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Psychological therapies for chronic post-traumatic stress disorder (PTSD) in adults (Review)

Bisson JI, Roberts NP, Andrew M, Cooper R, Lewis C

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[Intervention Review]

Psychological therapies for chronic post-traumatic stress disorder (PTSD) in adults

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ABSTRACT

Background

Post-traumatic stress disorder (PTSD) is a distressing condition, which is often treated with psychological therapies. Earlier versions of this review, and other meta-analyses, have found these to be effective, with trauma-focused treatments being more effective than non-trauma-focused treatments. This is an update of a Cochrane review first published in 2005 and updated in 2007.

Objectives

To assess the effects of psychological therapies for the treatment of adults with chronic post-traumatic stress disorder (PTSD).

Search methods

For this update, we searched the Cochrane Depression, Anxiety and Neurosis Group's Specialised Register (CCDANCTR-Studies and CCDANCTR-References) all years to 12th April 2013. This register contains relevant randomised controlled trials from: The Cochrane Library (all years), MEDLINE (1950 to date), EMBASE (1974 to date), and PsycINFO (1967 to date). In addition, we handsearched the Journal of Traumatic Stress, contacted experts in the field, searched bibliographies of included studies, and performed citation searches of identified articles.

Selection criteria

Randomised controlled trials of individual trauma-focused cognitive behavioural therapy (TFCBT), eye movement desensitisation and reprocessing (EMDR), non-trauma-focused CBT (non-TFCBT), other therapies (supportive therapy, non-directive counselling, psychodynamic therapy and present-centred therapy), group TFCBT, or group non-TFCBT, compared to one another or to a waitlist or usual care group for the treatment of chronic PTSD. The primary outcome measure was the severity of clinician-rated traumatic-stress symptoms.

Data collection and analysis

We extracted data and entered them into Review Manager 5 software. We contacted authors to obtain missing data. Two review authors independently performed 'Risk of bias' assessments. We pooled the data where appropriate, and analysed for summary effects.

Main results

We include 70 studies involving a total of 4761 participants in the review. The first primary outcome for this review was reduction in the severity of PTSD symptoms, using a standardised measure rated by a clinician. For this outcome, individual TFCBT and EMDR were more effective than waitlist/usual care (standardised mean difference (SMD) -1.62; 95% CI -2.03 to -1.21; 28 studies; n = 1256 and SMD -1.17; 95% CI -2.04 to -0.30; 6 studies; n = 183 respectively). There was no statistically significant difference between individual TFCBT, EMDR and

Stress Management (SM) immediately post-treatment although there was some evidence that individual TFCBT and EMDR were superior to non-TFCBT at follow-up, and that individual TFCBT, EMDR and non-TFCBT were more effective than other therapies. Non-TFCBT was more effective than waitlist/usual care and other therapies. Other therapies were superior to waitlist/usual care control as was group TFCBT. There was some evidence of greater drop-out (the second primary outcome for this review) in active treatment groups. Many of the studies were rated as being at 'high' or 'unclear' risk of bias in multiple domains, and there was considerable unexplained heterogeneity; in addition, we assessed the quality of the evidence for each comparison as very low. As such, the findings of this review should be interpreted with caution.

Authors' conclusions

The evidence for each of the comparisons made in this review was assessed as very low quality. This evidence showed that individual TFCBT and EMDR did better than waitlist/usual care in reducing clinician-assessed PTSD symptoms. There was evidence that individual TFCBT, EMDR and non-TFCBT are equally effective immediately post-treatment in the treatment of PTSD. There was some evidence that TFCBT and EMDR are superior to non-TFCBT between one to four months following treatment, and also that individual TFCBT, EMDR and non-TFCBT are more effective than other therapies. There was evidence of greater drop-out in active treatment groups. Although a substantial number of studies were included in the review, the conclusions are compromised by methodological issues evident in some. Sample sizes were small, and it is apparent that many of the studies were underpowered. There were limited follow-up data, which compromises conclusions regarding the long-term effects of psychological treatment.

