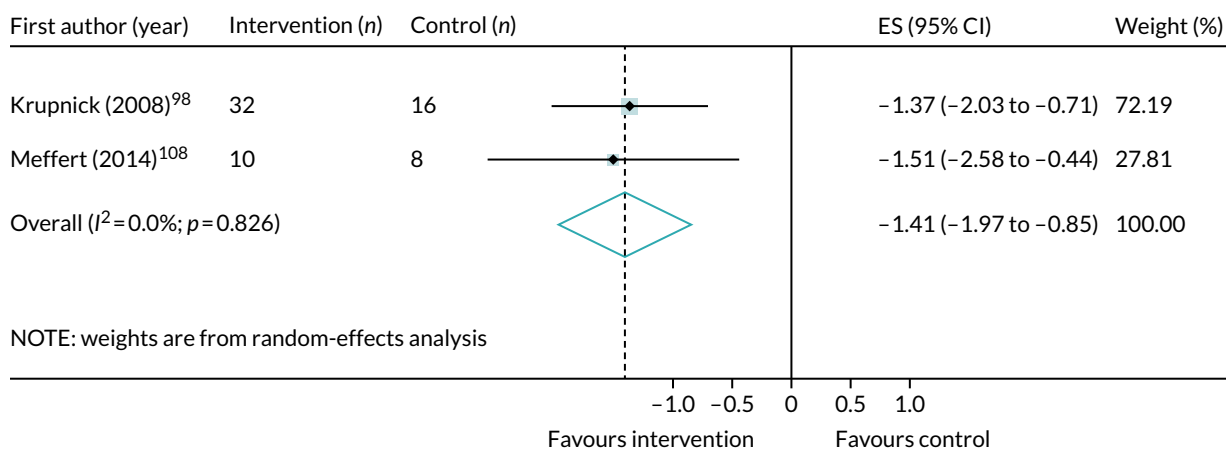


FIGURE 27 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all IPT interventions with control.

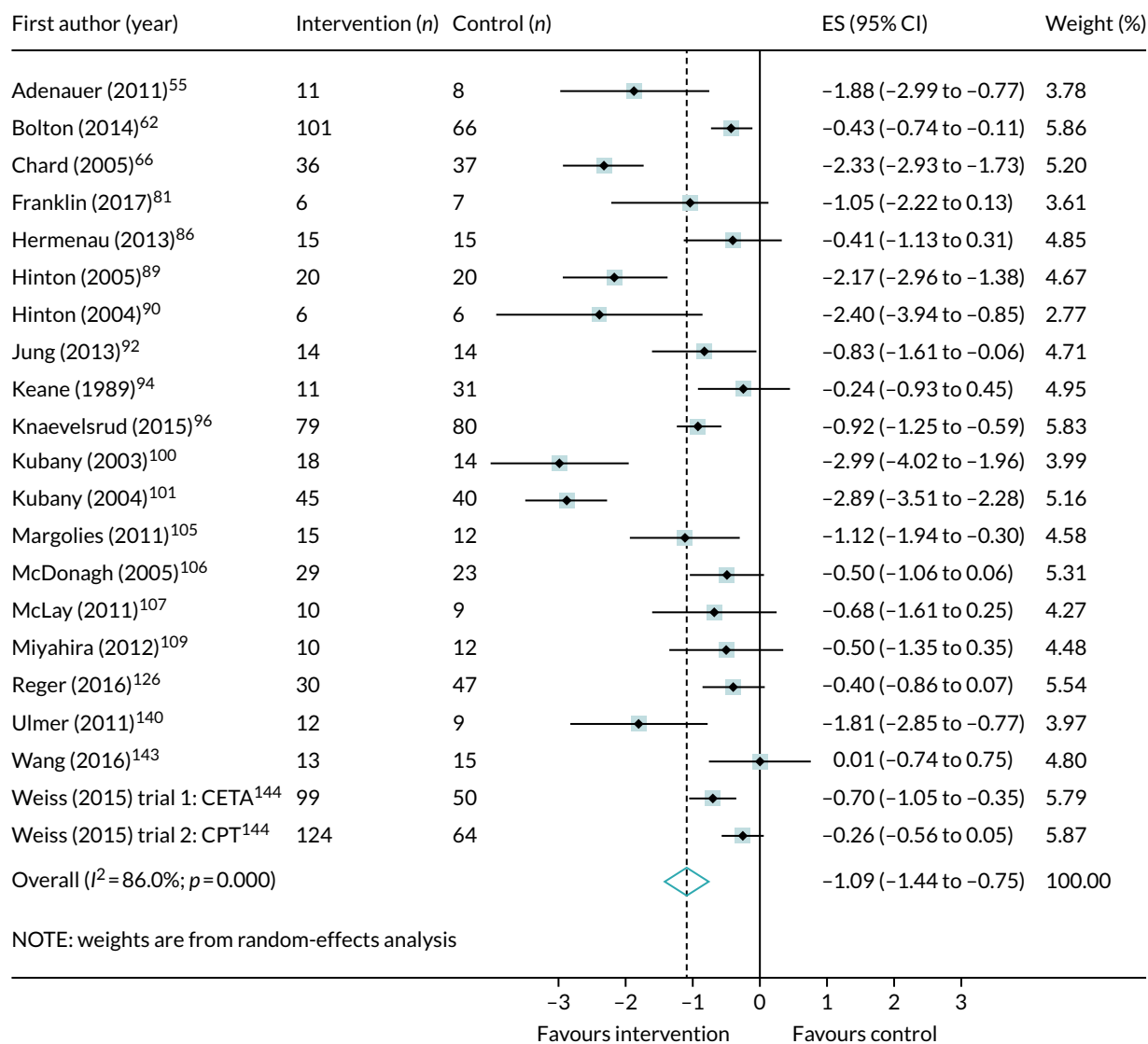


FIGURE 28 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all trauma-focused CBT interventions with control. CETA, common elements treatment approach; CPT, cognitive treatment therapy.

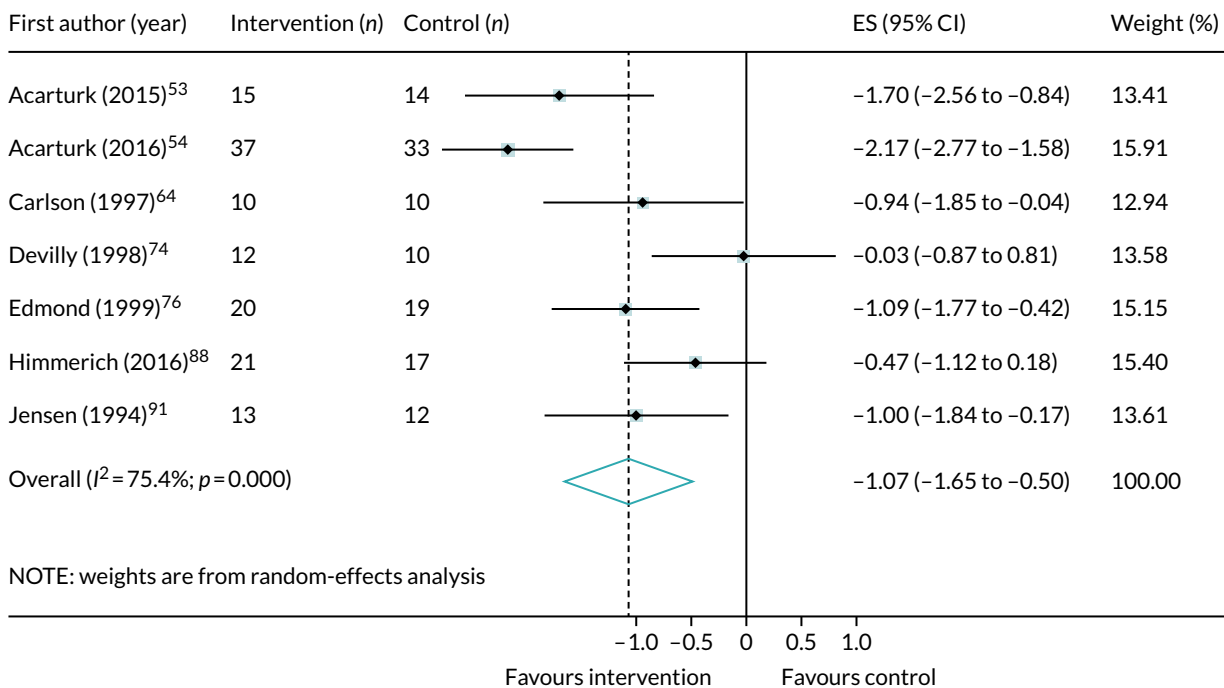


FIGURE 29 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all EMDR interventions with control.

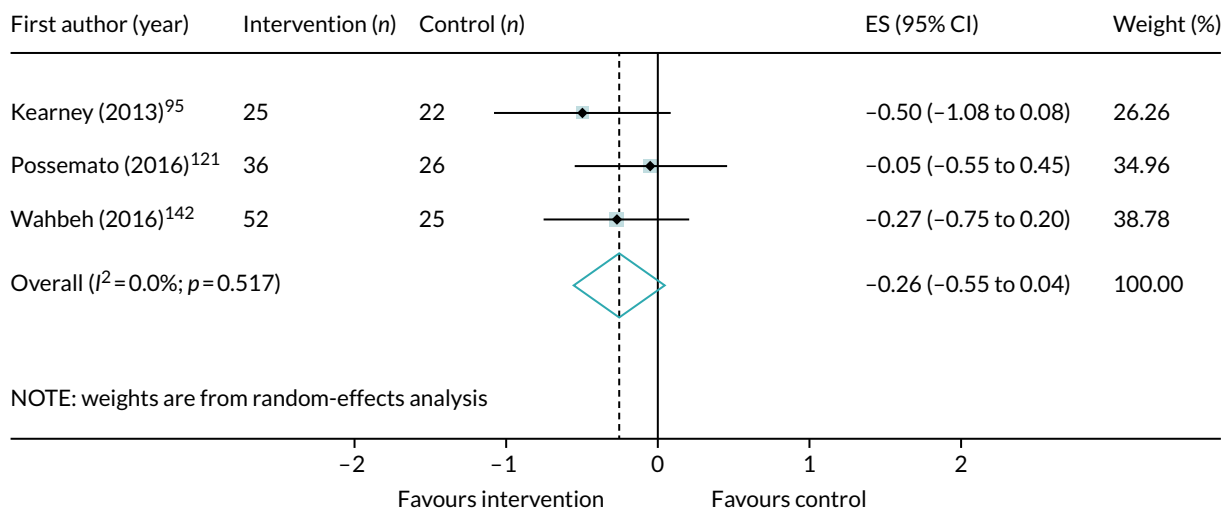


FIGURE 30 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all mindfulness interventions with control.

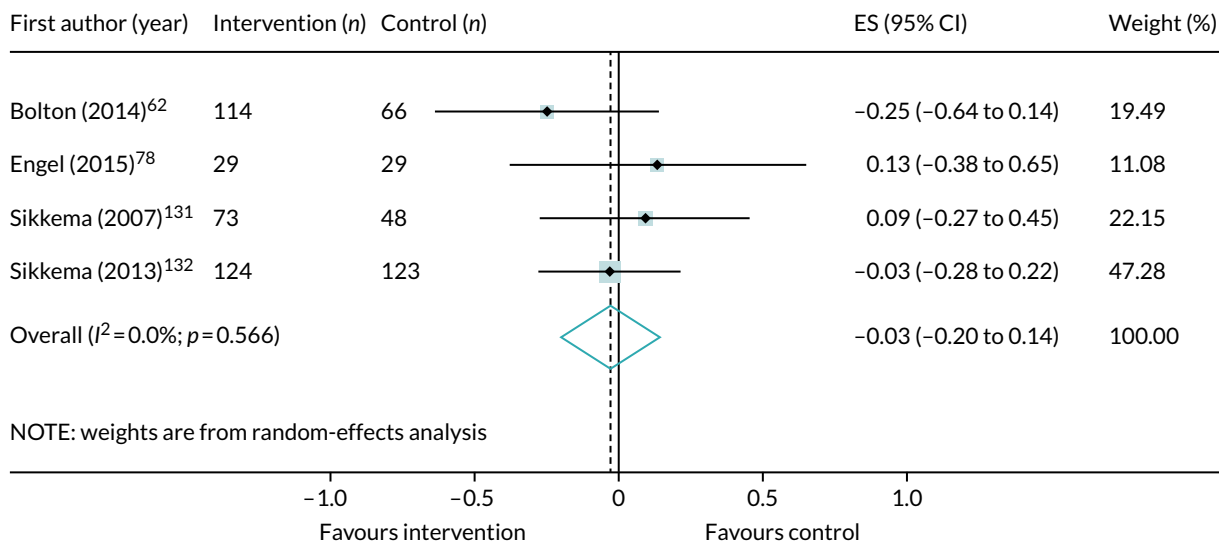


FIGURE 31 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all non-trauma-focused CBT interventions with control.

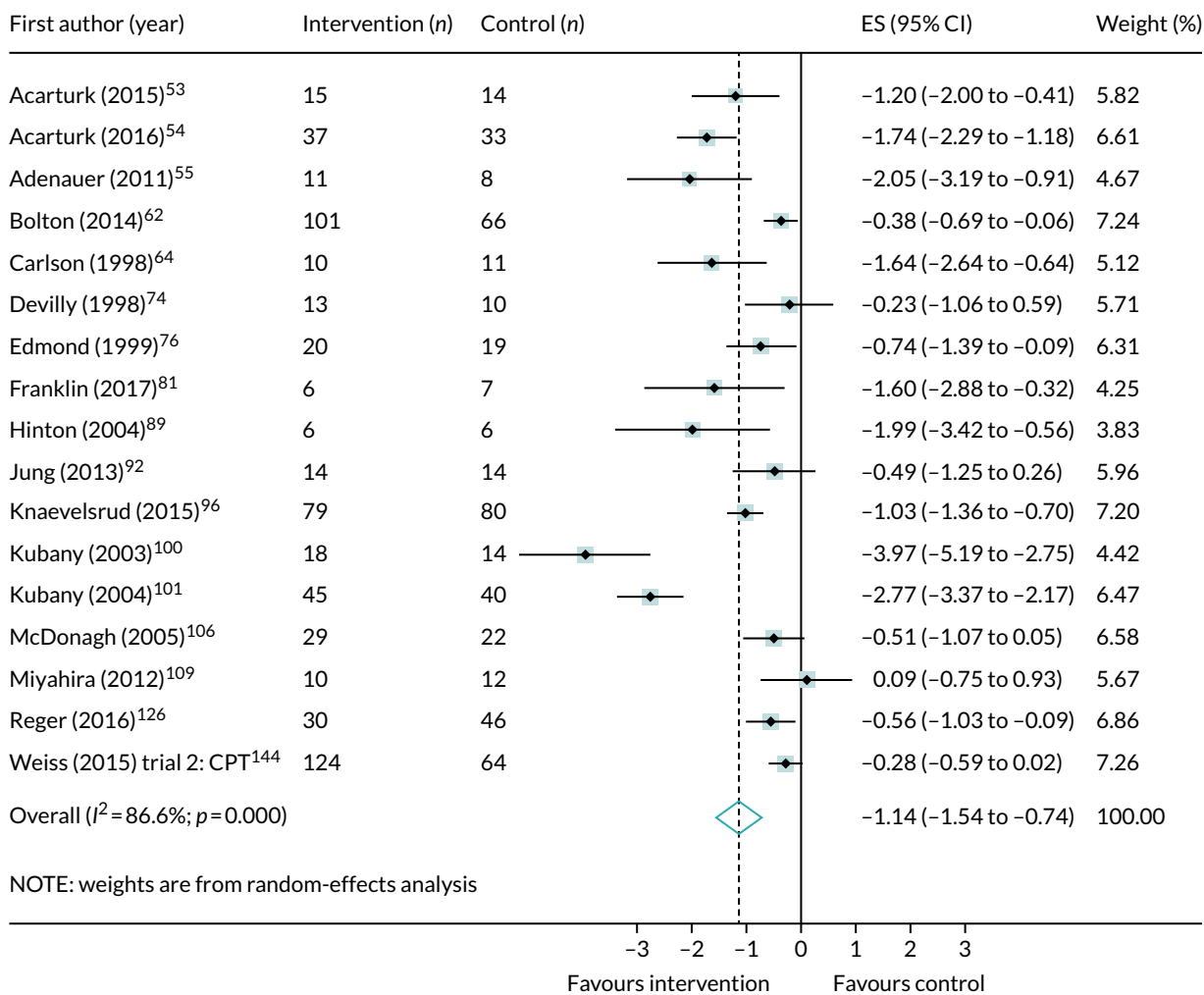


FIGURE 32 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all single-component trauma-focused interventions with control. CPT, cognitive processing therapy.

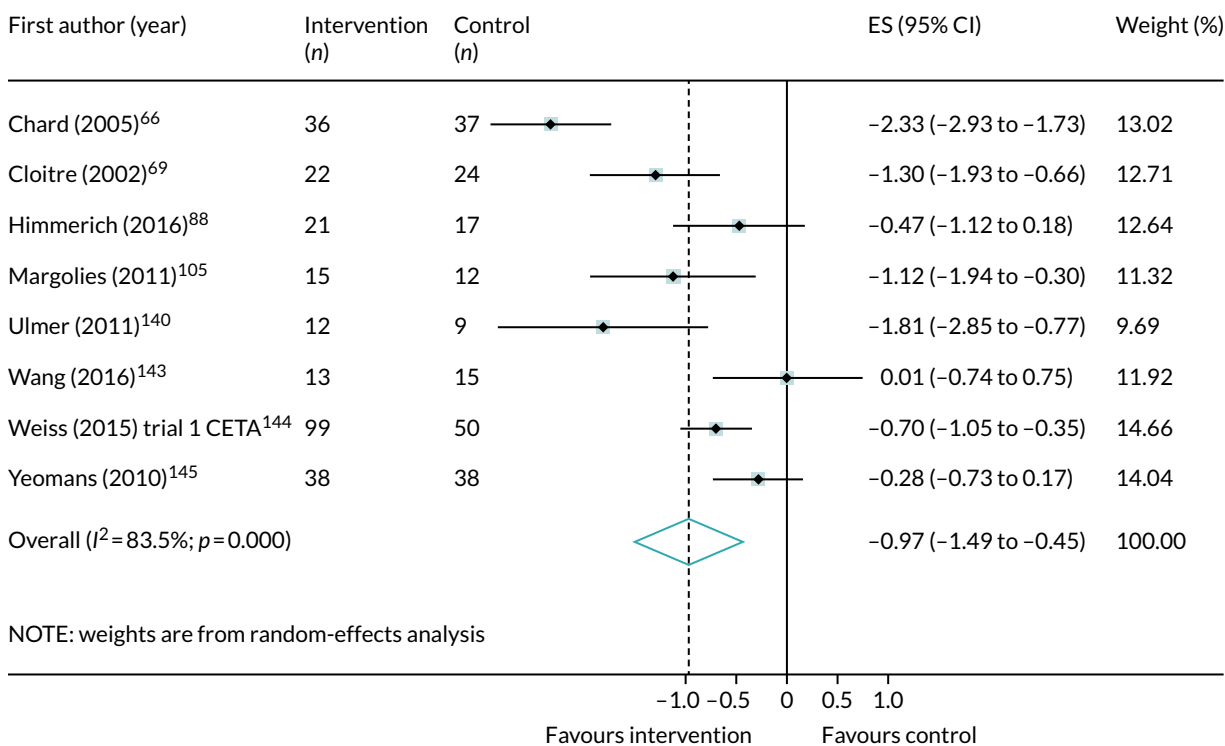


FIGURE 33 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all multicomponent trauma-focused interventions with control. CETA, common elements treatment approach.

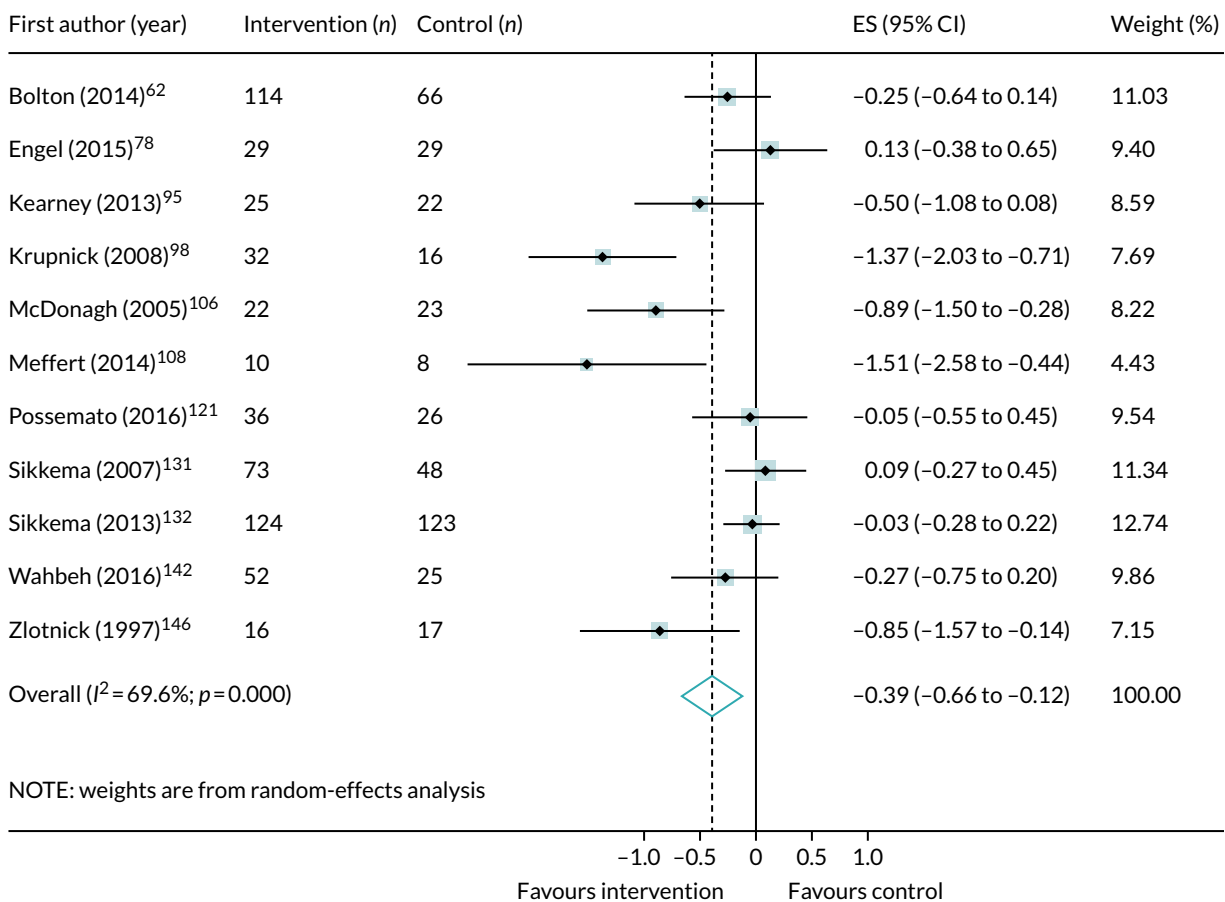


FIGURE 34 Meta-analysis of post-treatment effect size (ES) for PTSD total symptoms, comparing all single-component non-trauma-focused interventions with control.

Complex post-traumatic stress disorder symptoms

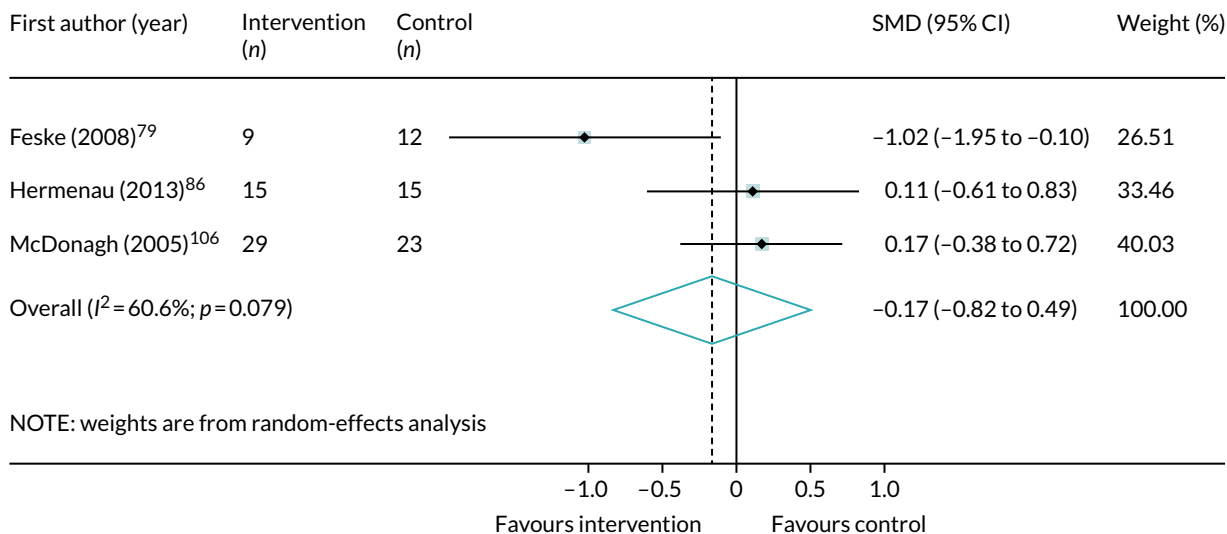


FIGURE 35 Meta-analysis of post-treatment SMD for emotional dysregulation, comparing trauma-focused CBT interventions with control.