PLAIN LANGUAGE SUMMARY

Psychological therapies for chronic post-traumatic stress disorder (PTSD) in adults

Background: Post-traumatic stress disorder (PTSD) can occur following a traumatic event. It is characterised by symptoms of re-experiencing the trauma (in the form of nightmares, flashbacks and distressing thoughts), avoiding reminders of the traumatic event, negative alterations in thoughts and mood, and symptoms of hyper-arousal (feeling on edge, being easily startled, feeling angry, having difficulties sleeping, and problems concentrating).

Previous reviews have supported the use of individual trauma-focused cognitive behavioural therapy (TFCBT) and eye movement desensitisation and reprocessing (EMDR) in the treatment of PTSD. TFCBT is a variant of cognitive behavioural therapy (CBT), which includes a number of techniques to help a person overcome a traumatic event. It is a combination of cognitive therapy aimed at changing the way a person thinks, and behavioural therapy, which aims to change the way a person acts. TFCBT helps an individual come to terms with a trauma through exposure to memories of the event. EMDR is a psychological therapy, which aims to help a person reprocess their memories of a traumatic event. The therapy involves bringing distressing trauma-related images, beliefs, and bodily sensations to mind, whilst the therapist guides eye movements from side to side. More positive views of the trauma memories are identified, with the aim of replacing the ones that are causing problems.

TFCBT and EMDR are currently recommended as the treatments of choice by guidelines such as those published by the United Kingdom's National Institute of Health and Clinical Excellence (NICE).

Study characteristics: This review draws together up-to-date evidence from 70 studies including a total of 4761 people.

Key findings: There is continued support for the efficacy of individual TFCBT, EMDR, non-TFCBT and group TFCBT in the treatment of chronic PTSD in adults. Other non-trauma-focused psychological therapies did not reduce PTSD symptoms as significantly. There was evidence that individual TFCBT, EMDR and non-TFCBT are equally effective immediately post-treatment in the treatment of PTSD. There was some evidence that TFCBT and EMDR are superior to non-TFCBT between one to four months following treatment, and also that individual TFCBT, EMDR and non-TFCBT are more effective than other therapies. No specific conflicts of interest were identified.

Quality of the evidence: Although we included a substantial number of studies in this review, each only included small numbers of people and some were poorly designed. We assessed the overall quality of the studies as very low and so the findings of this review should be interpreted with caution. There is insufficient evidence to show whether or not psychological therapy is harmful.

SUMMARY OF FINDINGS

Summary of findings for the main comparison. Trauma-focused CBT/Exposure therapy compared with Waitlist/Usual Care for chronic post-traumatic stress disorder (PTSD) in adults

Trauma-focused CBT/Exposure therapy versus Waitlist/Usual Care

Patient or population: Adults with PTSD for at least 3 months

Settings: Primary care, community, outpatient

Intervention: Trauma-focused CBT/Exposure Therapy

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk				
	Control	Trauma Focused CBT/ Exposure Therapy				
Severity of PTSD symptoms - Clinician-rated		The mean severity of PTSD symptoms - clinician-rated in the intervention groups was	1.62 standard deviations lower (2.03 to 1.21 lower)	1256 (28 studies)	⊕⊕⊕⊕ very low 1,2,3	
Leaving the study early for any reason	Study population		RR 1.64 (1.30 to 2.06)	1756 (33 studies)	⊕⊕⊕⊕ very low 1,2,3	
	130 per 1000	189 per 1000 (150 to 240)				
	Moderate					
	85 per 1000	124 per 1000 (99 to 157)				

*The basis for the **assumed risk** (e.g. the median control group risk across studies) is provided in footnotes. The **corresponding risk** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI).

CI: Confidence interval; **RR:** Risk ratio;

GRADE Working Group grades of evidence

High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low quality: We are very uncertain about the estimate.