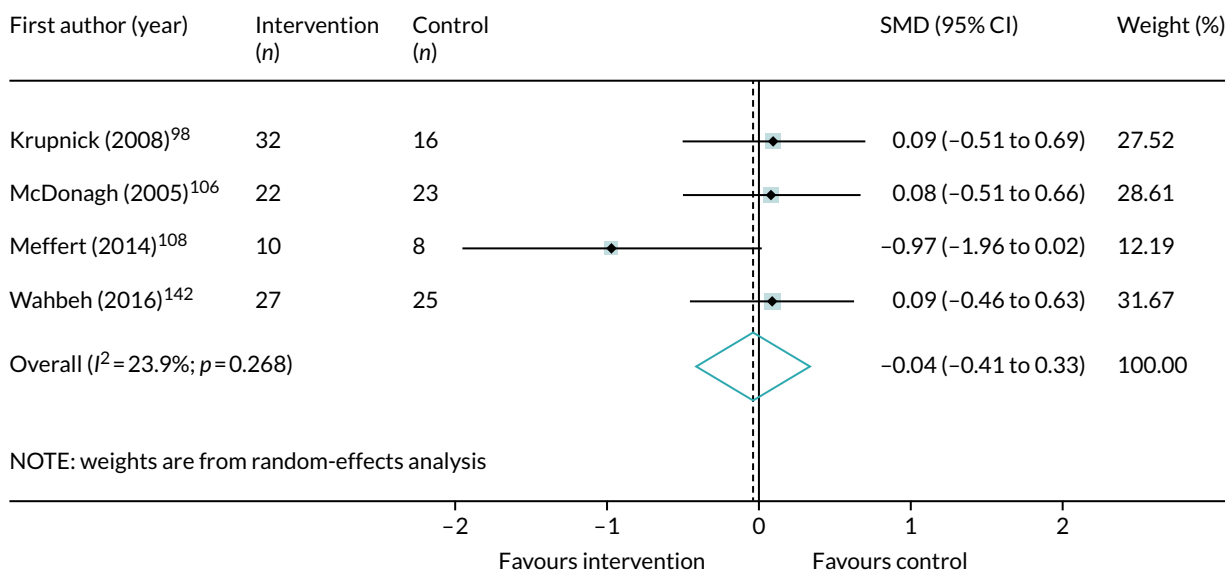


FIGURE 36 Meta-analysis of post-treatment SMD for emotional dysregulation, comparing single-component and non-trauma-focused interventions with control.

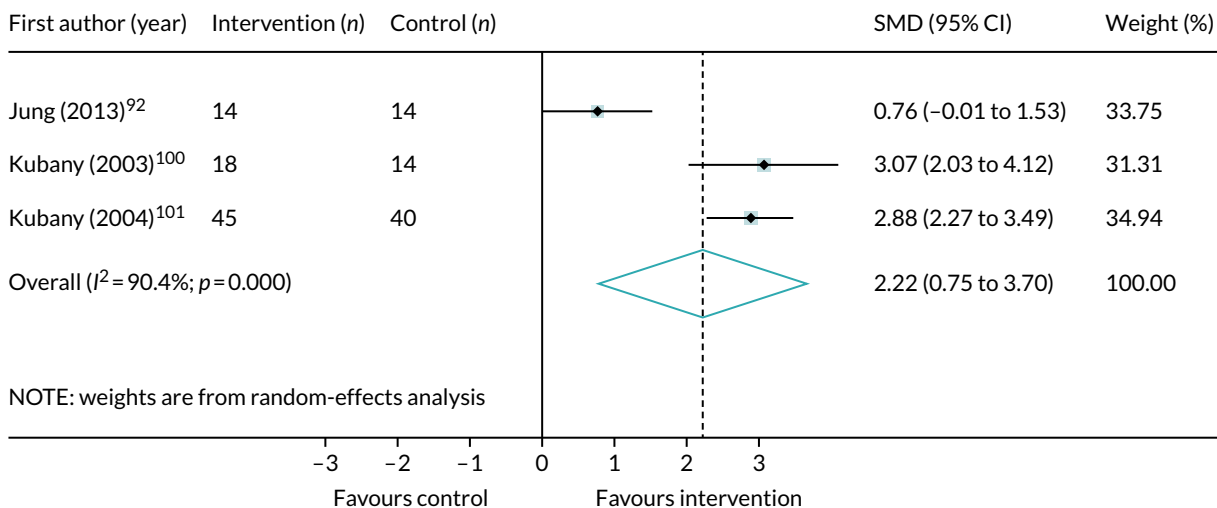


FIGURE 37 Meta-analysis of post-treatment SMD for negative self-concept, comparing all trauma-focused CBT interventions with control (positive SMD equals improvement in symptoms).

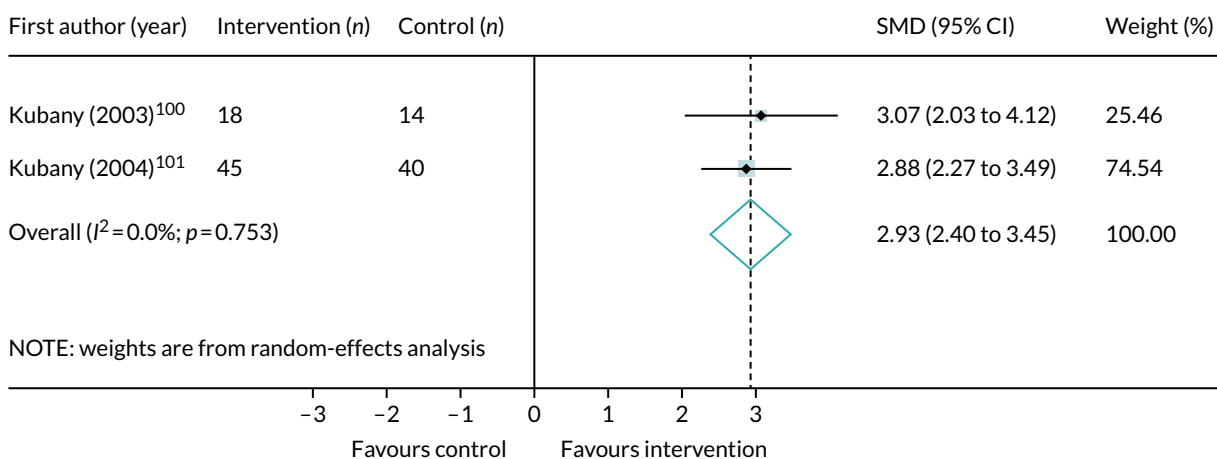


FIGURE 38 Meta-analysis of post-treatment SMD for negative self-concept, comparing all multicomponent and trauma-focused interventions with control (positive SMD equals improvement in symptoms).

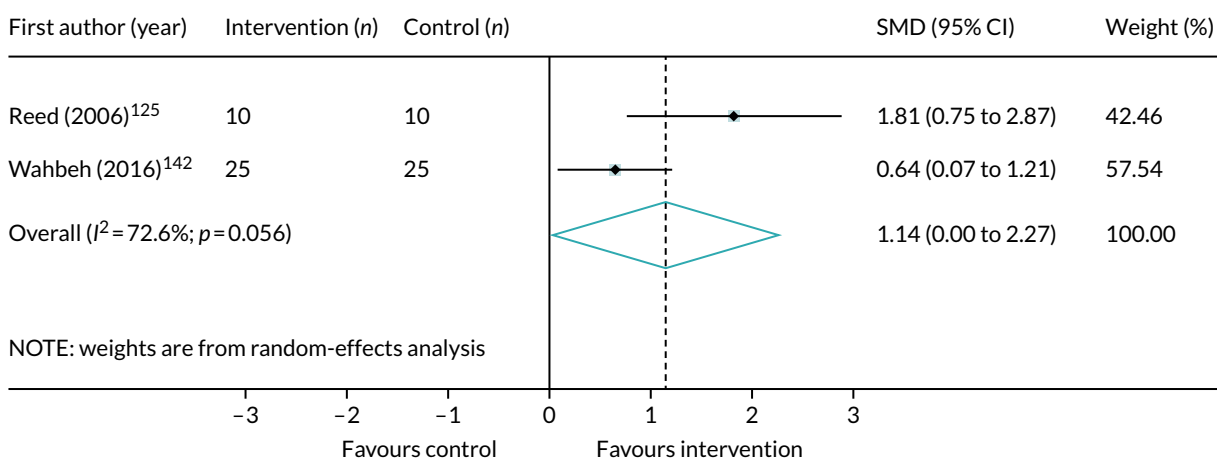


FIGURE 39 Meta-analysis of post-treatment SMD for negative self-concept, comparing all single-component and non-trauma-focused interventions with control (positive SMD equals improvement in symptoms).

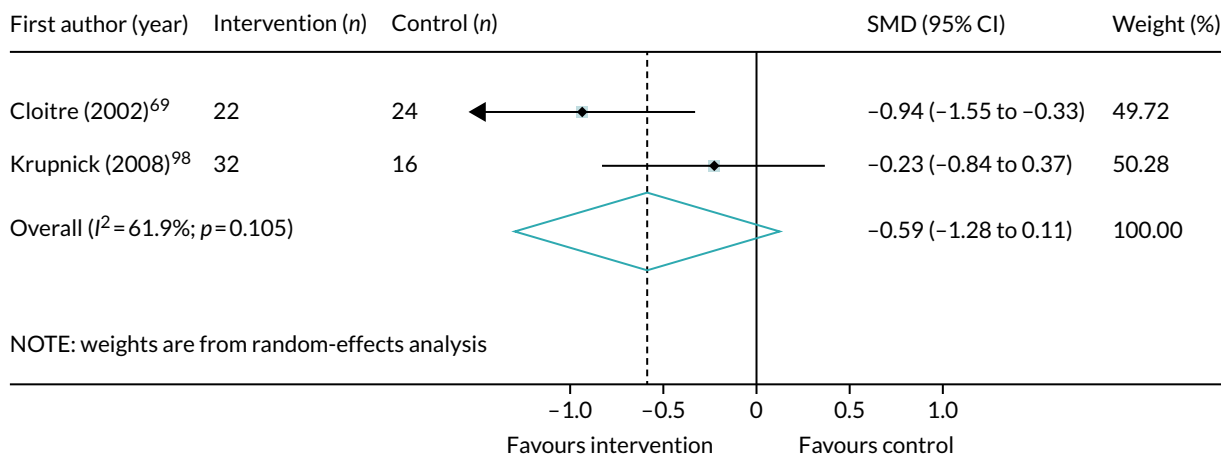


FIGURE 40 Meta-analysis of post-treatment SMD for interpersonal problems, comparing all psychological interventions with control.

Depression symptoms

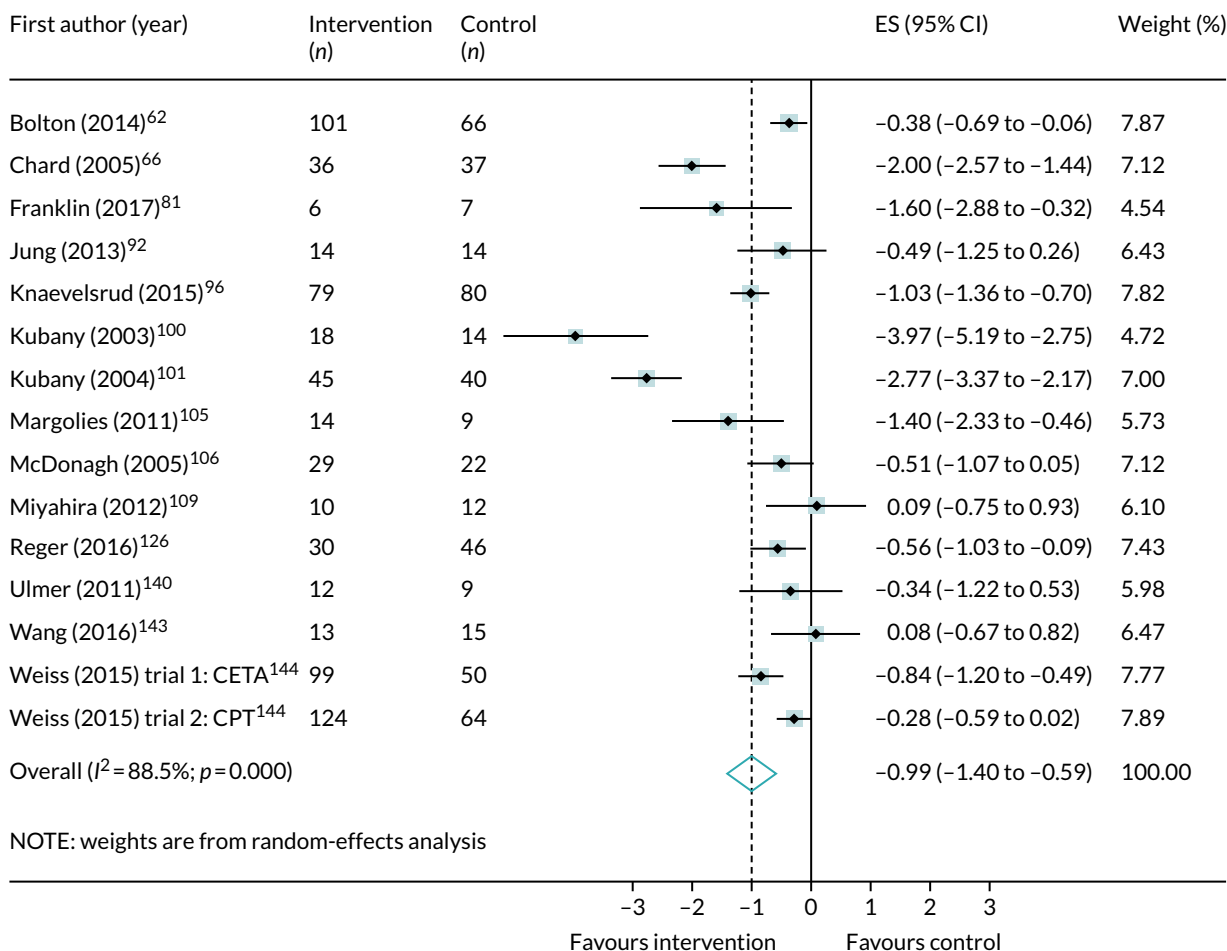


FIGURE 41 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all trauma-focused CBT interventions with control. CETA, common elements treatment approach; CPT, cognitive treatment therapy.

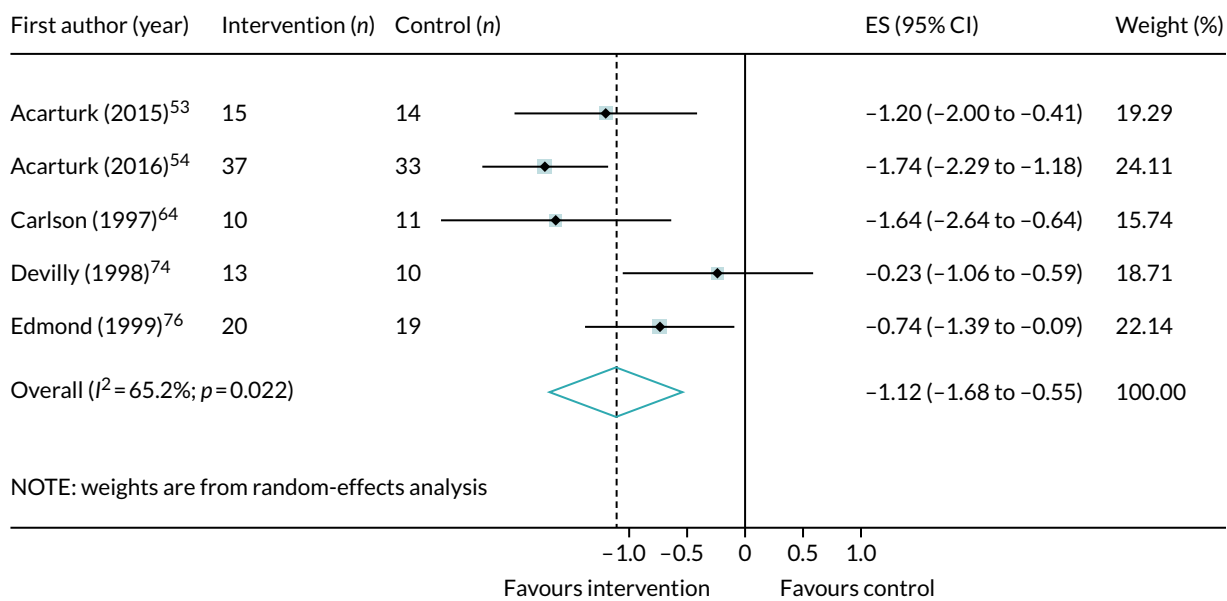


FIGURE 42 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all EMDR interventions with control.

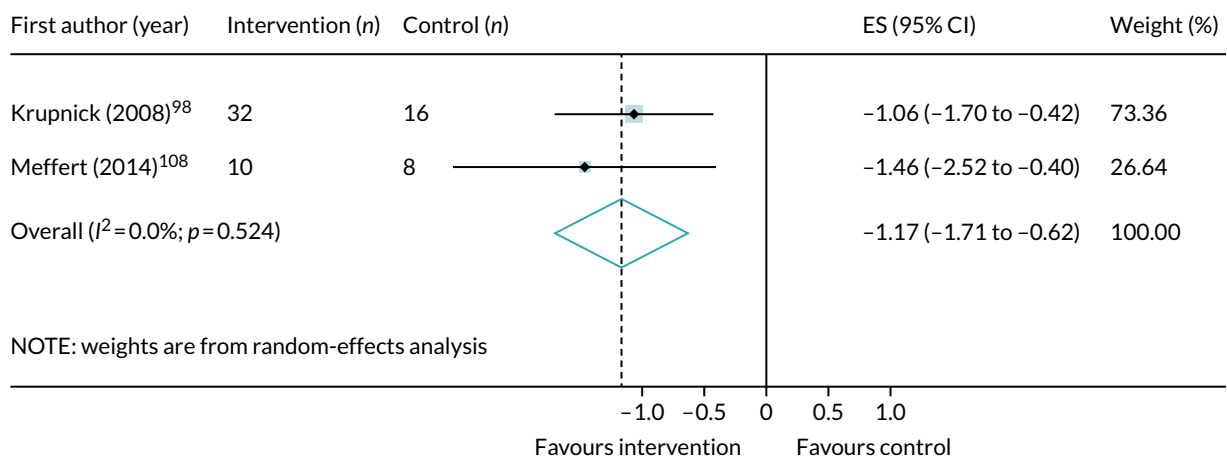


FIGURE 43 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all IPT interventions with control.

APPENDIX 10

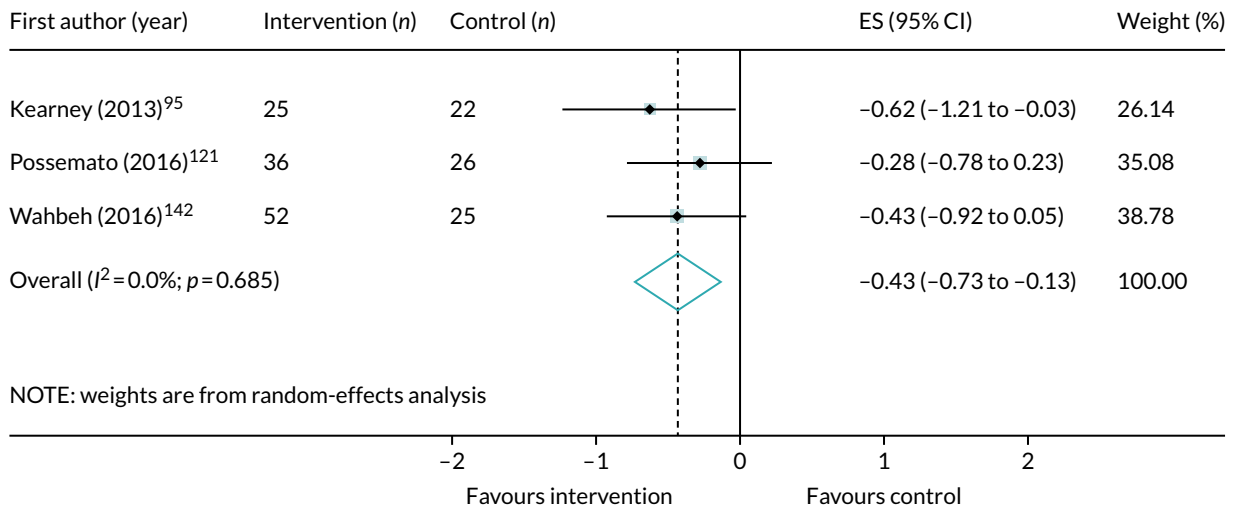


FIGURE 44 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all mindfulness interventions with control.

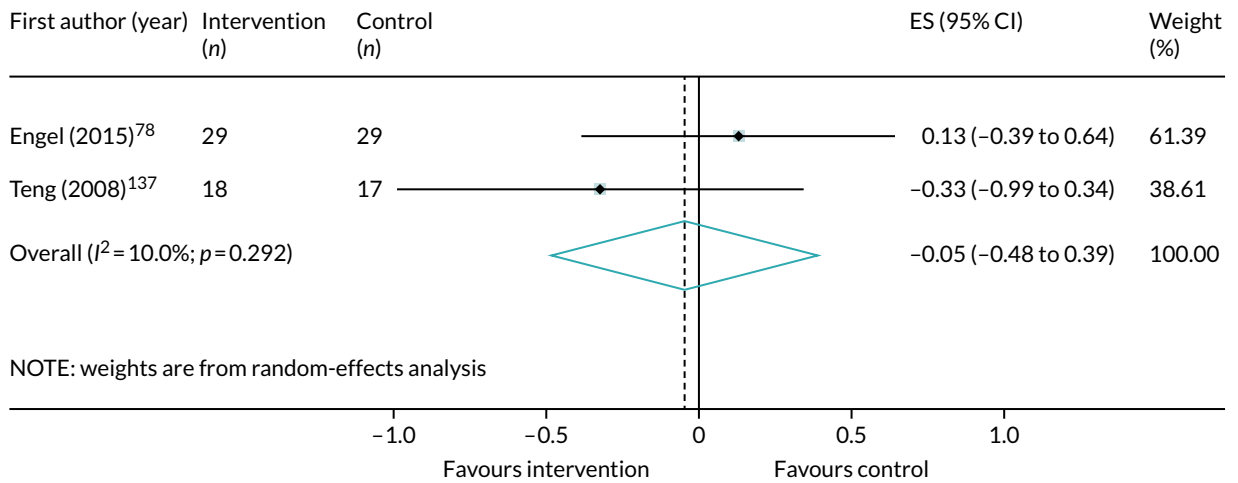


FIGURE 45 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all non-trauma-focused CBT interventions with control.

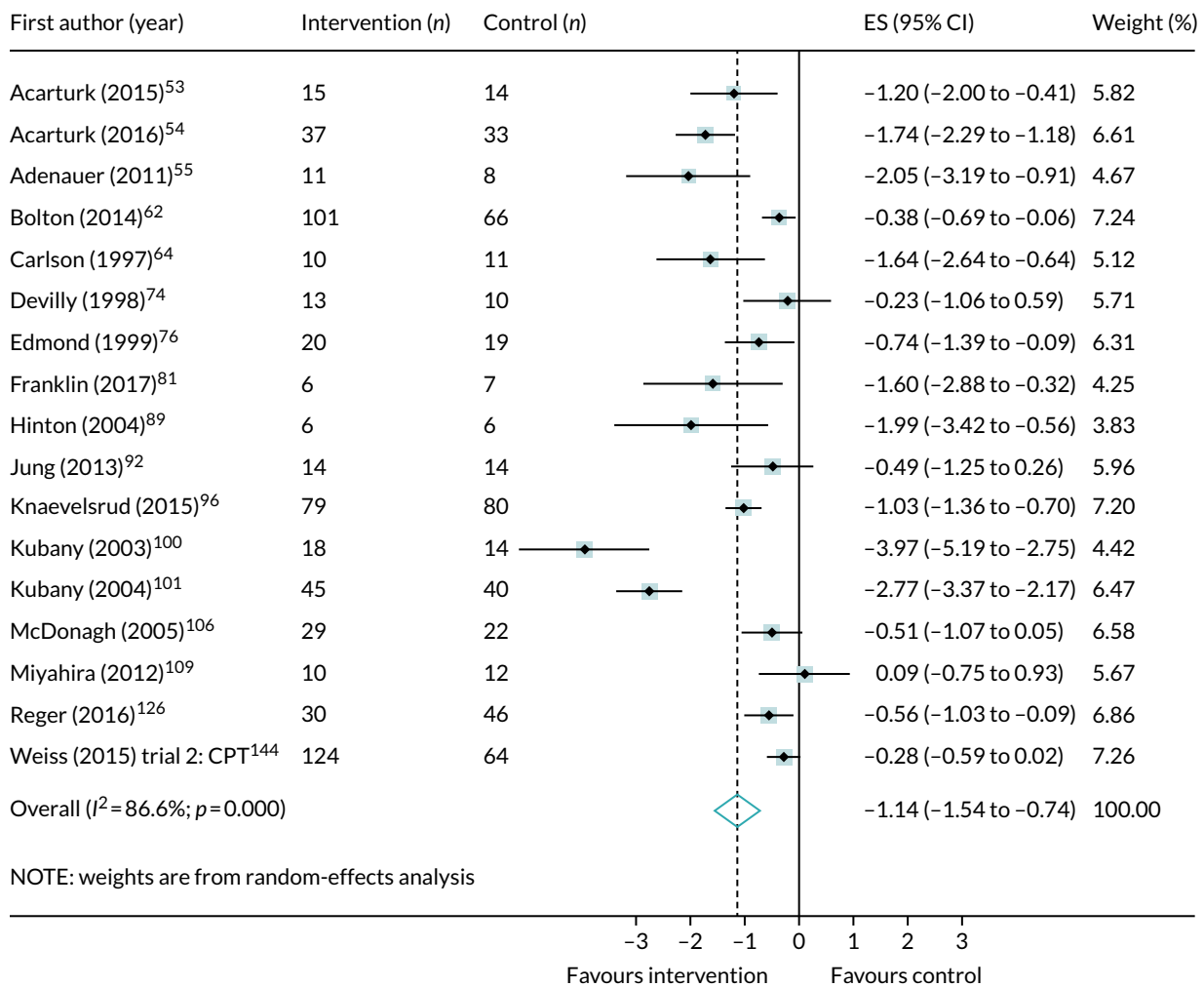


FIGURE 46 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all single-component and trauma-focused CBT interventions with control. CPT, cognitive processing therapy.

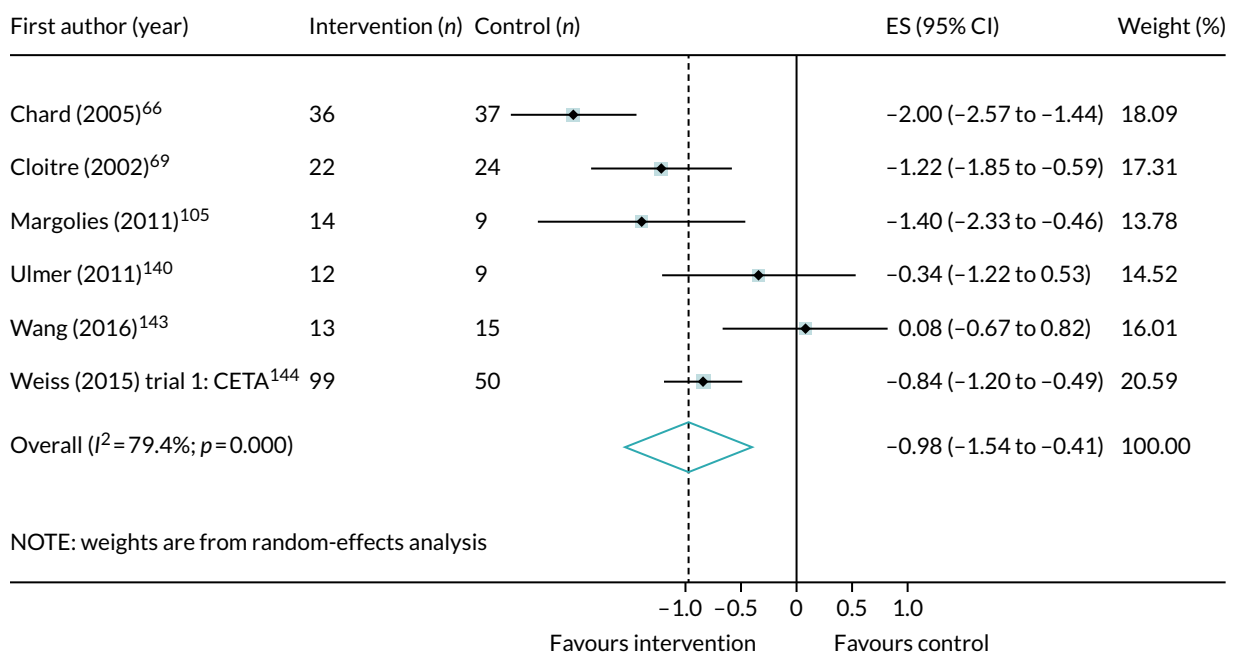


FIGURE 47 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all multicomponent and trauma-focused interventions with control. CETA, common elements treatment approach.

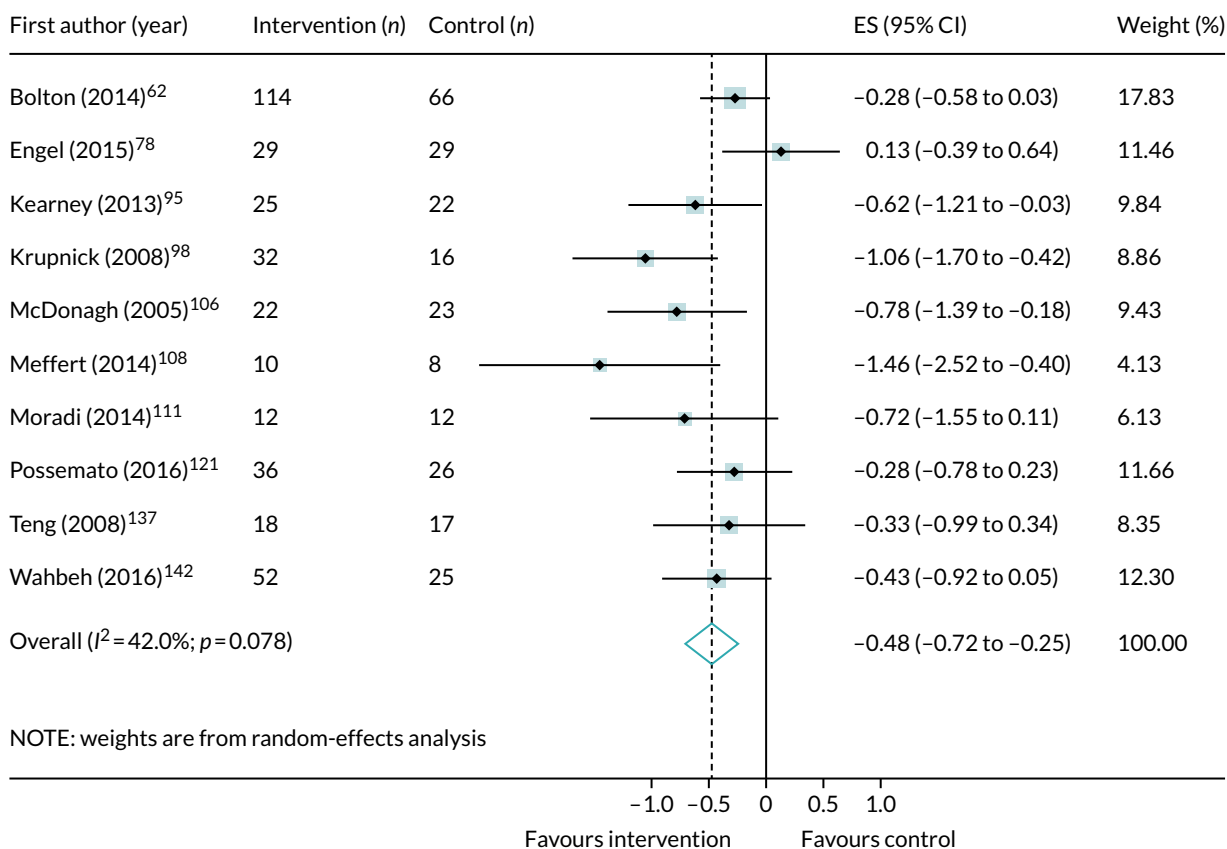


FIGURE 48 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing all single-component and non-trauma-focused interventions with control.

Anxiety symptoms

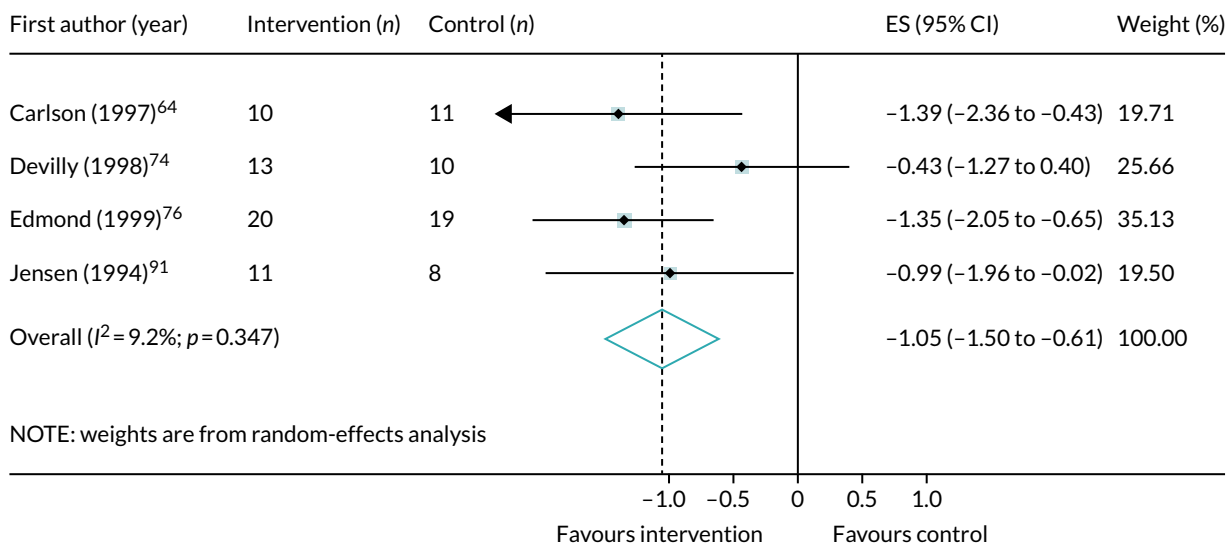


FIGURE 49 Meta-analysis of post-treatment effect size (ES) for anxiety symptoms, comparing EMDR interventions with control.

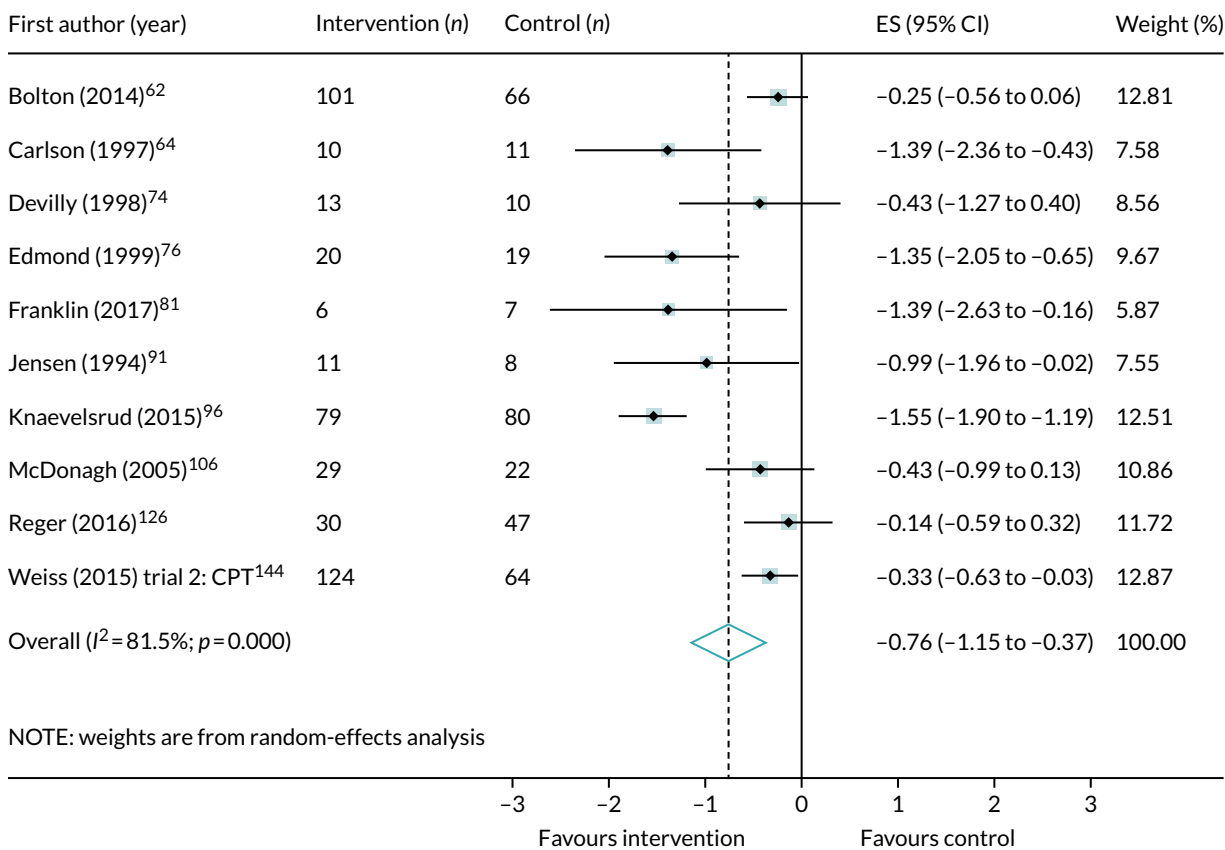


FIGURE 50 Meta-analysis of post-treatment effect size (ES) for anxiety symptoms, comparing single-component and trauma-focused interventions with control. CPT, cognitive processing therapy.

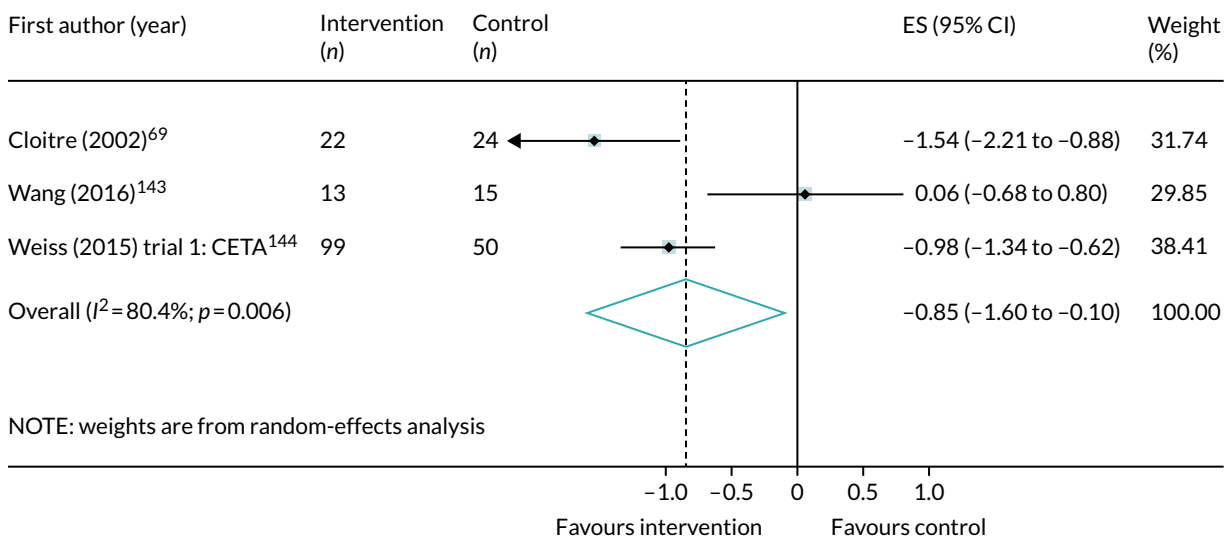


FIGURE 51 Meta-analysis of post-treatment effect size (ES) for anxiety symptoms, comparing multicomponent and trauma-focused interventions with control. CETA, common elements treatment approach.

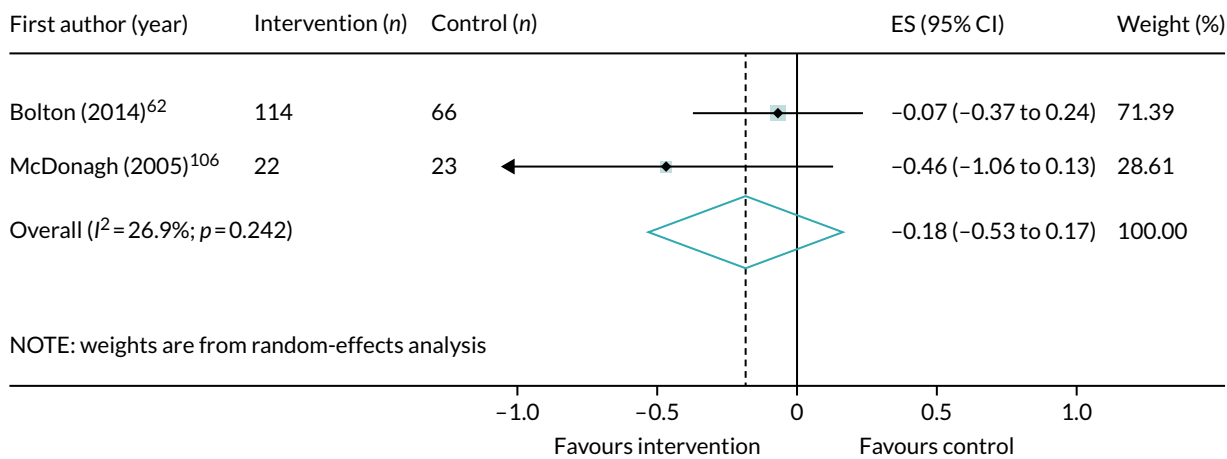


FIGURE 52 Meta-analysis of post-treatment effect size (ES) for anxiety symptoms, comparing single-component and non-trauma-focused interventions with control.

Quality of life

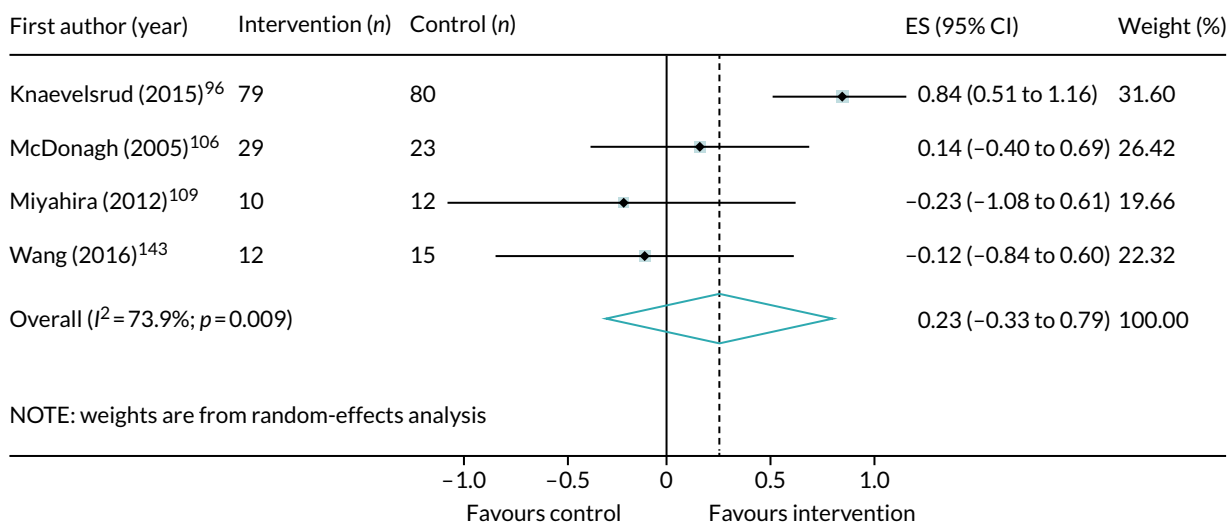


FIGURE 53 Meta-analysis of post-treatment effect size (ES) for quality of life, comparing trauma-focused CBT interventions with control (positive ES favours intervention).

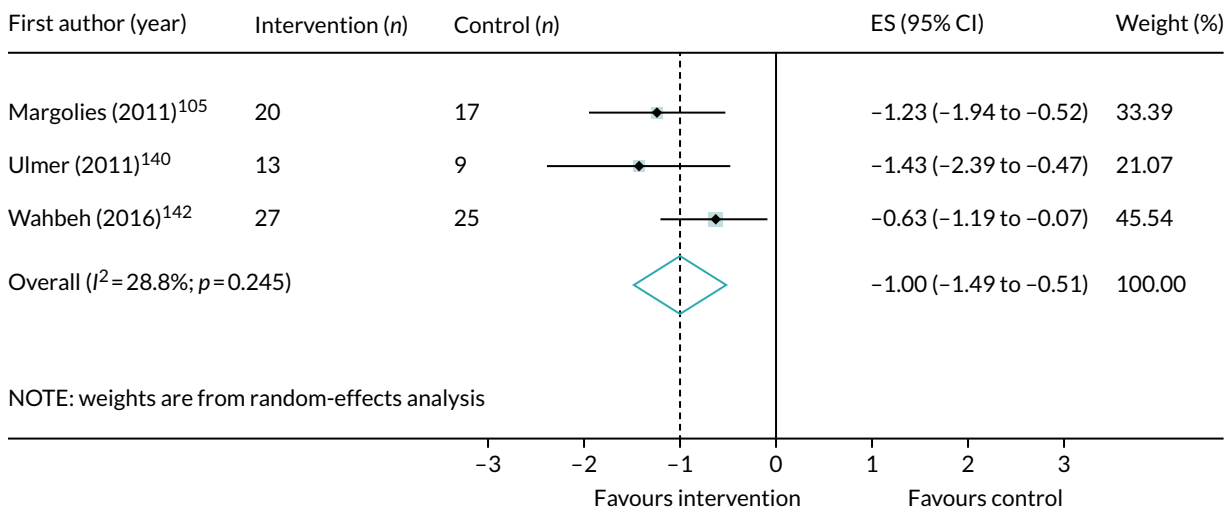
Sleep quality

FIGURE 54 Meta-analysis of post-treatment effect size (ES) for sleep quality, comparing all psychological interventions with control.

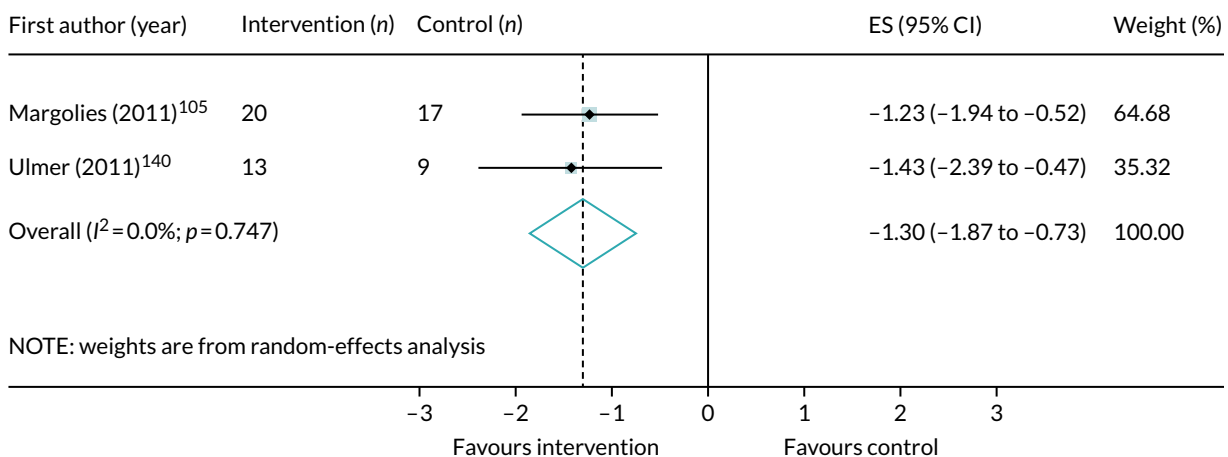


FIGURE 55 Meta-analysis of post-treatment effect size (ES) for sleep quality, comparing trauma-focused CBT interventions with control.

Psychological interventions versus control in trauma subgroups

Veterans

Post-traumatic stress disorder symptoms

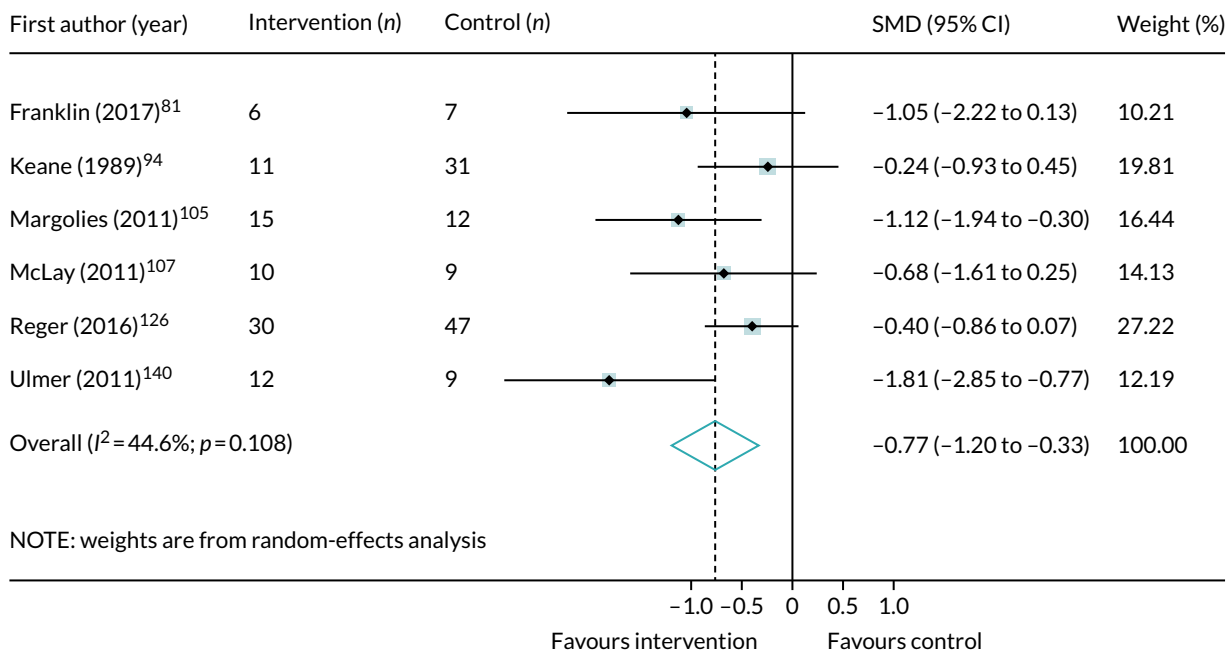


FIGURE 56 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing trauma-focused CBT interventions with control in veteran populations.