¹Some studies were judged to pose a high risk of bias

²Unexplained heterogeneity

³Small sample sizes

Summary of findings 2. Trauma-focused CBT/Exposure therapy compared with non-TFCBT for chronic post-traumatic stress disorder (PTSD) in adults

Trauma-focused CBT/Exposure therapy compared with non-TFCBT for chronic post-traumatic stress disorder (PTSD) in adults

Patient or population: Adults with PTSD for at least 3 months

Settings: Primary care, community, outpatient

Intervention: Trauma-focused CBT/Exposure therapy

Comparison: non-Trauma-focused CBT

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk				
	Non-TFCBT	Trauma Focused CBT/ Exposure Therapy				
Severity of PTSD Symptoms - Clinician-rated		The mean severity of PTSD symptoms - clinician-rated in the intervention groups was 0.27 standard deviations lower (0.63 lower to 0.10 higher)		267 (7 studies)	⊕○○○ very low ^{1,2}	
Leaving the study early for any reason	Study population		RR 1.19 (0.71 to 2.00)	312 (7 studies)	⊕○○○ very low ^{1,2,3}	
	154 per 1000	183 per 1000 (109 to 308)				
	Moderate					
	154 per 1000	183 per 1000 (109 to 308)				

*The basis for the **assumed risk** (e.g. the median control group risk across studies) is provided in footnotes. The **corresponding risk** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI).

CI: Confidence interval; **RR:** Risk ratio;

GRADE Working Group grades of evidence

High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low quality: We are very uncertain about the estimate.

¹Some studies were judged to pose a high risk of bias

²Unexplained heterogeneity

³Small sample sizes

Summary of findings 3. Trauma-focused CBT/Exposure therapy compared with other therapies for chronic post-traumatic stress disorder (PTSD) in adults

Trauma-focused CBT/Exposure therapy compared with other therapies for chronic post-traumatic stress disorder (PTSD) in adults

Patient or population: Adults with PTSD for at least 3 months

Settings: Primary care, community, outpatient

Intervention: Trauma-focused CBT/Exposure therapy

Comparison: other therapies

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk				
	Other Therapies	Trauma Focused CBT/Exposure Therapy				
Severity of PTSD symptoms - Clinician-rated		The mean severity of PTSD symptoms - clinician in the intervention groups was	-0.48 standard deviations lower (-0.83 to -0.43 lower)	612 (10 studies)	⊕⊕⊕⊕ very low 1,2,3	
Leaving the study early for any reason	Study population		RR 1.39 (1.01 to 1.92)	762 (11 studies)	⊕⊕⊕⊕ very low 1,2,3	
	142 per 1000	198 per 1000 (144 to 274)				
	Moderate					
	138 per 1000	192 per 1000 (139 to 265)				

*The basis for the **assumed risk** (e.g. the median control group risk across studies) is provided in footnotes. The **corresponding risk** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI).

CI: Confidence interval; **RR:** Risk ratio;

GRADE Working Group grades of evidence

High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low quality: We are very uncertain about the estimate.

¹Some studies were judged to pose a high risk of bias

²Unexplained heterogeneity

³Small sample sizes

Summary of findings 4. EMDR compared with Waitlist/Usual Care for chronic post-traumatic stress disorder (PTSD) in adults

EMDR compared with Waitlist/Usual Care for chronic post-traumatic stress disorder (PTSD) in adults

Patient or population: Adults with PTSD for at least 3 months

Settings: Primary care, community, outpatient

Intervention: Eye movement desensitization and reprocessing (EMDR)

Comparison: Waitlist/Usual Care

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk				
	Waitlist/Usual Care	EMDR				
Severity of PTSD symptoms - Clinician-rated		The mean severity of PTSD symptoms - clinician in the intervention groups was	1.17 standard deviations lower (2.04 to 0.30 lower)	183 (6 studies)	⊕⊕⊕⊕ very low ^{1,2,3}	
Leaving study early for any reason	Study population		RR 1.05 (0.62 to 1.79)	227 (7 studies)	⊕⊕⊕⊕ very low ^{1,3}	
	178 per 1000	188 per 1000 (104 to 313)				
	Moderate					
	172 per 1000	182 per 1000 (101 to 305)				

*The basis for the **assumed risk** (e.g. the median control group risk across studies) is provided in footnotes. The **corresponding risk** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI).