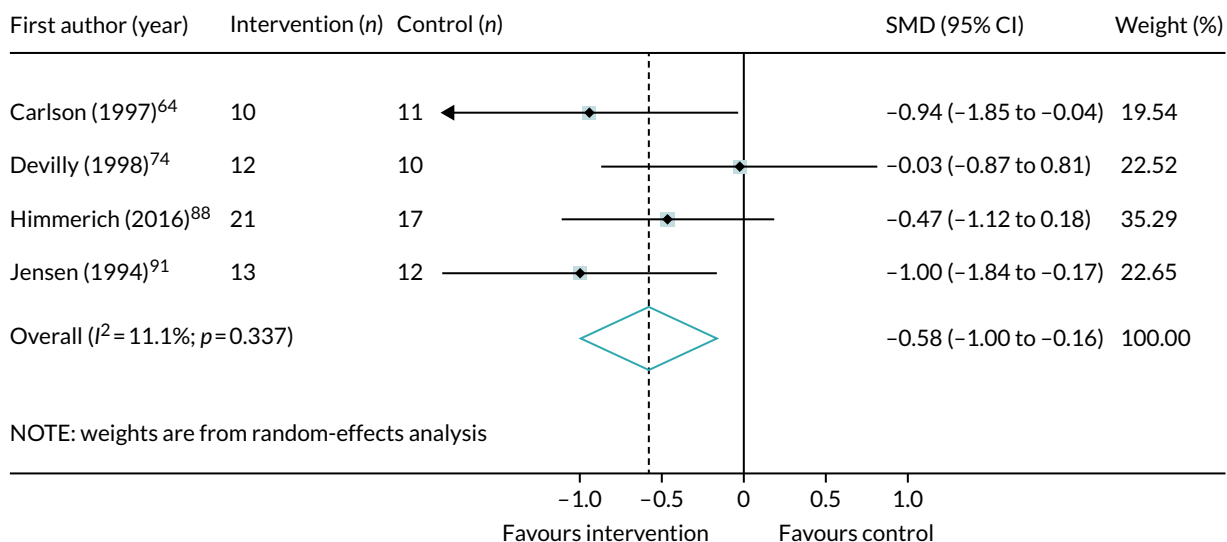


FIGURE 57 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing EMDR interventions with control in veteran populations.

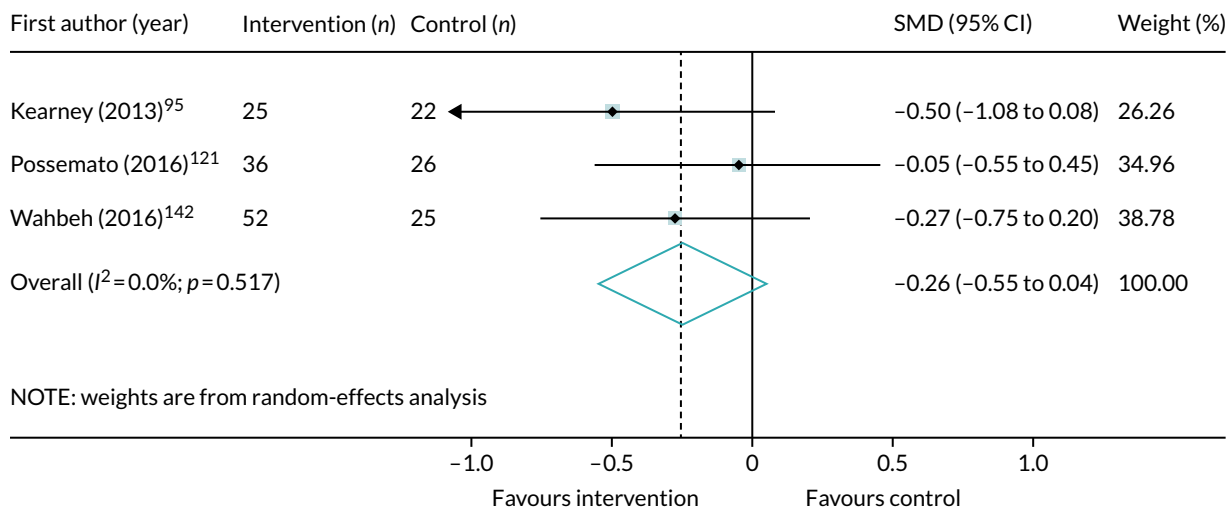


FIGURE 58 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing mindfulness interventions with control in veteran populations.

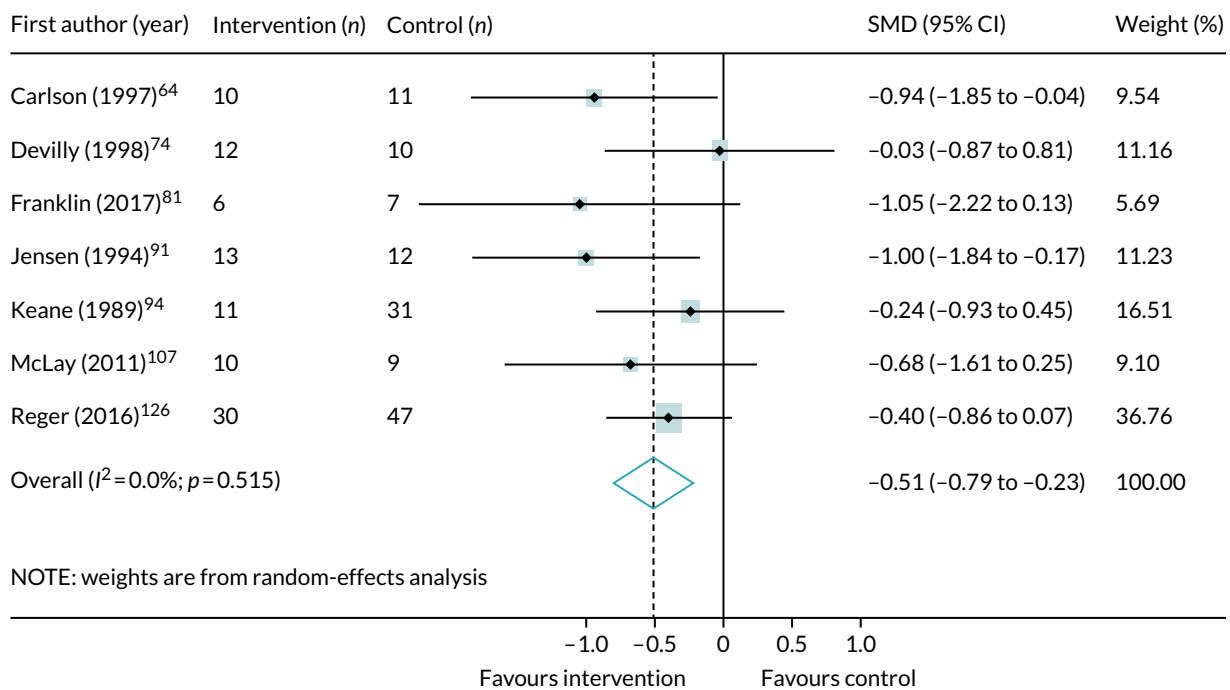


FIGURE 59 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing single-component and trauma-focused interventions with control in veteran populations.

APPENDIX 10

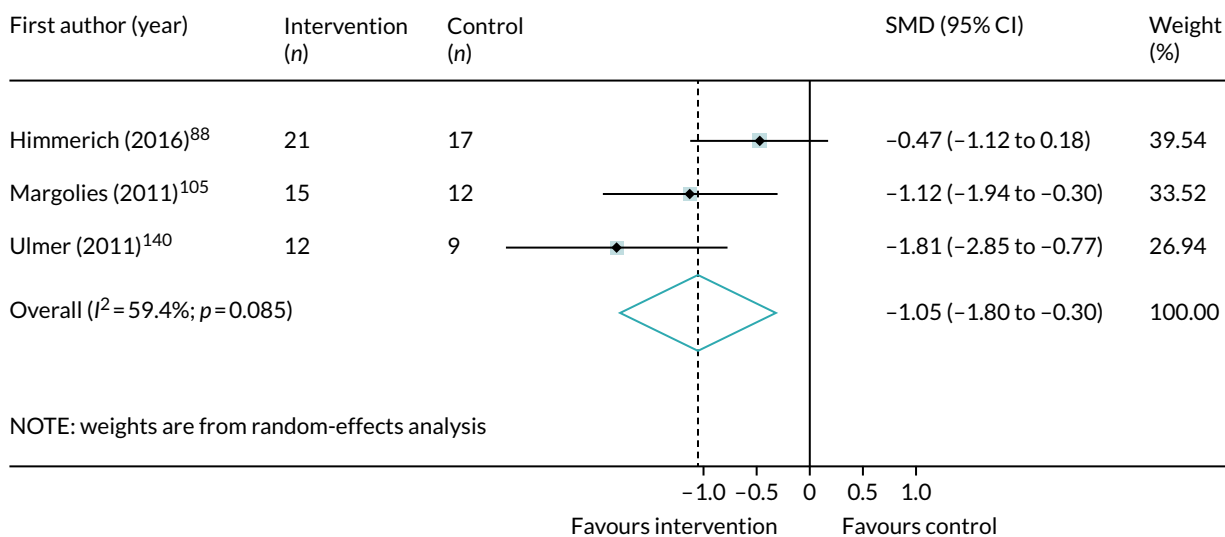


FIGURE 60 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing multicomponent and trauma-focused interventions with control in veteran populations.

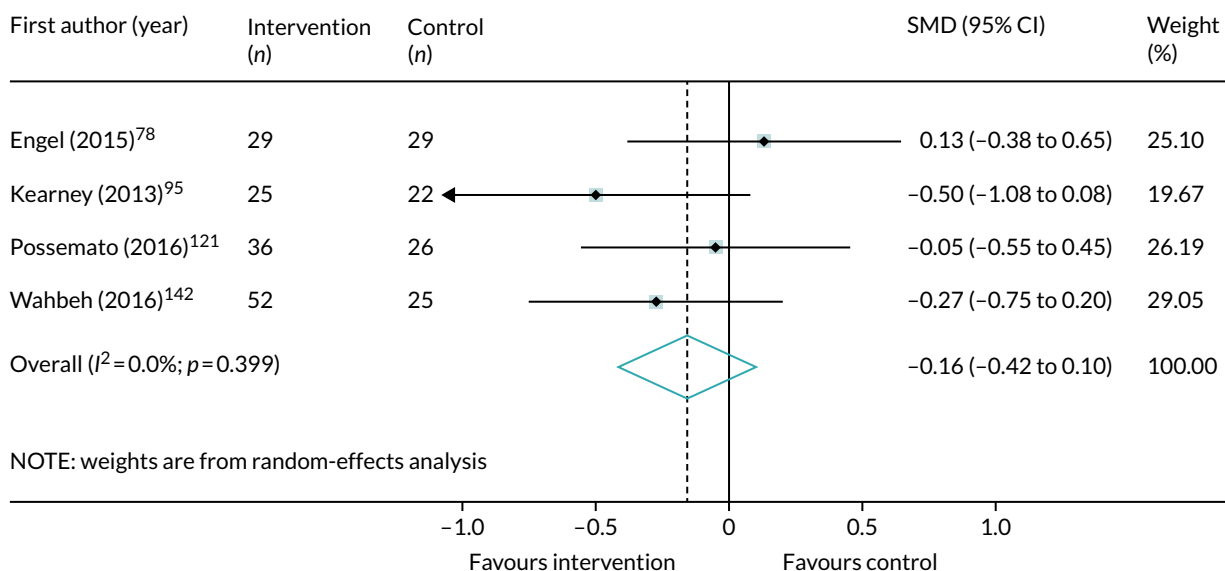


FIGURE 61 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing single-component and non-trauma-focused interventions with control in veteran populations.

Depression symptoms

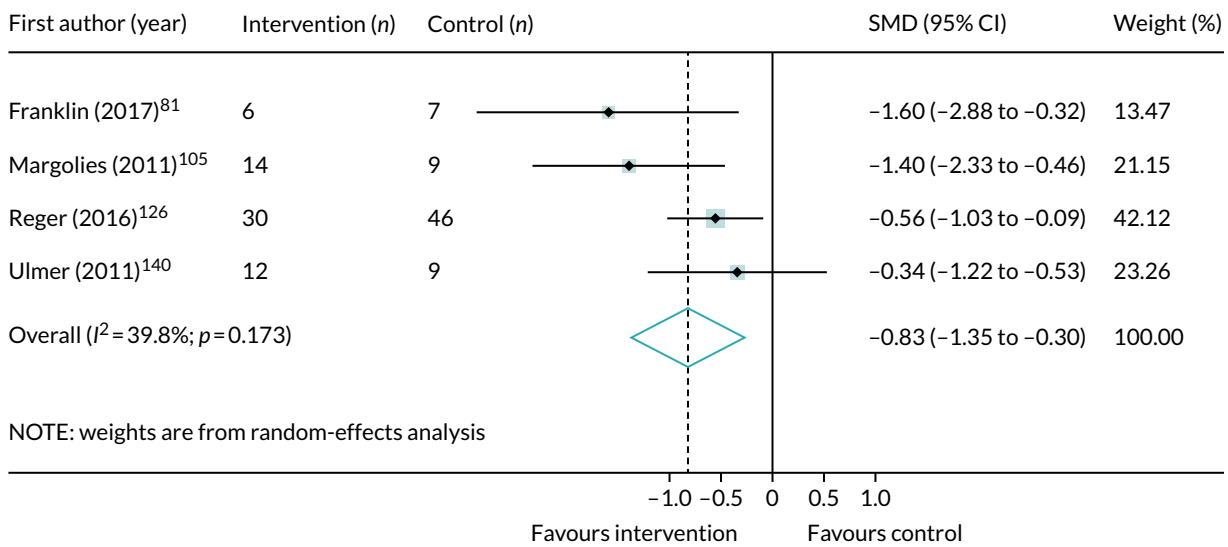


FIGURE 62 Meta-analysis of post-treatment SMD for total depression symptoms, comparing trauma-focused CBT interventions with control in veteran populations.

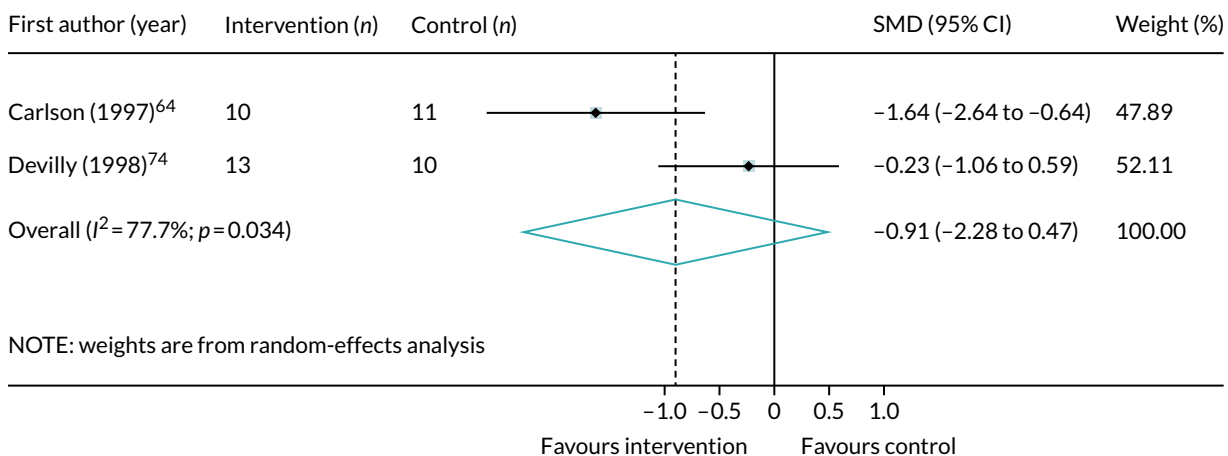


FIGURE 63 Meta-analysis of post-treatment SMD for total depression symptoms, comparing EMDR interventions with control in veteran populations.

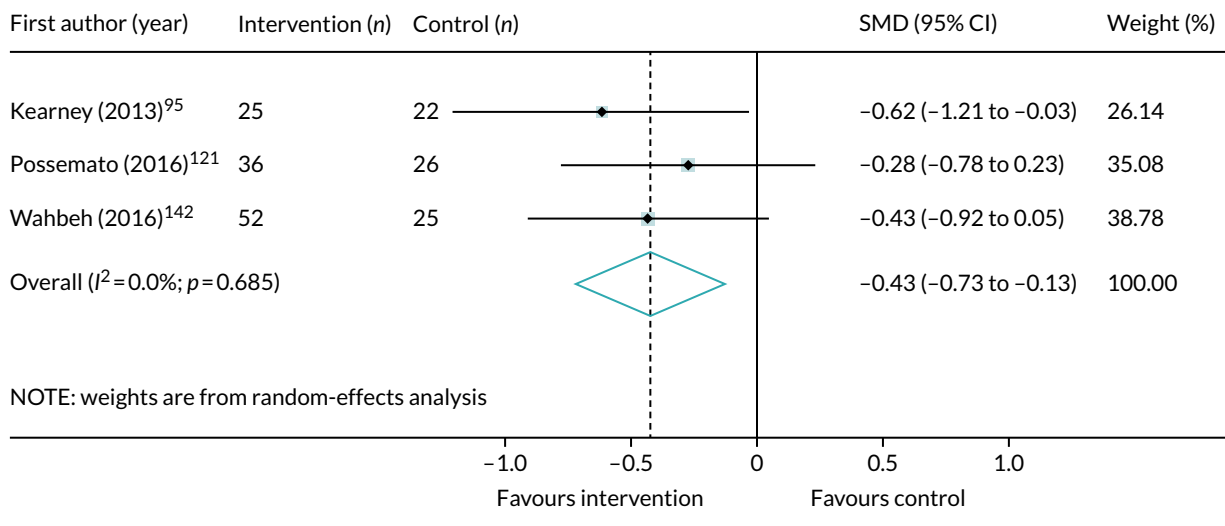


FIGURE 64 Meta-analysis of post-treatment SMD for total depression symptoms, comparing mindfulness interventions with control in veteran populations.

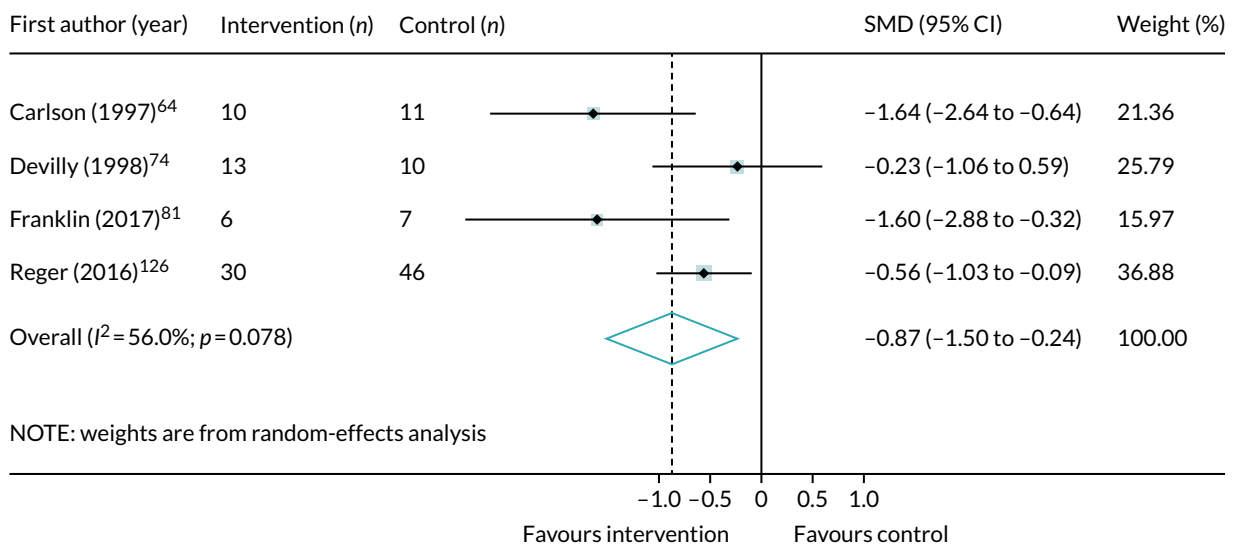


FIGURE 65 Meta-analysis of post-treatment SMD for total depression symptoms, comparing single-component and trauma-focused interventions with control in veteran populations.

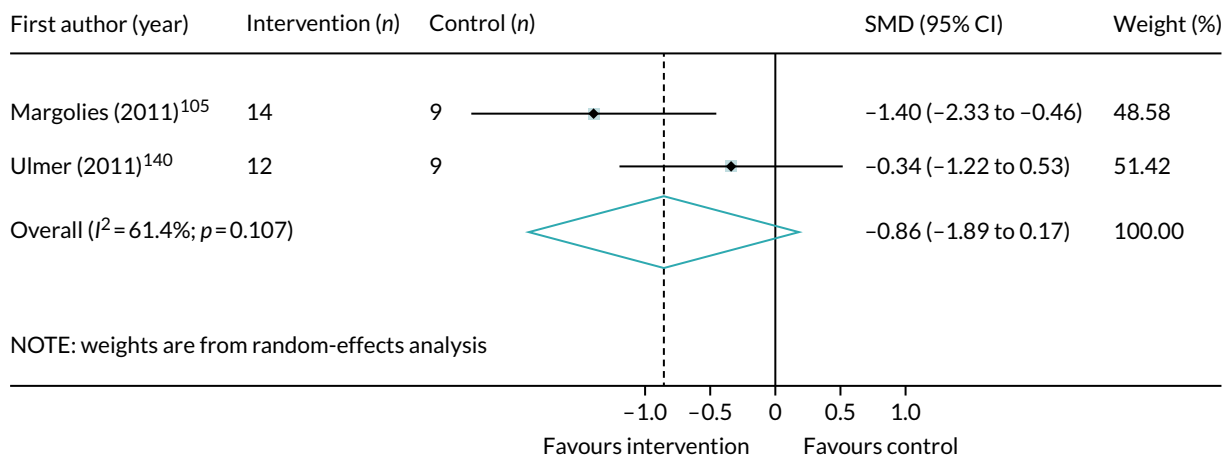


FIGURE 66 Meta-analysis of post-treatment SMD for total depression symptoms, comparing multicomponent and trauma-focused interventions with control in veteran populations.

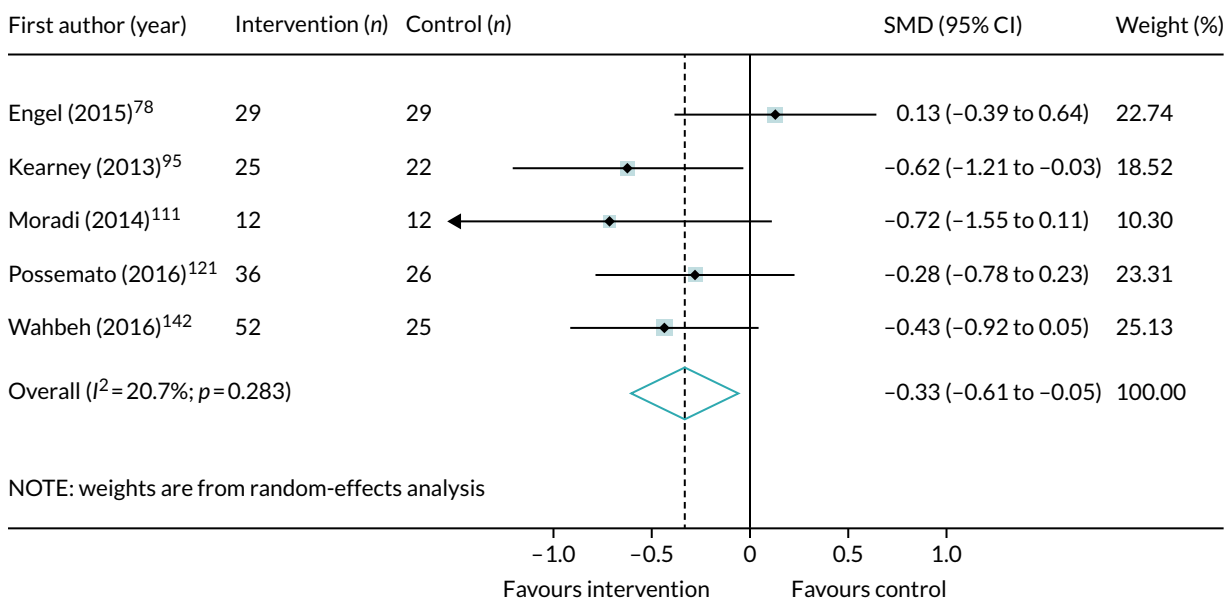


FIGURE 67 Meta-analysis of post-treatment SMD for total depression symptoms, comparing single-component and non-trauma-focused interventions with control in veteran populations.