CI: Confidence interval; **RR:** risk ratio;

GRADE Working Group grades of evidence

High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low quality: We are very uncertain about the estimate.

- ¹Some studies were judged to pose a high risk of bias
- ²Unexplained heterogeneity
- ³Small sample sizes

Summary of findings 5. EMDR compared with Trauma-focused CBT for chronic post-traumatic stress disorder (PTSD) in adults

EMDR compared with Trauma-focused CBT for chronic post-traumatic stress disorder (PTSD) in adults

Patient or population: Adults with PTSD for at least 3 months
Settings: Primary care, community, outpatient
Intervention: Eye movement desensitization and reprocessing (EMDR)
Comparison: Trauma-focused CBT

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk				
	Trauma Focused CBT	EMDR				
Severity of PTSD symptoms - Clinician-rated		The mean severity of PTSD symptoms - clinician in the intervention groups was	0.03 standard deviations lower (0.43 lower to 0.38 higher)	327 (7 studies)	⊕⊕⊕⊕ very low ^{1,2,3}	
Leaving study early for any reason	Study population		RR 1.00 (0.74 to 1.35)	400 (8 studies)	⊕⊕⊕⊕ very low ^{1,2,3}	
	279 per 1000	268 per 1000 (191 to 367)				
	Moderate					
	257 per 1000	247 per 1000 (174 to 342)				

*The basis for the **assumed risk** (e.g. the median control group risk across studies) is provided in footnotes. The **corresponding risk** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI).

CI: Confidence interval; **RR:** risk ratio;

GRADE Working Group grades of evidence

High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low quality: We are very uncertain about the estimate.

- ¹Some studies were judged as posing a high risk of bias
- ²Unexplained heterogeneity
- ³Small sample sizes

Summary of findings 6. EMDR compared with non-TFCBT for chronic post-traumatic stress disorder (PTSD) in adults

EMDR compared with non-TFCBT for chronic post-traumatic stress disorder (PTSD) in adults

Patient or population: Adults with PTSD for at least 3 months
Settings: Primary care, community, outpatient
Intervention: Eye movement desensitization and reprocessing (EMDR)
Comparison: non-trauma-focused CBT

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk				
	Non-TFCBT	EMDR				
Severity of PTSD symptoms - Clinician-rated		The mean severity of PTSD symptoms - clinician in the intervention groups was	0.35 standard deviations lower (0.90 lower to 0.19 higher)	53 (2 studies)	⊕⊕⊕⊕ very low ^{1,2}	
Leaving the study early for any reason	Study population		RR 1.03 (0.37 to 2.88)	84 (3 studies)	⊕⊕⊕⊕ very low ^{1,2}	
	140 per 1000	144 per 1000 (46 to 367)				
	Moderate					
	91 per 1000	94 per 1000 (29 to 264)				

*The basis for the **assumed risk** (e.g. the median control group risk across studies) is provided in footnotes. The **corresponding risk** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI).

CI: Confidence interval; **RR:** risk ratio;

GRADE Working Group grades of evidence

High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.
Very low quality: We are very uncertain about the estimate.

¹Studies reported insufficient information to judge risk of bias
²Small sample sizes. Only two studies.