Anxiety symptoms

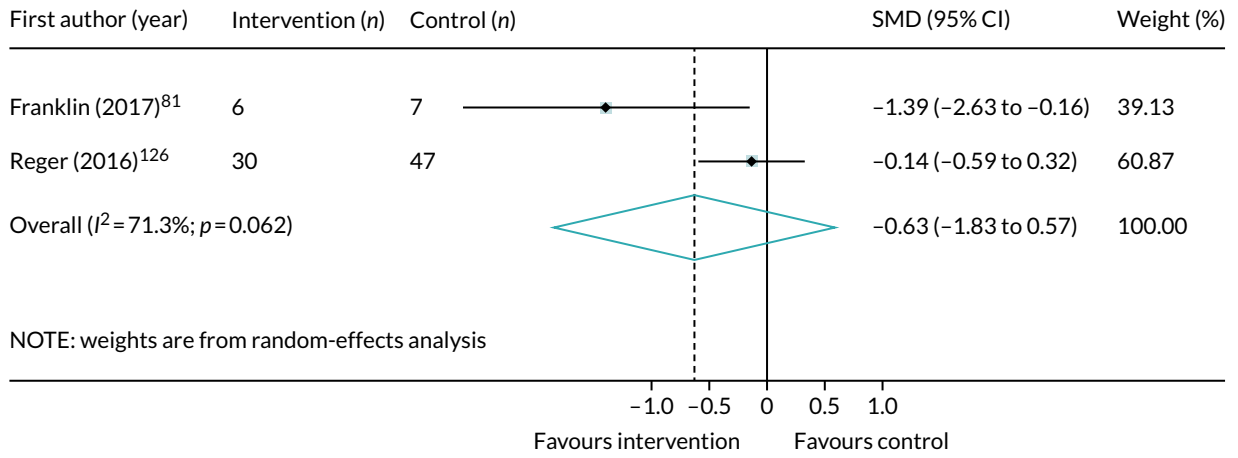


FIGURE 68 Meta-analysis of post-treatment SMD for total anxiety symptoms, comparing trauma-focused CBT interventions with control in veteran populations.

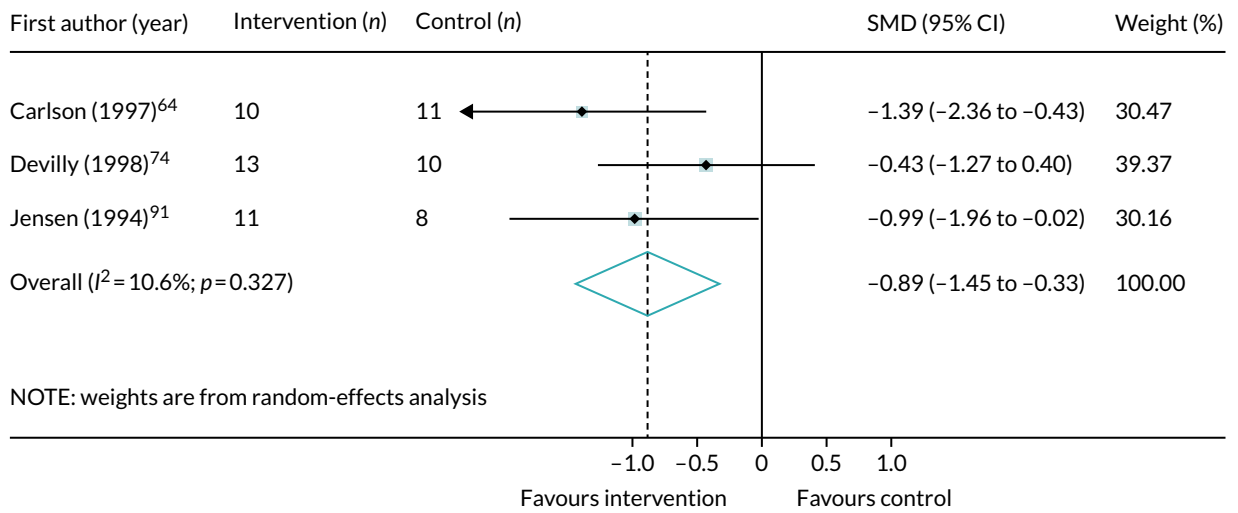


FIGURE 69 Meta-analysis of post-treatment SMD for total anxiety symptoms, comparing EMDR interventions with control in veteran populations.

War-affected populations

Post-traumatic stress disorder symptoms

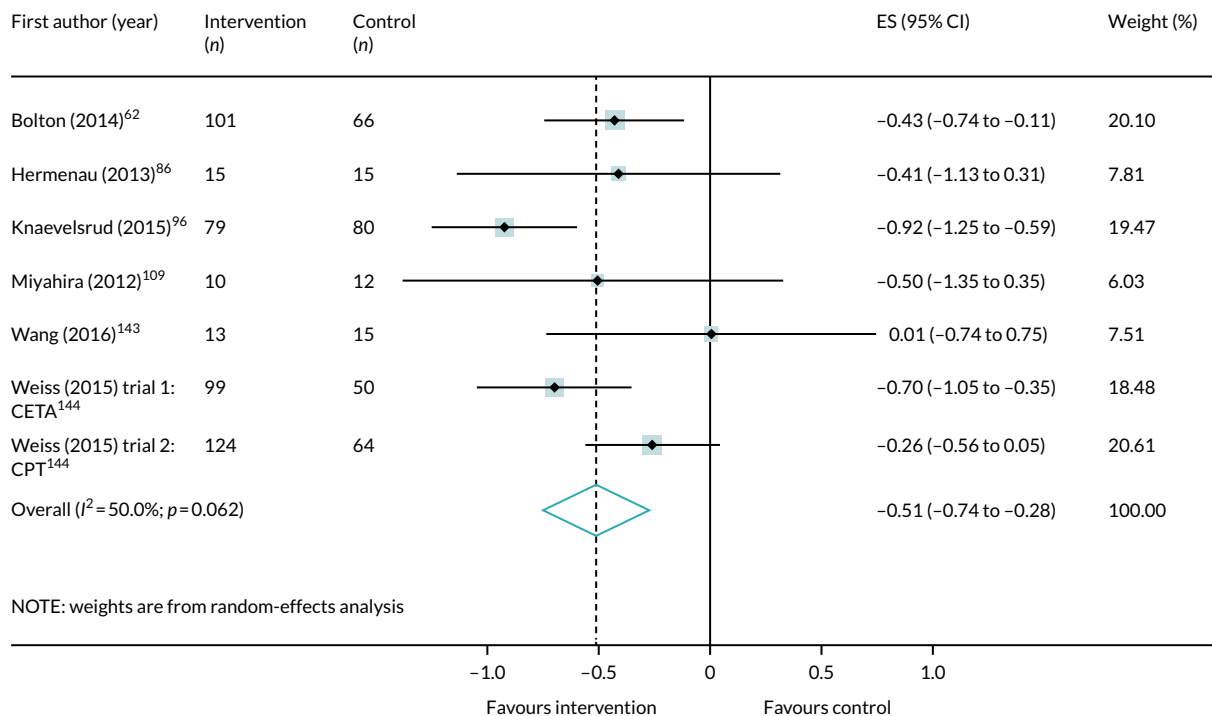


FIGURE 70 Meta-analysis of post-treatment effect size (ES) for total PTSD symptoms, comparing trauma-focused CBT interventions with control in war-affected populations. CETA, common elements treatment approach; CPT, cognitive treatment therapy.

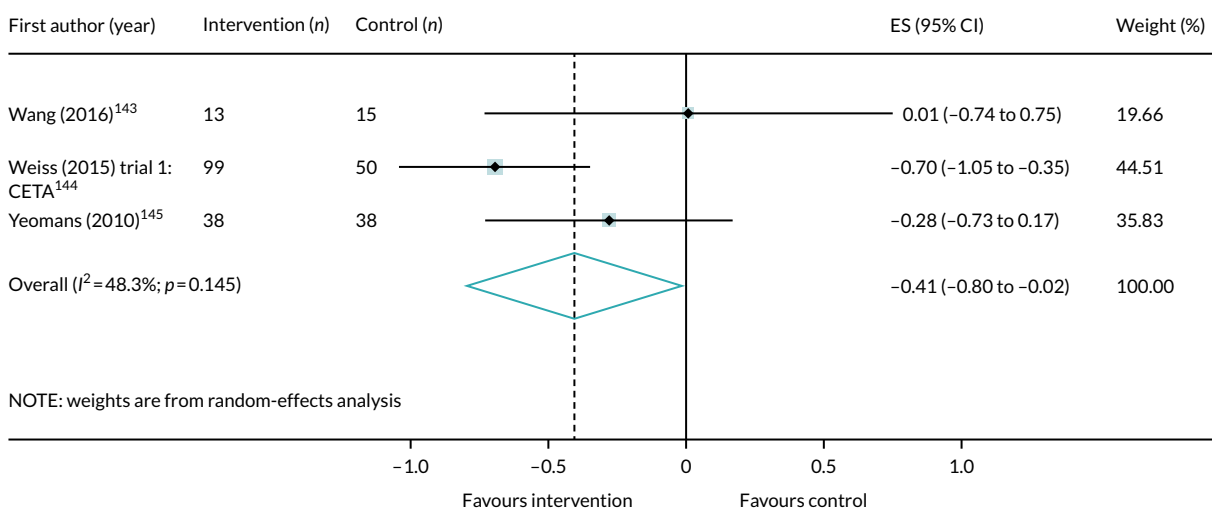


FIGURE 71 Meta-analysis of post-treatment effect size (ES) for total PTSD symptoms, comparing multicomponent trauma-focused interventions with control in war-affected populations. CETA, common elements treatment approach.

Depression symptoms

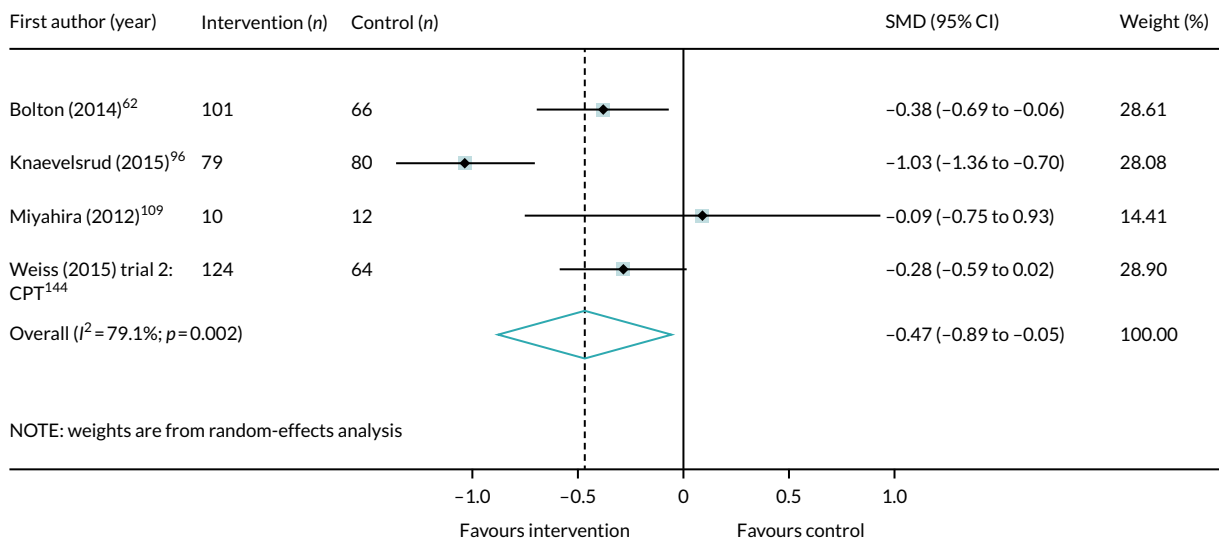


FIGURE 72 Meta-analysis of post-treatment SMD for depression symptoms, comparing single-component and trauma-focused interventions with control in war-affected populations. CPT, cognitive processing therapy.

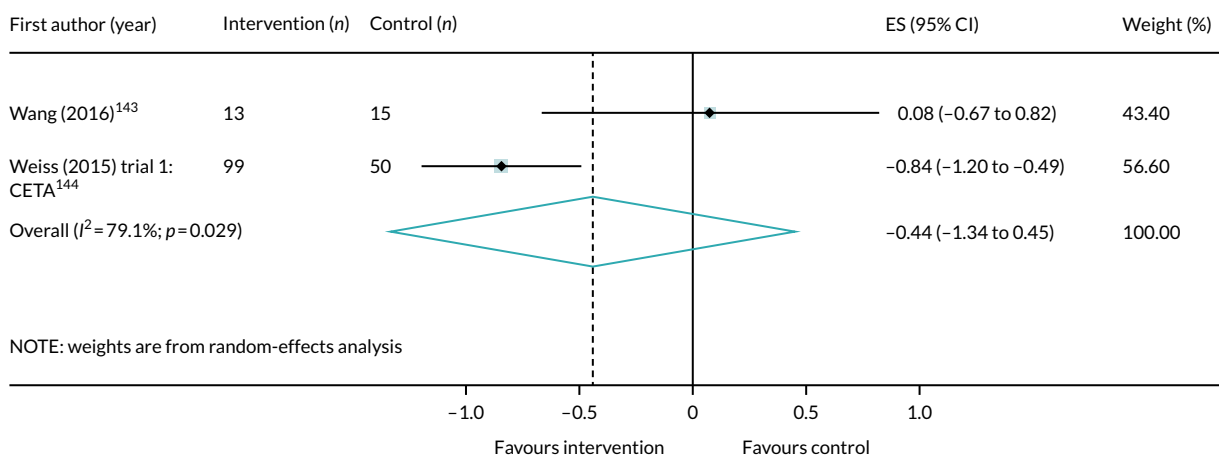


FIGURE 73 Meta-analysis of post-treatment effect size (ES) for depression symptoms, comparing multicomponent and trauma-focused interventions with control in war-affected populations. CETA, common elements treatment approach.

Anxiety symptoms

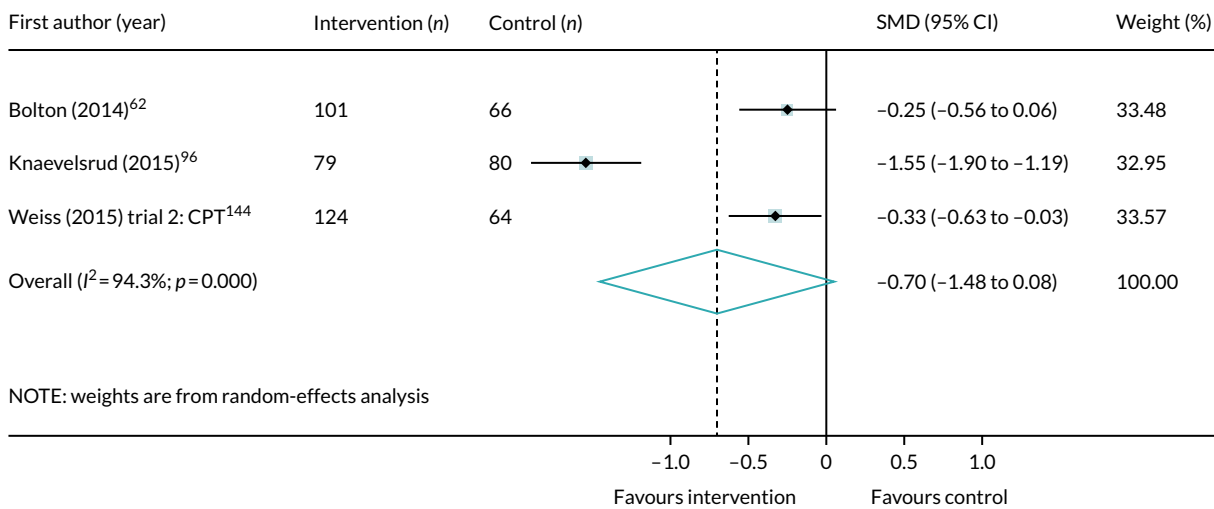


FIGURE 74 Meta-analysis of post-treatment SMD for total anxiety symptoms, comparing single-component and trauma-focused interventions with control in war-affected populations. CPT, cognitive processing therapy.

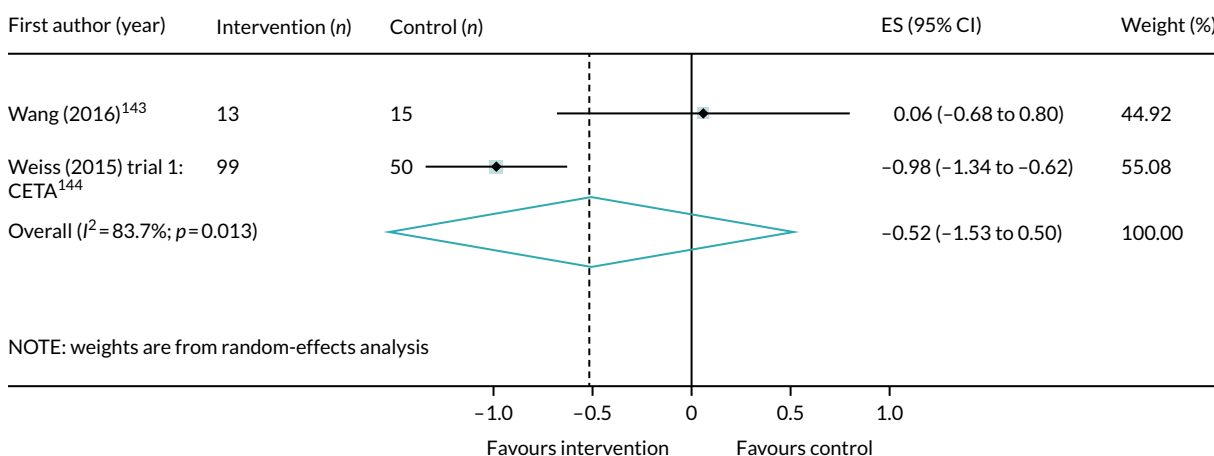


FIGURE 75 Meta-analysis of post-treatment effect size (ES) for total anxiety symptoms, comparing multicomponent and trauma-focused interventions with control in war-affected populations. CETA, common elements treatment approach.

Childhood sexual abuse populations

Post-traumatic stress disorder symptoms

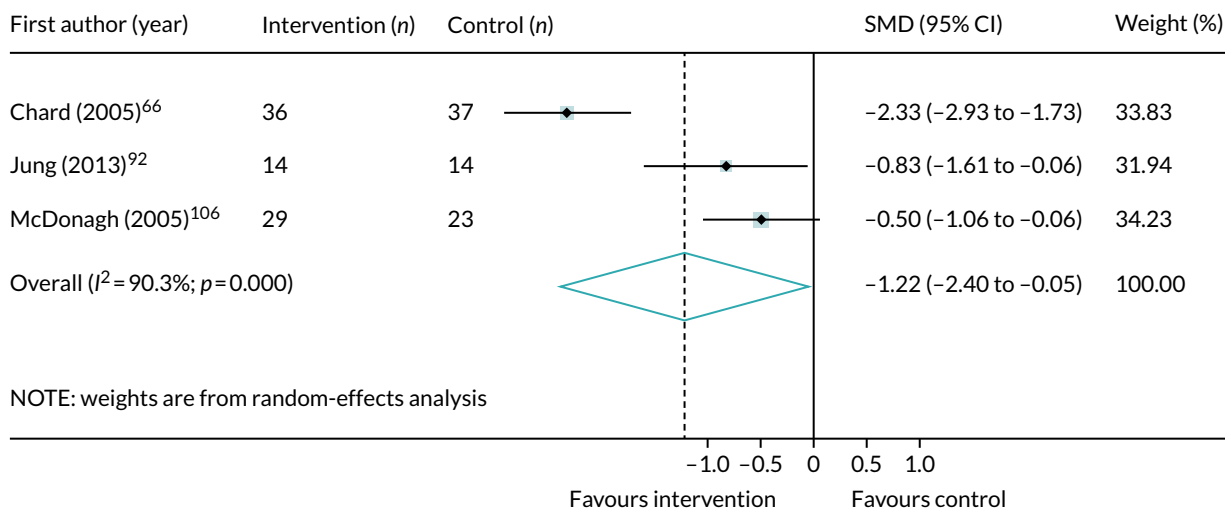


FIGURE 76 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing trauma-focused CBT interventions with control in childhood sexual abuse populations.

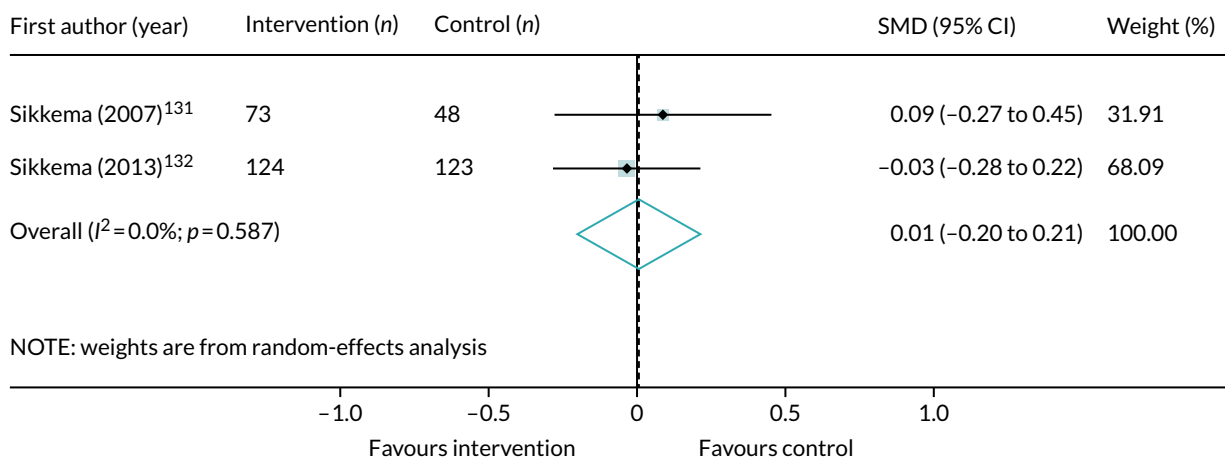


FIGURE 77 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing non-trauma-focused CBT interventions with control in childhood sexual abuse populations.

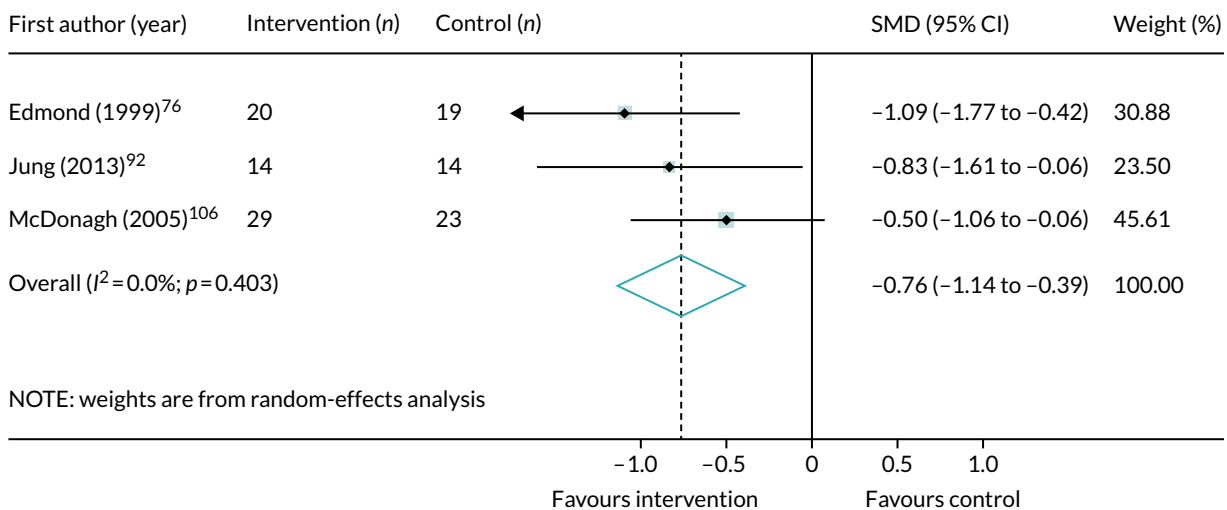


FIGURE 78 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing single-component and trauma-focused interventions with control in childhood sexual abuse populations.

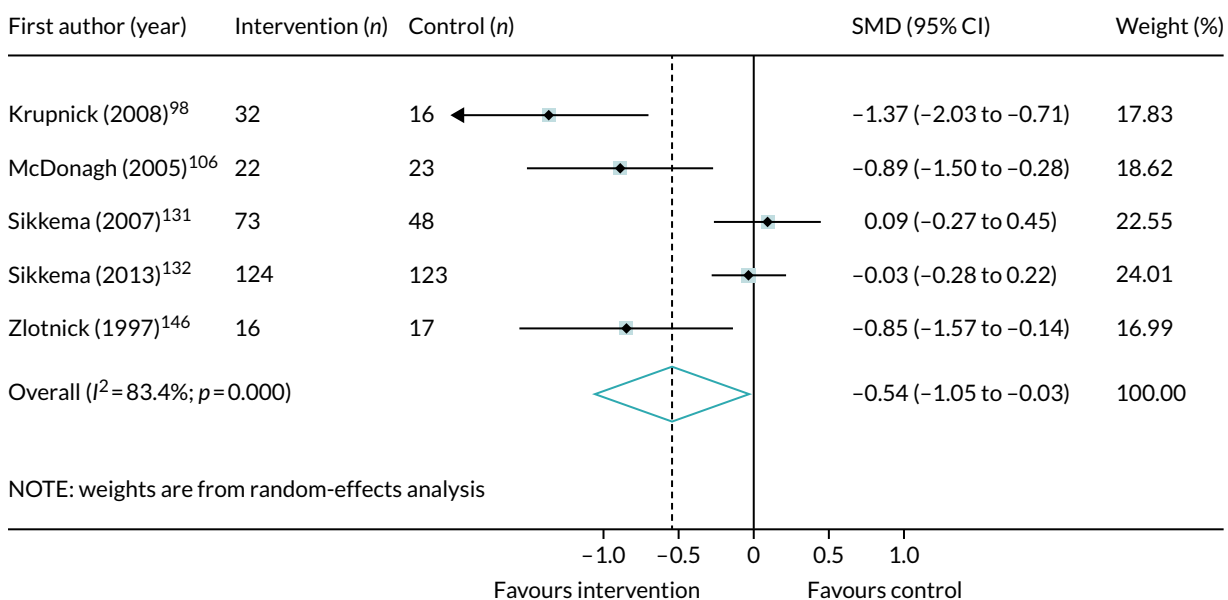


FIGURE 79 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing single-component and non-trauma-focused interventions with control in childhood sexual abuse populations.