Summary of findings 7. EMDR compared with other therapies for chronic post-traumatic stress disorder (PTSD) in adults

EMDR compared with other therapies for chronic post-traumatic stress disorder (PTSD) in adults

Patient or population: Adults with PTSD for at least 3 months
Settings: Primary care, community, outpatient
Intervention: Eye movement desensitization and reprocessing (EMDR)
Comparison: other therapies

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk				
	Other Therapies	EMDR				
Leaving study early for any reason	Study population		RR 1.48 (0.26 to 8.54)	127 (2 studies)	⊕○○○ very low ^{1,2}	
	32 per 1000	47 per 1000 (8 to 234)				
	Moderate					
	32 per 1000	48 per 1000 (8 to 236)				

*The basis for the **assumed risk** (e.g. the median control group risk across studies) is provided in footnotes. The **corresponding risk** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI).

CI: Confidence interval; **RR:** risk ratio;

GRADE Working Group grades of evidence

High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low quality: We are very uncertain about the estimate.

¹One study was judged to pose a high risk of bias. The other study reported insufficient information for a judgement to be made

²Only two studies. Small sample sizes

Summary of findings 8. Non-TFCBT compared with Waitlist/Usual Care for chronic post-traumatic stress disorder (PTSD) in adults

Non-TFCBT compared with Waitlist/Usual Care for chronic post-traumatic stress disorder (PTSD) in adults

Patient or population: Adults with PTSD for at least 3 months

Settings: Primary care, community, outpatient

Intervention: non-trauma-focused CBT

Comparison: Waitlist/Usual Care

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk				
	Waitlist/Usual Care	Non-TFCBT Therapy				
Severity of PTSD symptoms - Clinician-rated		The mean severity of PTSD symptoms - clinician in the intervention groups was 1.22 standard deviations lower (1.76 to 0.69 lower)		106 (4 studies)	⊕⊕⊕⊕ very low ^{1,2,3}	
Leaving the study early due to any reason	Study population		RR 1.96 (0.70 to 5.48)	141 (5 studies)	⊕⊕⊕⊕ very low ^{1,2,3}	
	78 per 1000	153 per 1000 (55 to 428)				
	Moderate					
	83 per 1000	163 per 1000 (58 to 455)				

*The basis for the **assumed risk** (e.g. the median control group risk across studies) is provided in footnotes. The **corresponding risk** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI).

CI: Confidence interval; **RR:** Risk ratio;

GRADE Working Group grades of evidence

High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low quality: We are very uncertain about the estimate.

- ¹Insufficient data to judge risk of bias
- ²Unexplained heterogeneity
- ³Small sample sizes

Summary of findings 9. Non-TFCBT compared with other therapies for chronic post-traumatic stress disorder (PTSD) in adults

Non-TFCBT compared with other therapies for chronic post-traumatic stress disorder (PTSD)

Patient or population: Adults with PTSD for at least 3 months
Settings: Primary care, community, outpatient
Intervention: non-trauma-focused CBT
Comparison: other therapies

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk				
	Non-TFCBT					
Severity of PTSD symptoms - Clinician-rated	See comment	See comment	Not estimable	25 (1 study)	⊕○○○ very low 1,2,3	
Leaving the study early for any reason	See comment	See comment	Not estimable	31 (1 study)	⊕○○○ very low 1,2,3	

*The basis for the **assumed risk** (e.g. the median control group risk across studies) is provided in footnotes. The **corresponding risk** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI).

CI: Confidence interval

GRADE Working Group grades of evidence

High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low quality: We are very uncertain about the estimate.