Depression symptoms

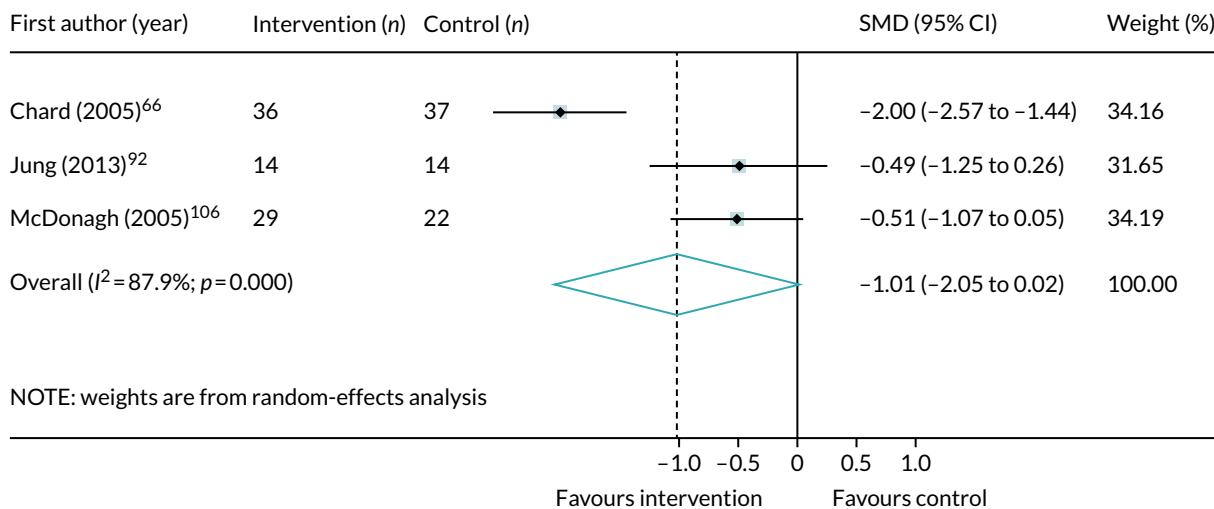


FIGURE 80 Meta-analysis of post-treatment SMD for depression symptoms, comparing trauma-focused CBT interventions with control in childhood sexual abuse populations.

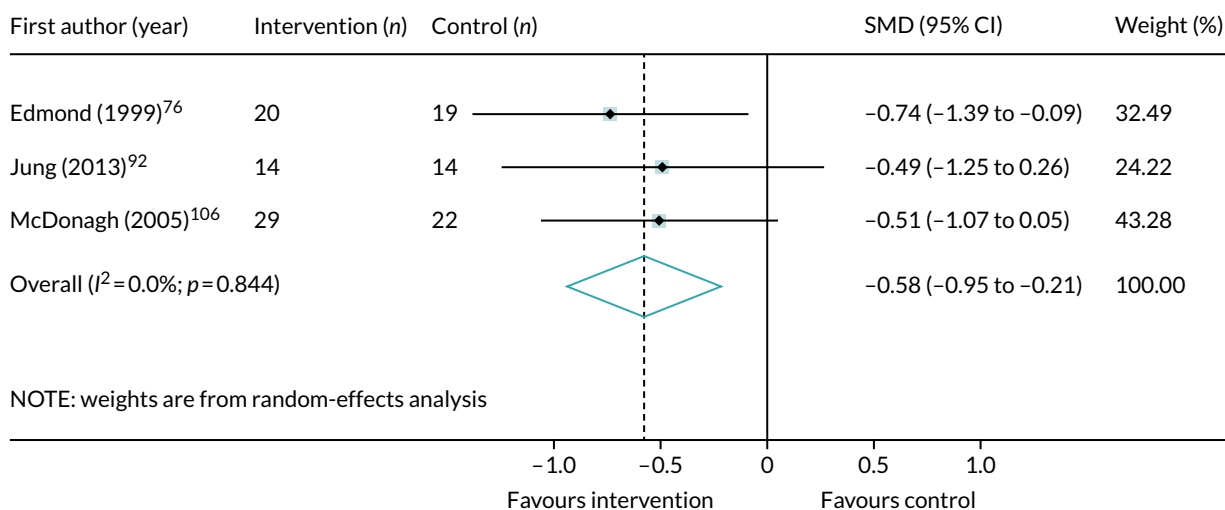


FIGURE 81 Meta-analysis of post-treatment SMD for depression symptoms, comparing single-component and trauma-focused interventions with control in childhood sexual abuse populations.

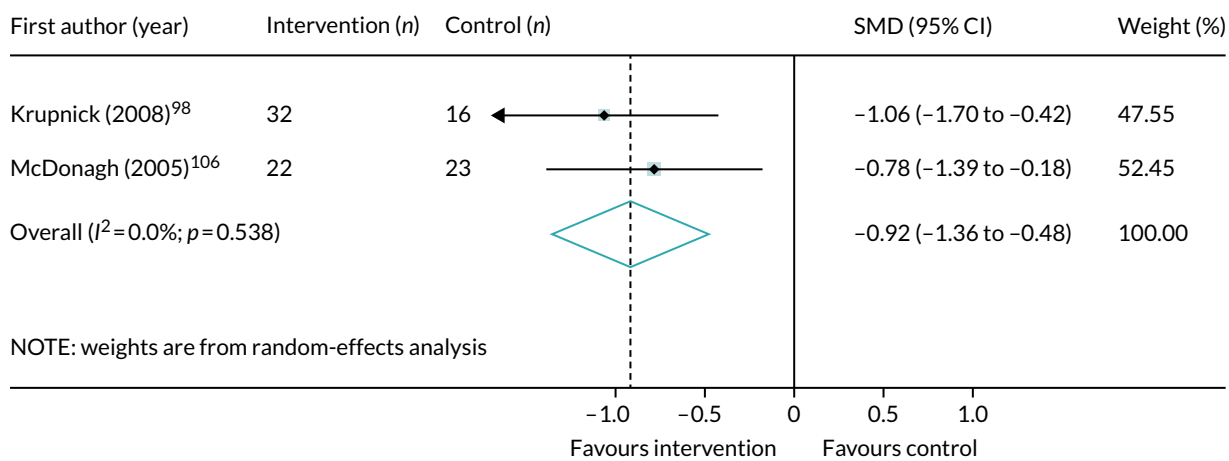


FIGURE 82 Meta-analysis of post-treatment SMD for depression symptoms, comparing single-component and non-trauma-focused interventions with control in childhood sexual abuse populations.

Anxiety symptoms

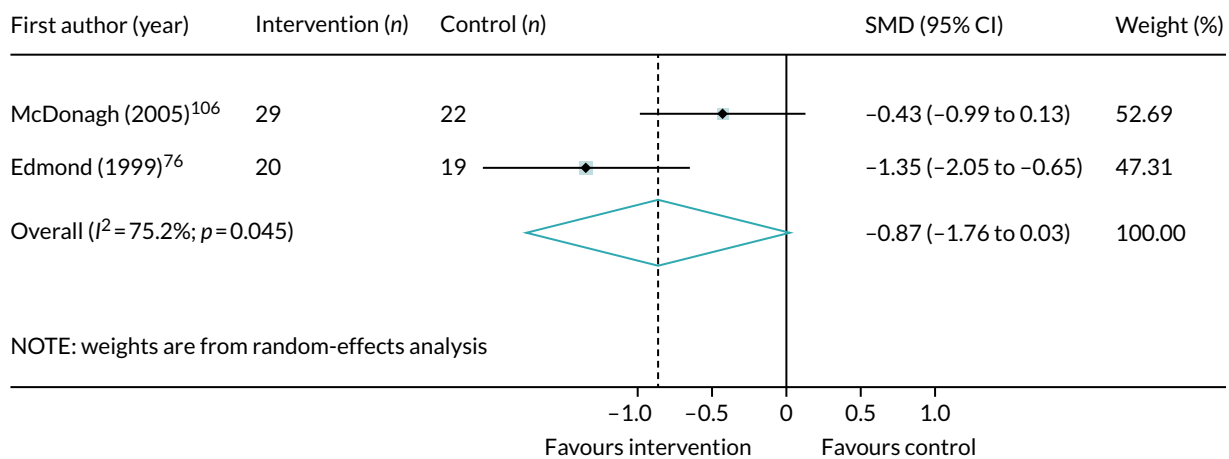


FIGURE 83 Meta-analysis of post-treatment SMD for anxiety symptoms, comparing single-component and trauma-focused interventions with control in childhood sexual abuse populations.

Refugee populations

Post-traumatic stress disorder symptoms

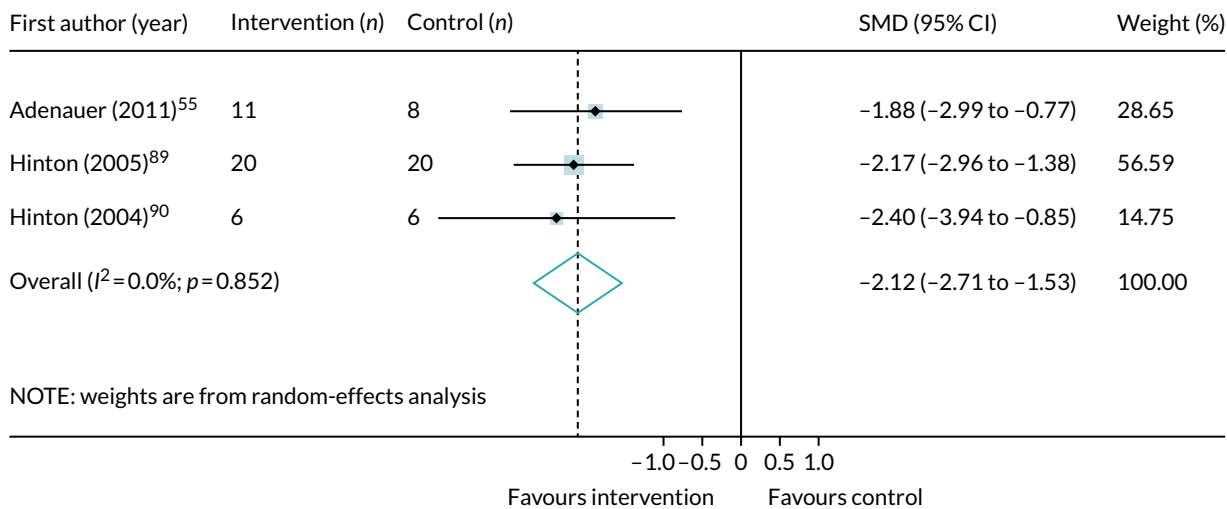


FIGURE 84 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing trauma-focused CBT interventions with control in refugee populations.

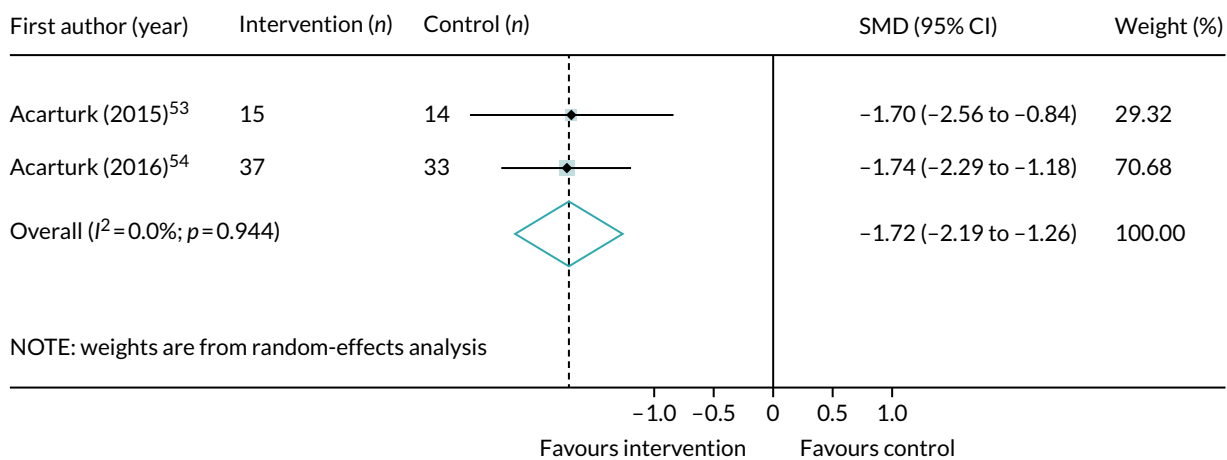


FIGURE 85 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing EMDR interventions with control in refugee populations.

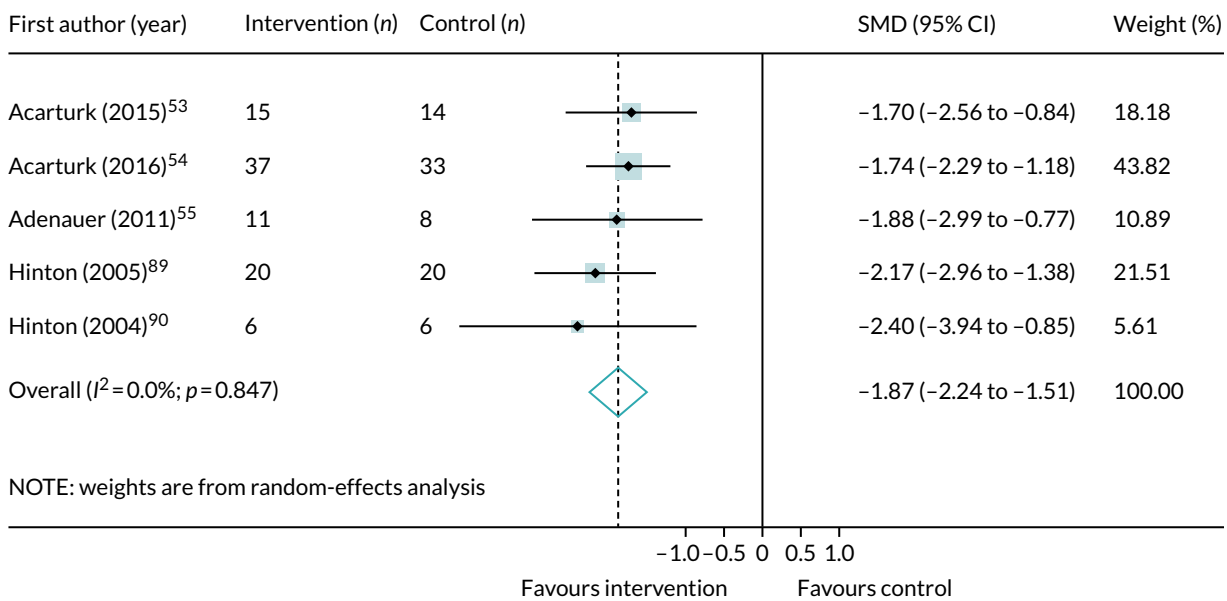


FIGURE 86 Meta-analysis of post-treatment SMD for total PTSD symptoms, comparing single-component and trauma-focused interventions with control in refugee populations.

Depression symptoms

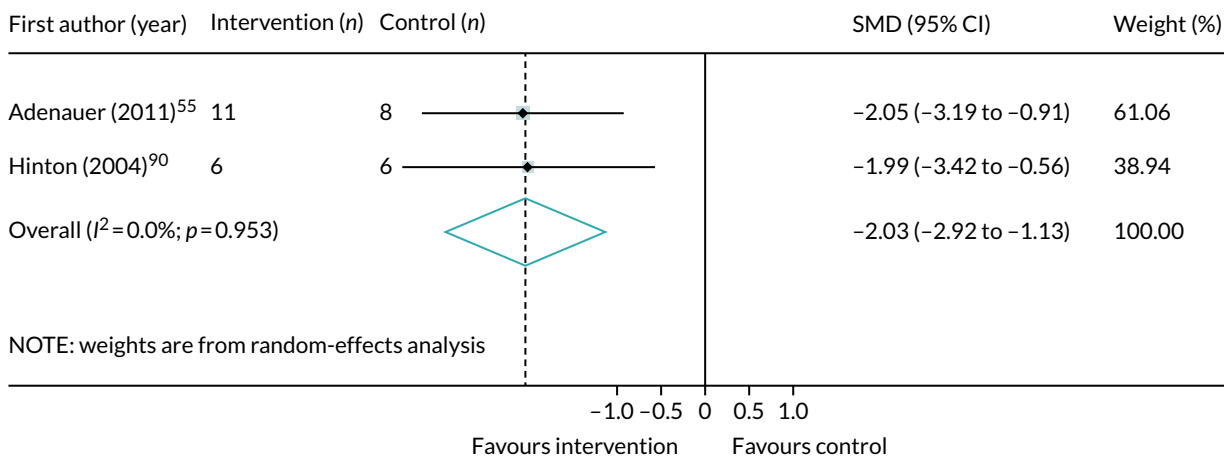


FIGURE 87 Meta-analysis of post-treatment SMD for depression symptoms, comparing trauma-focused CBT interventions with control in refugee populations.

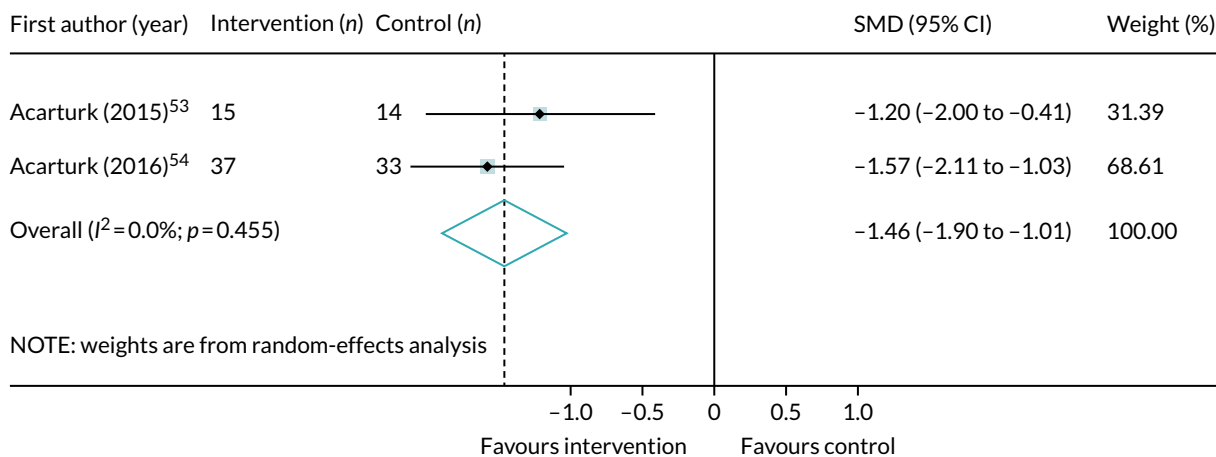


FIGURE 88 Meta-analysis of post-treatment SMD for depression symptoms, comparing EMDR interventions with control in refugee populations.

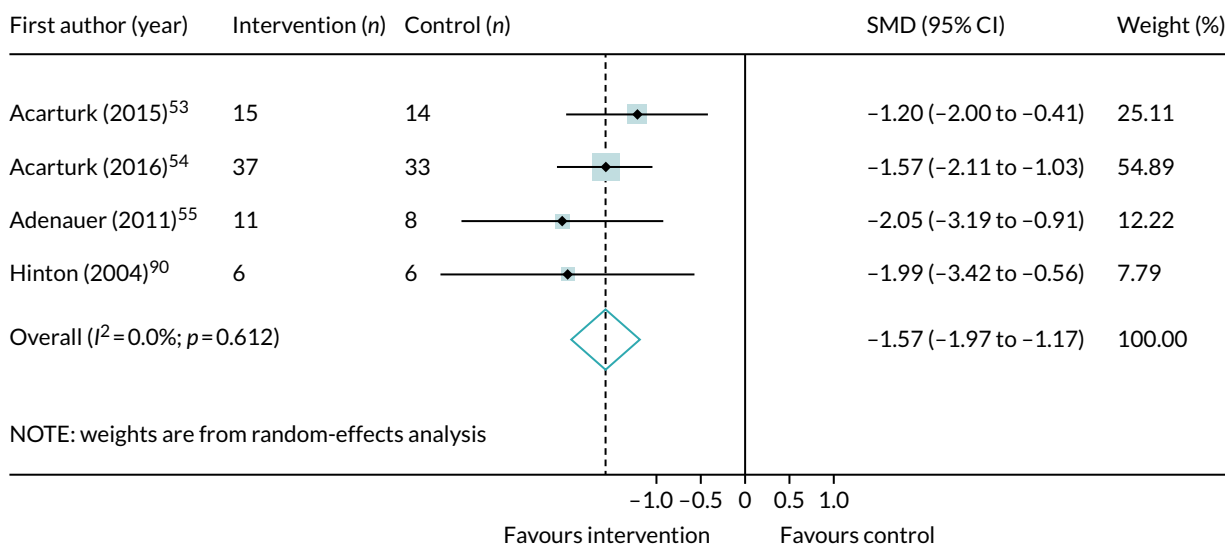


FIGURE 89 Meta-analysis of post-treatment SMD for depression symptoms, comparing single-component and trauma-focused interventions with control in refugee populations.

Pharmacological interventions versus placebo

Post-traumatic stress disorder symptoms

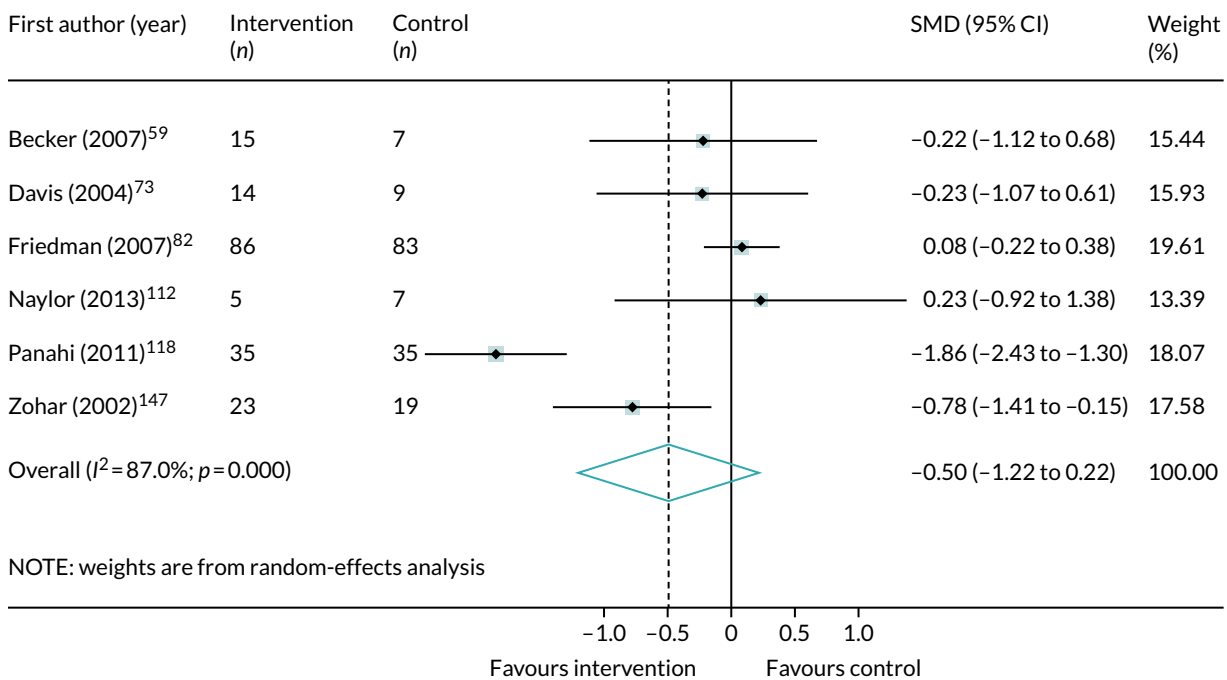


FIGURE 90 Meta-analysis of post-treatment SMD for PTSD symptoms, comparing antidepressants with placebo.

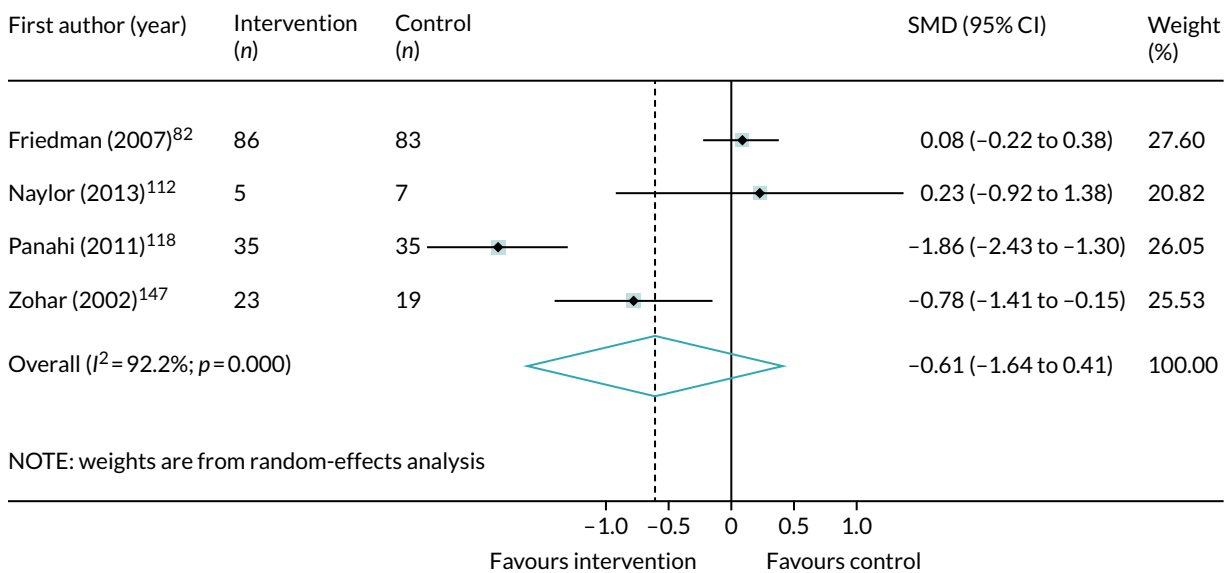


FIGURE 91 Meta-analysis of post-treatment SMD for PTSD symptoms, comparing SSRIs with placebo.

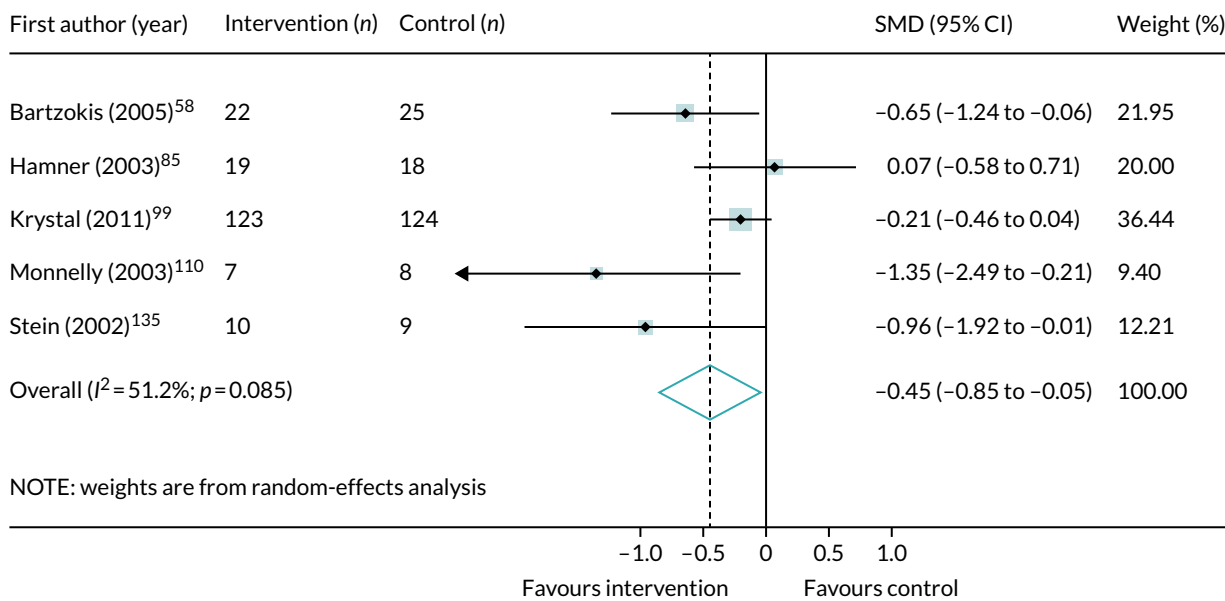


FIGURE 92 Meta-analysis of post-treatment SMD for PTSD symptoms, comparing antipsychotics with placebo.

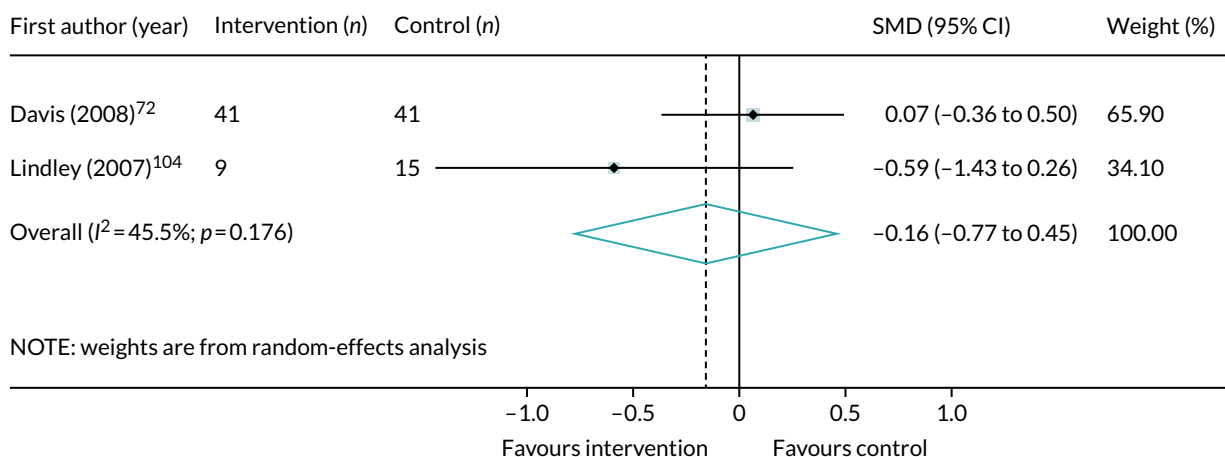


FIGURE 93 Meta-analysis of post-treatment SMD for PTSD symptoms, comparing anticonvulsants with placebo.

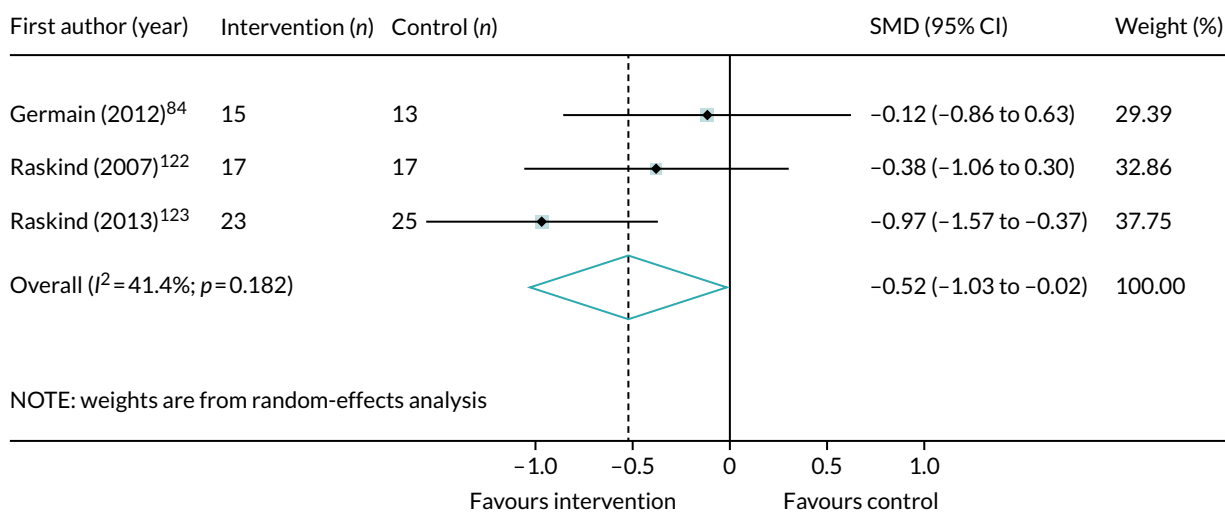


FIGURE 94 Meta-analysis of post-treatment SMD for PTSD symptoms, comparing prazosin with placebo.

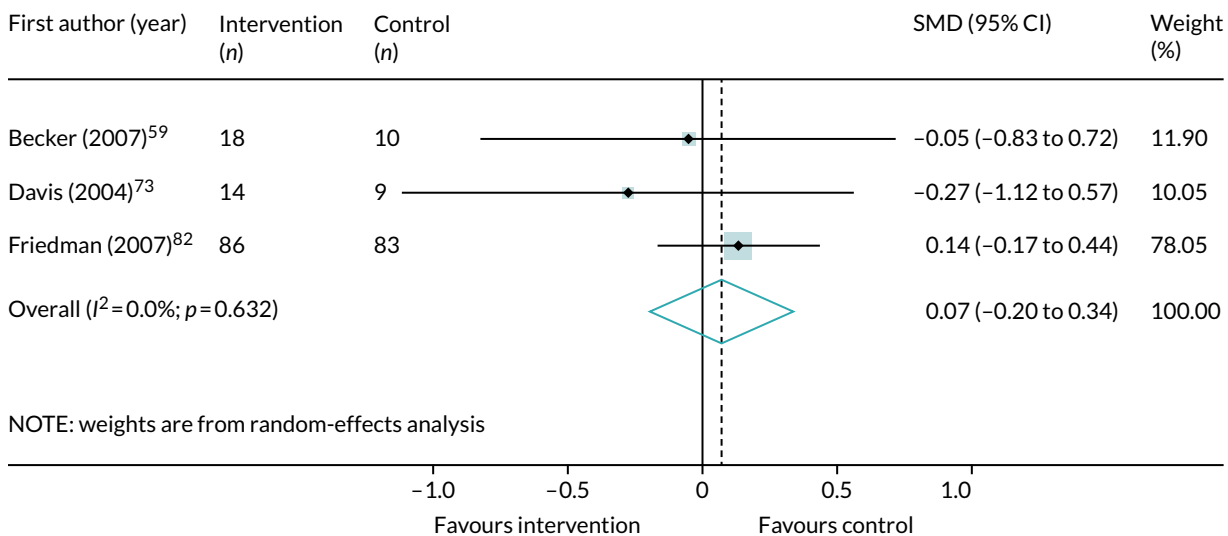
Depression symptoms

FIGURE 95 Meta-analysis of post-treatment SMD for depression symptoms, comparing antidepressants with placebo.

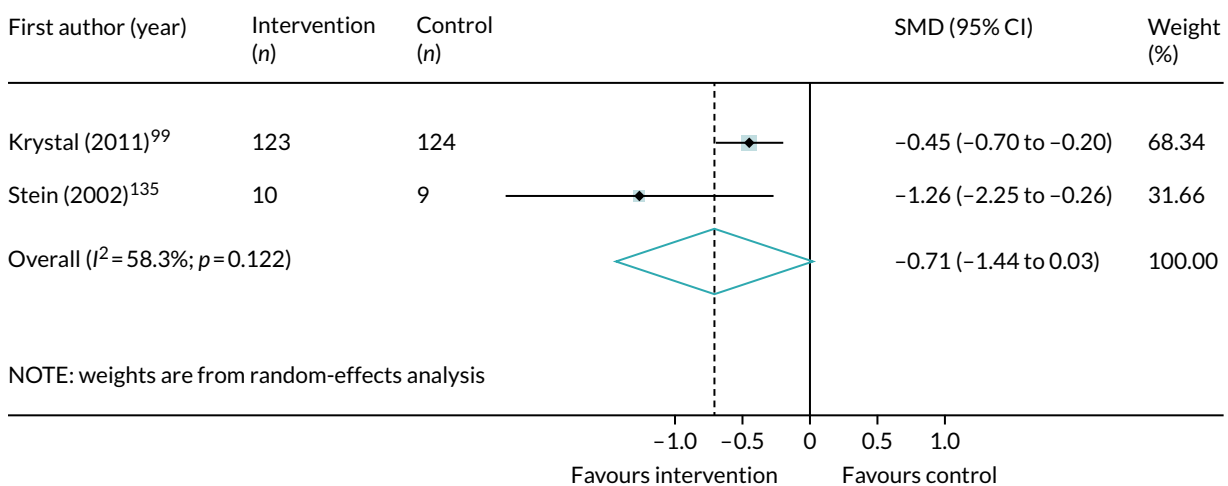


FIGURE 96 Meta-analysis of post-treatment SMD for depression symptoms, comparing antipsychotics with placebo.

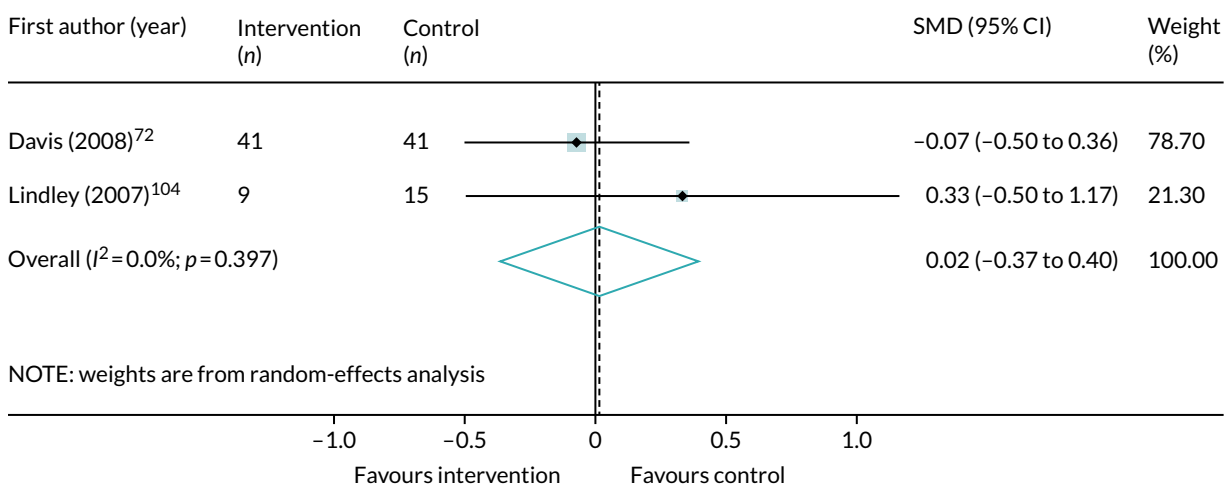


FIGURE 97 Meta-analysis of post-treatment SMD for depression symptoms, comparing anticonvulsants with placebo.

Psychosis symptoms

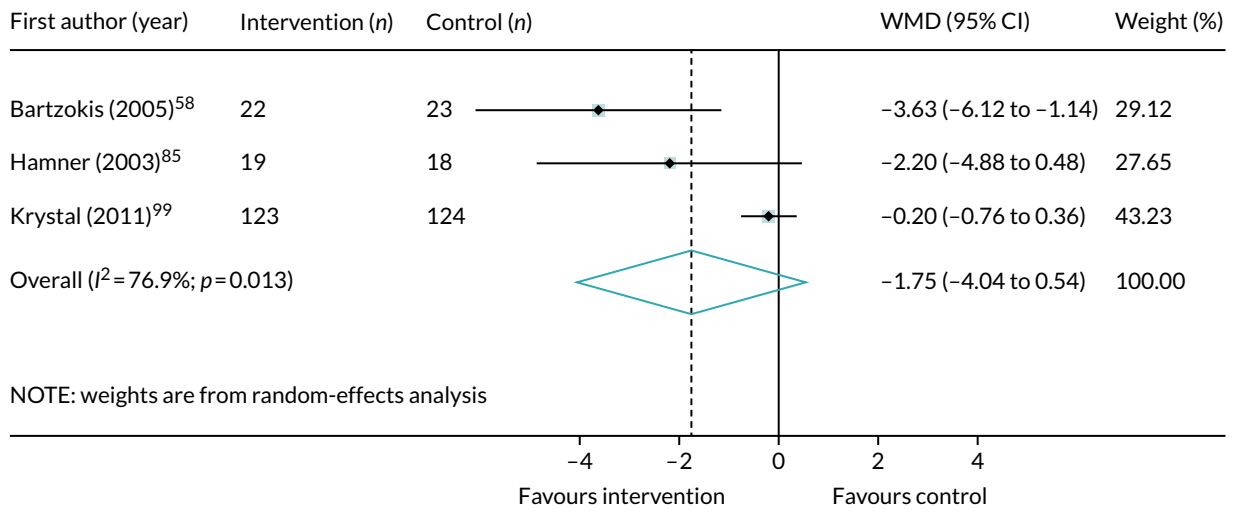


FIGURE 98 Meta-analysis of post-treatment weighted mean difference (WMD) for positive psychotic symptoms, comparing risperidone with placebo.

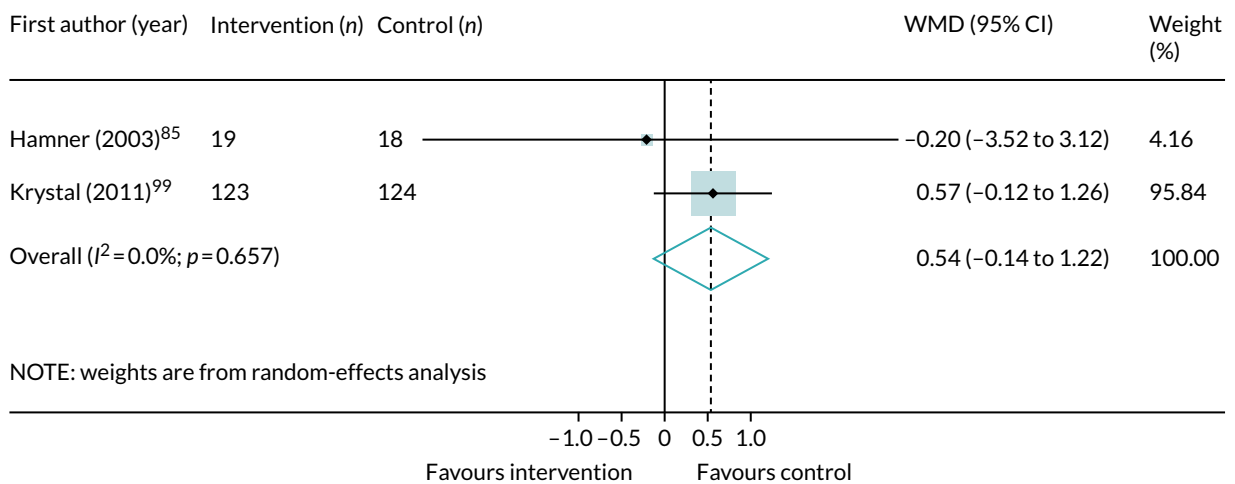


FIGURE 99 Meta-analysis of post-treatment weighted mean difference (WMD) for negative psychotic symptoms, comparing risperidone with placebo.

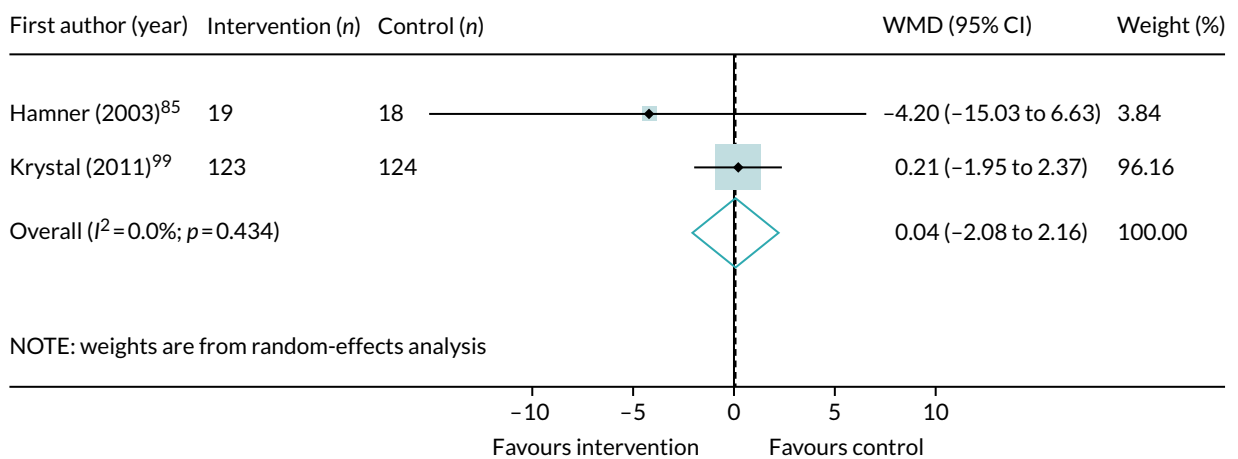


FIGURE 100 Meta-analysis of post-treatment weighted mean difference (WMD) for total psychotic symptoms, comparing risperidone with placebo.

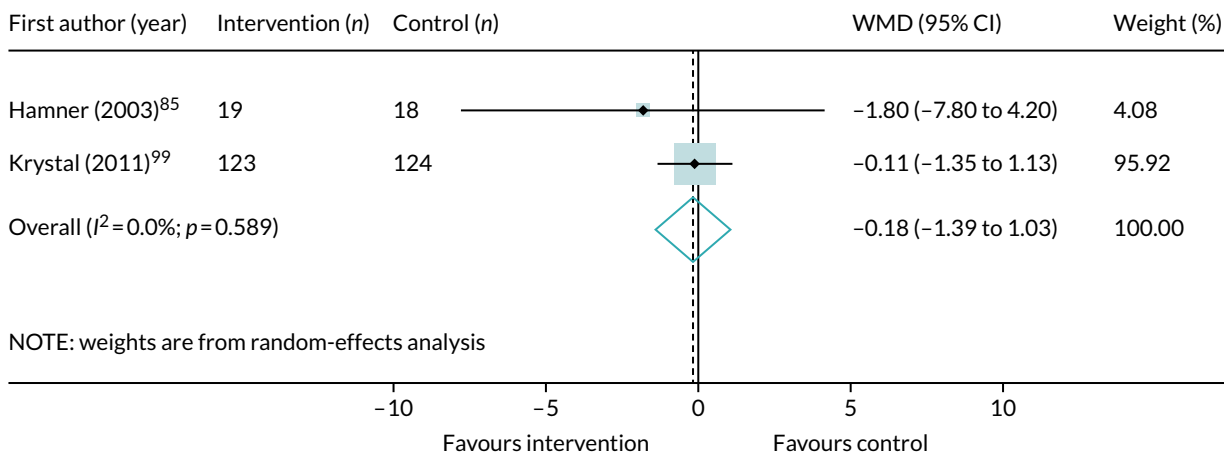


FIGURE 101 Meta-analysis of post-treatment weighted mean difference (WMD) for general psychopathology symptoms, comparing risperidone with placebo.

Attrition meta-analyses

Veterans

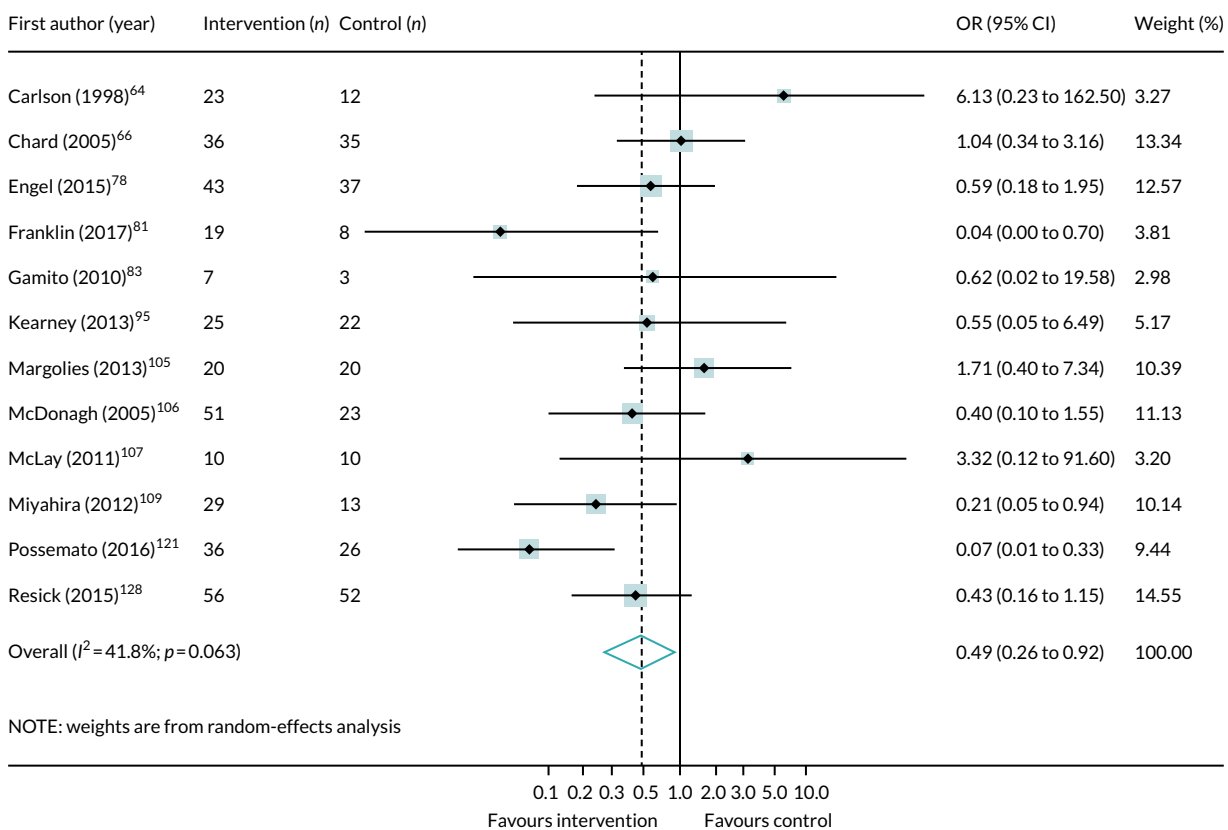


FIGURE 102 Meta-analysis of OR of attrition from all psychological interventions compared with control, among a veteran population.