- ¹Some studies were judged to pose a high risk of bias
- ²Unexplained heterogeneity
- ³Small sample sizes

Summary of findings 10. Group TFCBT compared with Waitlist/Usual Care for chronic post-traumatic stress disorder (PTSD) in adults

Group TFCBT compared with Waitlist/Usual Care for chronic post-traumatic stress disorder (PTSD)

Patient or population: Adults with PTSD for at least 3 months

Settings: Primary care, community, outpatient

Intervention: Group TFCBT

Comparison: Waitlist/Usual Care/Minimal Contact

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk				
	Group TFCBT					
Severity of PTSD symptoms - Clinician-rated		The mean severity of PTSD symptoms - clinician in the intervention groups was 1.28 standard deviations lower (2.25 to 0.31 lower)		185 (3 studies)	⊕⊕⊕⊕ very low 1,2,3	
Leaving the study early for any reason	Study population		RR 1.21 (0.94 to 1.55)	573 (7 studies)	⊕⊕⊕⊕ very low 1,2,3	
	262 per 1000	317 per 1000 (246 to 406)				
	Moderate					
	200 per 1000	242 per 1000 (188 to 310)				

*The basis for the **assumed risk** (e.g. the median control group risk across studies) is provided in footnotes. The **corresponding risk** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI).

CI: Confidence interval; **RR:** Risk ratio;

GRADE Working Group grades of evidence

High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low quality: We are very uncertain about the estimate.

¹Insufficient information to judge risk of bias

²Unexplained heterogeneity

³Small sample sizes

Summary of findings 11. Group TFCBT compared with Group non-TFCBT for chronic post-traumatic stress disorder (PTSD) in adults

Group CBT (trauma focused) compared with Group CBT (non-trauma focused) for chronic post-traumatic stress disorder (PTSD) in adults

Patient or population: Adults with PTSD for at least 3 months

Settings: Primary care, community, outpatient

Intervention: Group TFCBT

Comparison: Group non-TFCBT

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk				
	Group CBT (non-trauma focused)	Group CBT (trauma focused)				
Severity of PTSD symptoms - Clinician-rated	See comment	See comment	Not estimable	325 (1 study)	⊕○○○ very low ^{1,2}	
Leaving the study early for any reason	See comment	See comment	Not estimable	360 (1 study)	⊕○○○ very low ^{1,2}	

*The basis for the **assumed risk** (e.g. the median control group risk across studies) is provided in footnotes. The **corresponding risk** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI).

CI: Confidence interval;

GRADE Working Group grades of evidence

High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low quality: We are very uncertain about the estimate.

¹Insufficient information to judge risk of bias

²One study with a small sample size

Summary of findings 12. Other therapies compared with Waitlist/Usual Care for chronic post-traumatic stress disorder (PTSD) in adults

Other therapies compared with Waitlist/Usual Care for chronic post-traumatic stress disorder (PTSD) in adults

Patient or population: Adults with PTSD for at least 3 months

Settings: Primary care, community, outpatient

Intervention: Other therapies

Comparison: Waitlist/Usual Care

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk				
	Waitlist/Usual Care	Other therapies				
Severity of PTSD symptoms - Clinician		The mean severity of PTSD symptoms - clinician in the intervention groups was 0.58 standard deviations lower (0.96 to 0.20 lower)		112 (3 studies)	⊕⊕⊕⊕ very low ¹	
Leaving the study early due to any reason	Study population		RR 2.45 (0.99 to 6.10)	211 (4 studies)	⊕⊕⊕⊕ very low ^{1,2}	
	74 per 1000	181 per 1000 (73 to 452)				
	Moderate					
	72 per 1000	176 per 1000 (71 to 439)				

*The basis for the **assumed risk** (e.g. the median control group risk across studies) is provided in footnotes. The **corresponding risk** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI).

CI: Confidence interval; **RR:** Risk ratio;

GRADE Working Group grades of evidence

High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low quality: We are very uncertain about the estimate.