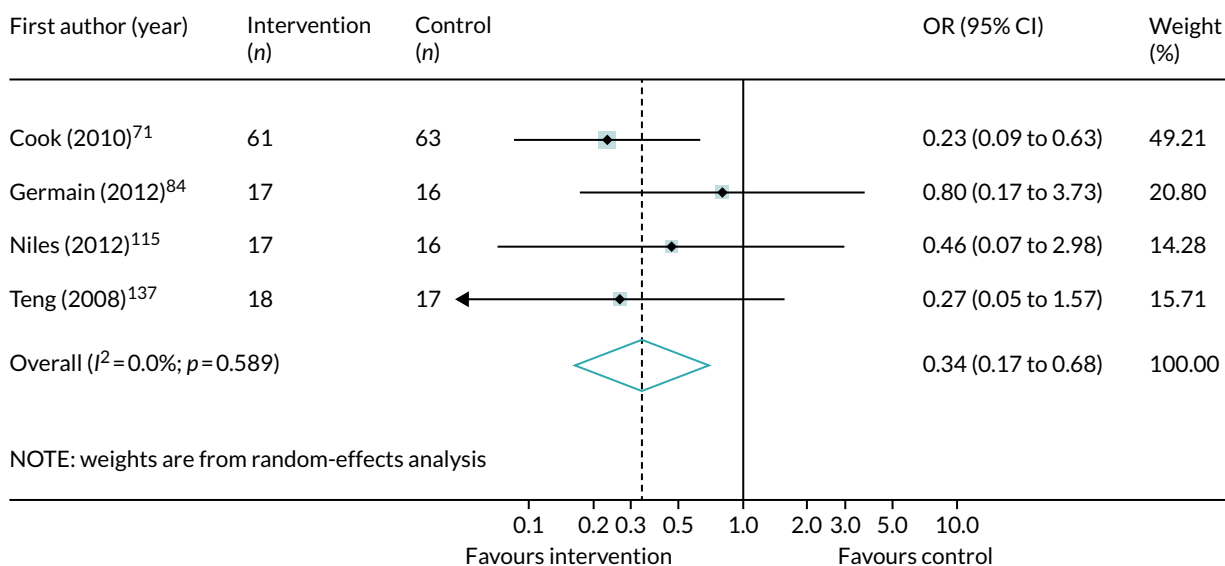


FIGURE 103 Meta-analysis of OR of attrition from all psychological interventions compared with active controls, among a veteran population.

Pharmacological interventions

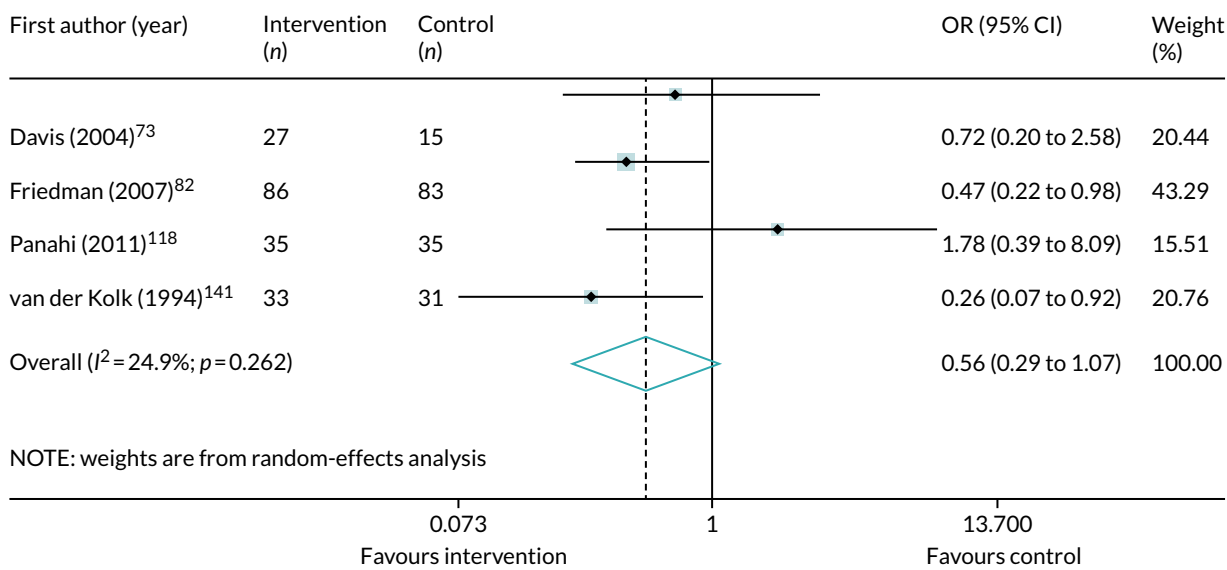


FIGURE 104 Meta-analysis of OR of attrition from antidepressants compared with placebo, among a veteran population.

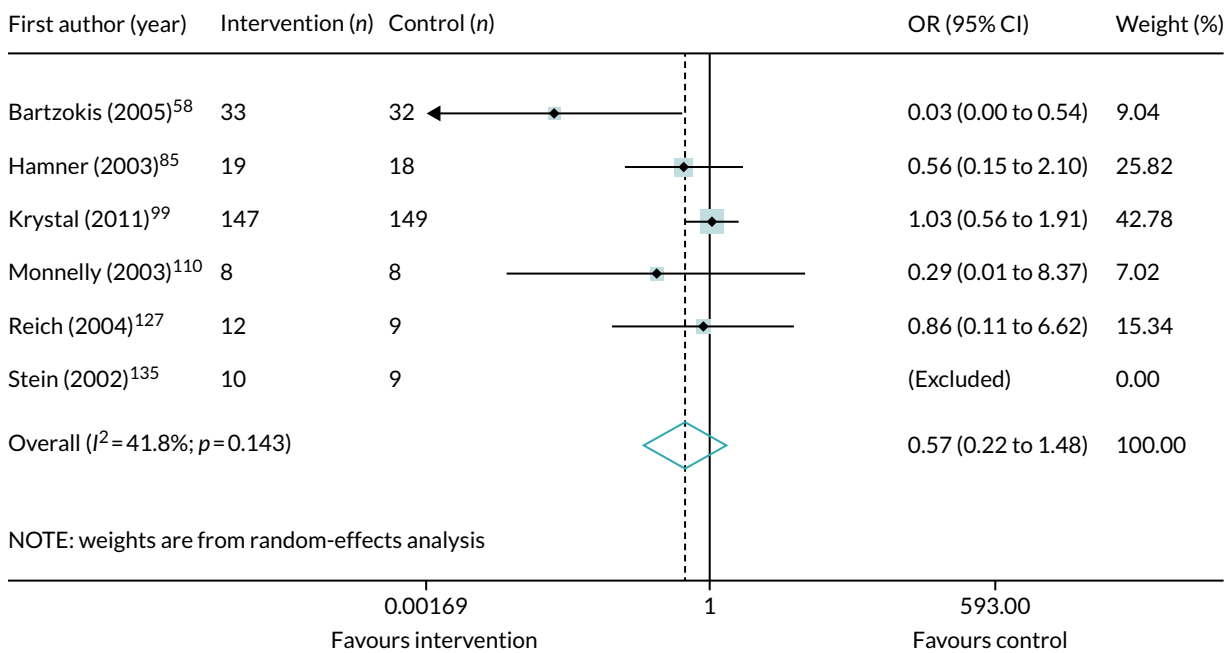


FIGURE 105 Meta-analysis of OR of attrition from antipsychotics compared with placebo, among a veteran population.

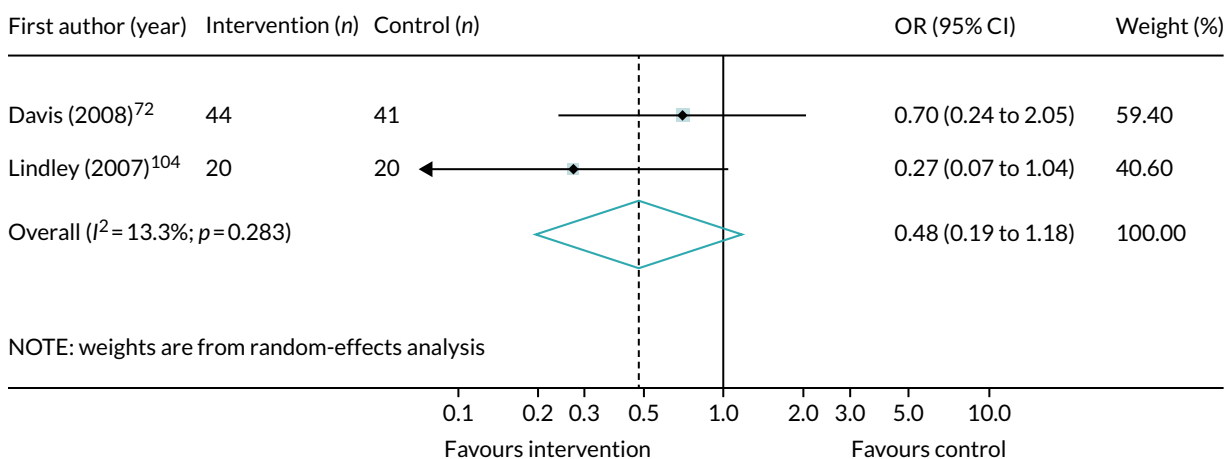


FIGURE 106 Meta-analysis of OR of attrition from anticonvulsants compared with placebo, among a veteran population.

Childhood sexual abuse populations

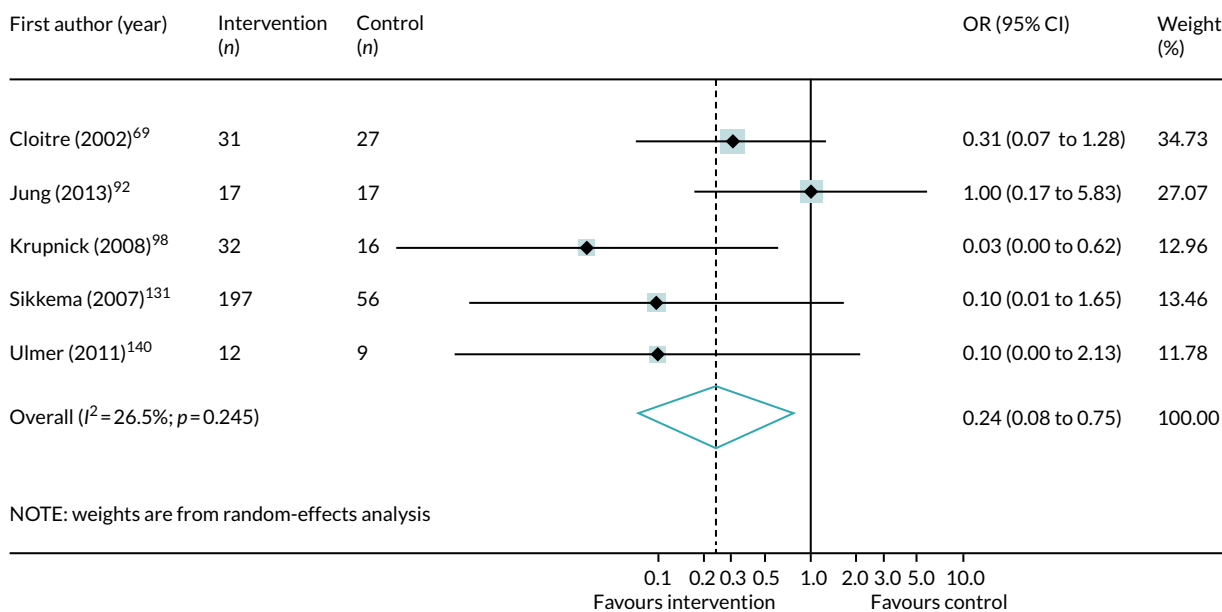


FIGURE 107 Meta-analysis of OR of attrition from all psychological interventions compared with control, among a childhood sexual abuse population.

Refugee populations

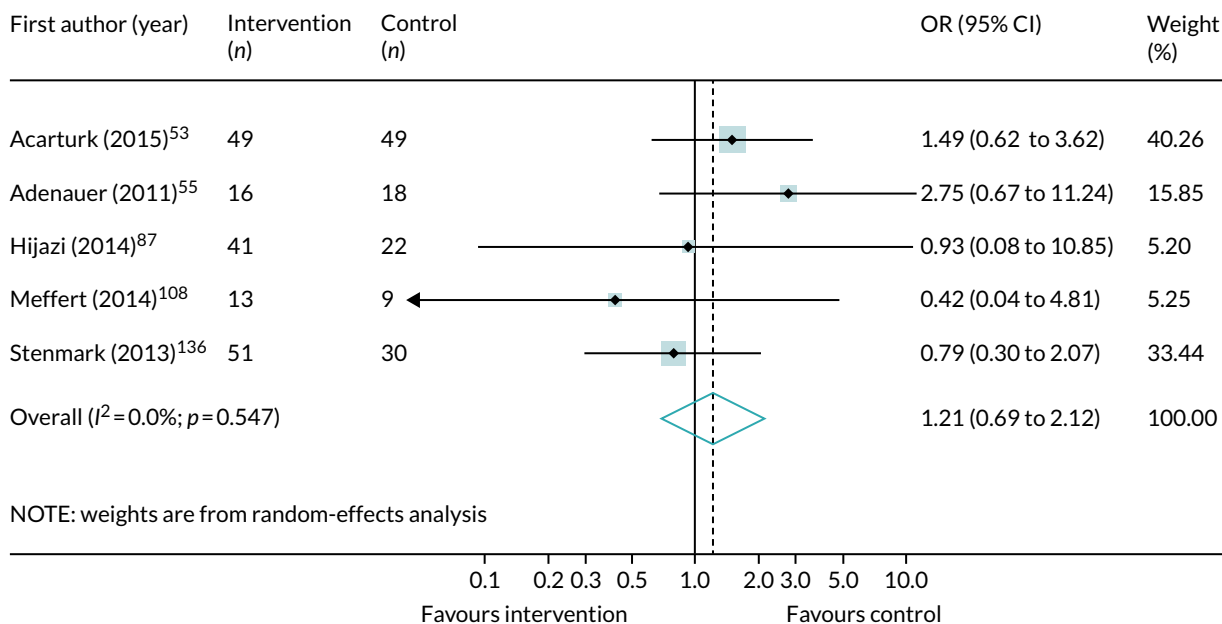


FIGURE 108 Meta-analysis of OR of attrition from all psychological interventions compared with control, among a refugee population.

Domestic violence populations

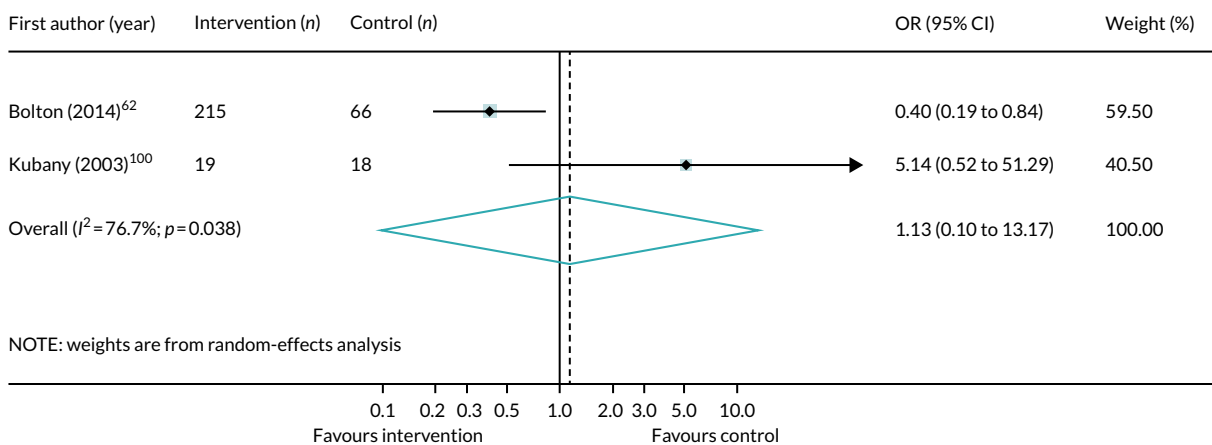


FIGURE 109 Meta-analysis of OR of attrition from all psychological interventions compared with control, among a domestic violence population.

War-affected populations

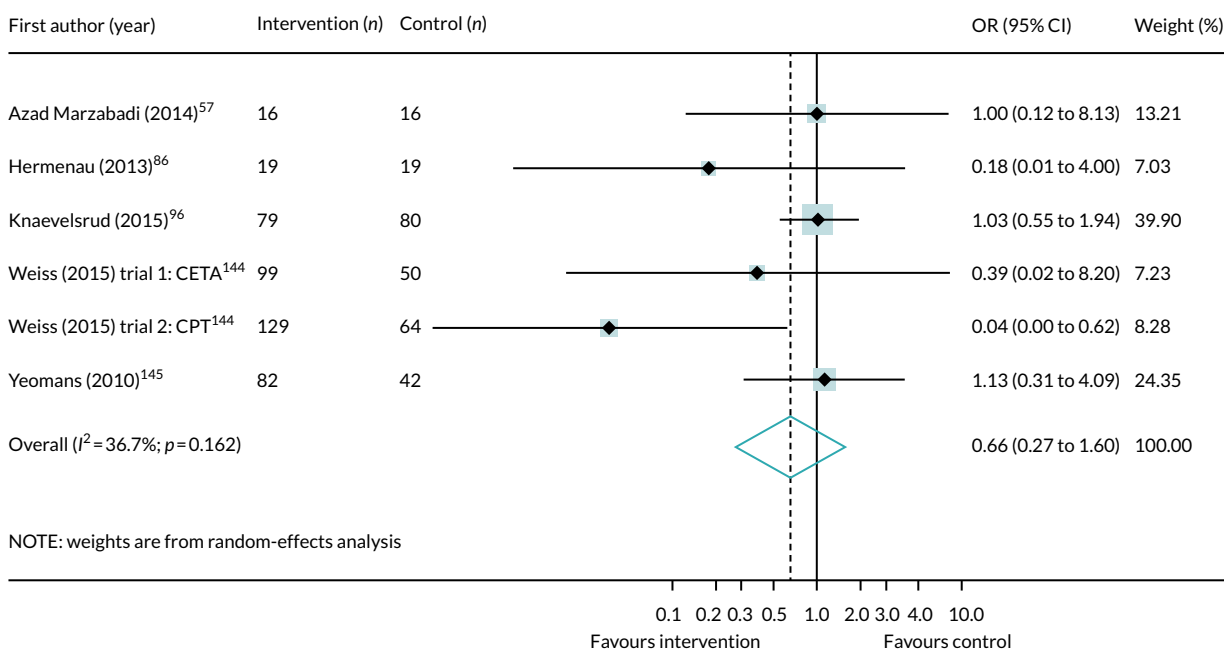


FIGURE 110 Meta-analysis of OR of attrition from all psychological interventions compared with control, among a war-affected population. CETA, common elements treatment approach; CPT, cognitive treatment therapy.

Appendix 11 Characteristics of qualitative studies included

TABLE 49 Characteristics of the qualitative studies included

Authors (year), country	Aim	Population (sample size)	Intervention(s) and delivery	Outcomes	Qualitative approach and data collection	CERQual outcome
Bermudez <i>et al.</i> (2013), ¹⁶³ USA	An analysis of the perspectives of women with trauma exposure participating in mindfulness-based interventions over time	Low-income minority women with a PTSD history exposed to intimate partner violence (<i>n</i> = 10)	Group MBSR	Struggle to practise meditation, vision of growing and helping, personal and interpersonal improvement	Semistructured interviews/focus group Thematic analysis (interpretive phenomenological analysis)	Minimal concerns Contributes to existing knowledge, identifies areas of value to women experiencing intimate partner violence
Dutton <i>et al.</i> (2013), ¹⁶⁴ USA	The use of MBSR as a community-based intervention to reduce health disparities for low-income, predominantly African American, women with a history of intimate partner violence and PTSD	Low-income minority women with a PTSD history exposed to intimate partner violence (<i>n</i> = 53)	Group MBSR	Feasibility, initial interest to participate Acceptability, congruent and relevant to participant needs Positive benefits included increased awareness; self-acceptance; self-empowerment, non-reactivity and self-care; decreased distress; increased sense of belonging and compassion	Follow-up interviews Thematic findings	Minimal concerns Description of method lacking Pilot study to inform future research. Offers insight into dropout rates and reasons for attrition, as well as effects of conflict within the groups
Hughes and Rasmussen (2010), ¹⁶² USA	Study to examine the use of motivational interviewing with women receiving services at a domestic violence shelter	Women in domestic shelters who have been exposed to domestic violence. Experimental group (<i>n</i> = 10) and control group (<i>n</i> = 10) were included in the mixed-methods study but not all were included in the qualitative review (<i>n</i> = 6)	Motivational interviewing vs. treatment as usual	Self-perception, beliefs of abuse causation, beliefs of shelter efficacy, emotions towards abuser, specific statements, beliefs of personal strength	Interviews/grounded theory Part of mixed-methods study	Minimal concerns Some qualitative methods reported; results not thematic (more difficult to pick out) Pilot study. Valuable to inform future design of full study

Authors (year), country	Aim	Population (sample size)	Intervention(s) and delivery	Outcomes	Qualitative approach and data collection	CERQual outcome
Hundt <i>et al.</i> (2017), ¹⁶⁶ USA	Qualitative interviews to elicit first-hand accounts of veterans' experiences in these evidence-based psychotherapies	Male and female veterans ($n = 23$)	Prolonged exposure, cognitive processing therapy or both	Patient experience of intervention, perceptions of treatment mechanisms	Qualitative interviews Thematic analysis (grounded theory). Focus is qualitative	Minimal concerns Contributes to body of evidence for patient's satisfaction with prolonged exposure treatment and cognitive processing therapy
Martinez <i>et al.</i> (2015), ¹⁶⁵ USA	Study to better understand the unique challenges that may keep veterans referred to MBSR from enrolling and completing the programme	Male and female veterans ($n = 48$)	MBSR vs. no control	Barriers to enrolment and participation	Semistructured interviews/content analysis Some qualitative methods reported and thematic findings. Focus is qualitative	Minimal concerns Provides insight into barriers to enrolment and participation by veterans in MBSR
Naved <i>et al.</i> (2009), ¹⁶¹ Bangladesh	Evaluation of an initiative to use paramedics as first-level mental health counsellors of abused women in rural Bangladesh (2003–2004) from the perspective of the abused women	Women in rural Bangladesh exposed to lifetime physical and sexual abuse ($n = 30$)	Paramedic-conducted mental health counselling	Includes patient experience of the intervention	In-depth interviews/thematic/content analysis Part of mixed-methods design (survey and interviews)	Significant concerns regarding recruitment and data analysis Mixed-methods design. Value in identifying barriers to participation in low-income rural areas
Palmer <i>et al.</i> (2007), ¹⁶⁷ Canada	Inpatient programme for traumatic stress recovery in which patients were interviewed after discharge about their experiences during treatment	Males and females exposed to childhood sexual abuse ($n = 30$)	Group 6-week inpatient programme for traumatic stress recovery. Community milieu (group healing), safety (supportive environment), addressing problematic behaviours, traumatic re-enactment	Includes patient experience of intervention	Semistructured interviews Thematic/constant comparison/ethnography. Part of a larger quantitative study	Minimal concerns Useful to inform participant screening and selection when designing group-based interventions

continued

TABLE 49 Characteristics of the qualitative studies included (continued)

Authors (year), country	Aim	Population (sample size)	Intervention(s) and delivery	Outcomes	Qualitative approach and data collection	CERQual outcome
Parker <i>et al.</i> (2007), ¹⁶⁸ Canada	Qualitative study to understand how women with a history of child maltreatment experienced the 'Women Recovering from Abuse Program' (WRAP), an existing intensive group treatment programme	Women exposed to childhood sexual abuse (n = 7)	Group treatment	Includes patient experience of intervention	Semistructured interviews Thematic/ phenomenological approach. Focus is qualitative. Some qualitative methods reported. Thematic findings	No concerns Useful to examine the phenomenological approach to investigate the patients' perspective of the intervention in relation to their own personal lived experiences
Vincent <i>et al.</i> (2013), ¹⁶⁹ UK	This study considers the acceptability of trauma-focused CBT for asylum seekers with PTSD by exploring their experiences of treatment	Asylum seekers exposed to trauma (n = 7)	Trauma-focused CBT for PTSD	Includes patient experience of the intervention – acceptability	Semistructured interviews Interpretive phenomenological analysis	Minimal concerns Useful insight into the challenges of examining the value of interventions on asylum seekers with PTSD

EME
HS&DR
HTA
PGfAR
PHR

Part of the NIHR Journals Library
www.journalslibrary.nihr.ac.uk

*This report presents independent research funded by the National Institute for Health Research (NIHR).
The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the
Department of Health and Social Care*

Published by the NIHR Journals Library