¹Small sample sizes

²Studies were judged to pose a low/unclear risk of bias

Summary of findings 13. Group non-TFCBT compared with Waitlist/Usual Care for chronic post-traumatic stress disorder (PTSD) in adults

Group non-TFCBT compared to Waitlist/Usual Care for chronic post-traumatic stress disorder (PTSD) in adults

Patient or population: Adults with PTSD for at least 3 months

Settings: Primary care, community, outpatient

Intervention: Group non-TFCBT
Comparison: Waitlist/Usual Care

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk				
	Waitlist/Usual Care	Group nonTFCBT				
Leaving the study early for any reason	See comment	See comment	Not estimable	47 (1 study)	⊕⊕⊕⊕ very low ^{1,2}	

*The basis for the **assumed risk** (e.g. the median control group risk across studies) is provided in footnotes. The **corresponding risk** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI).

CI: Confidence interval;

GRADE Working Group grades of evidence

High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low quality: We are very uncertain about the estimate.

¹Only one study. Risk of bias high/unclear in several domains.

²Only one study

BACKGROUND

Description of the condition

Post-traumatic stress disorder (PTSD) is a well recognised psychiatric disorder that occurs following a major traumatic event. Characteristic symptoms include re-experiencing phenomena such as nightmares and recurrent distressing thoughts of the event, avoidance of talking or being reminded of the traumatic event, negative alterations in thoughts and mood, and hyperarousal symptoms including sleep disturbance, increased irritability and hypervigilance. PTSD can be diagnosed after a one-month duration of symptoms. The condition is considered chronic once symptoms have been present for three months. PTSD is a relatively common condition. The National Co-morbidity Survey ([Kessler 1995](#)) found that 7.8% of 5877 American adults had suffered from PTSD at some time in their lives. When data were examined from individuals who had been exposed to a traumatic event, rates of PTSD varied according to the type of stressor. For example, physical assaults amongst women led to a lifetime prevalence of 29% and combat experience amongst men to a lifetime prevalence of 39%.

Description of the intervention

Psychological therapies have been advocated as being effective in the treatment of PTSD since its conception. Various forms of psychological therapy have been used including exposure therapy ([Creamer 2004](#)), cognitive therapy ([Ehlers 2005](#); [Resick 1992](#)), psychodynamic psychotherapy ([Brom 1989](#)) and eye movement desensitisation and reprocessing (EMDR) ([Shapiro 1989b](#)). Exposure therapy usually involves asking the participant to relive the trauma imaginally. This is often done by creating a detailed present tense account of exactly what happened, making an audio tape recording or transcript of it and asking the individual to listen to/read this over and over again. Another form of exposure therapy involves exposing participants to cues associated with the traumatic event (for example, graded re-exposure to car travel following a road traffic accident). Trauma-focused cognitive therapy involves helping the individual to identify distorted thinking patterns regarding themselves, the traumatic incident and the world. Individuals are encouraged to challenge their thoughts by weighing up available evidence and through the utilisation of various techniques by the therapist, including specific questioning that leads the individual to challenge distorted views. EMDR involves the PTSD sufferer focusing on a traumatic image, thought, emotion and a bodily sensation whilst receiving bilateral stimulation, most commonly in the form of eye movements. Non-TFCBT usually focuses on techniques for the reduction of anxiety. The most widely used protocol for anxiety reduction in PTSD is stress inoculation training (SIT), which teaches skills for managing stress, such as relaxation, thought stopping and guided dialogue. It provides the opportunity to practise acquired skills gradually, across a variety of settings. Psychodynamic psychotherapy focuses on integrating the traumatic experience into the life experience of the individual as a whole; childhood issues are often felt to be important.

How the intervention might work

The psychological therapies considered by this review stem from various theoretical perspectives. Individual protocols describe how therapies might work in detail. TFCBT protocols draw on four core components emphasised in varying degrees: 1) psycho-

education; 2) anxiety management; 3) exposure; and 4) cognitive restructuring. Earlier therapies tended to be more behaviourally based, focusing heavily on exposure work. Cognitive components have become more prominent over time, in line with the popularity of information processing accounts of the disorder. Exposure plays an important role in many TFCBT protocols. It may be carried out in vivo (real life), or imaginally. It is common for both to be used in the treatment of PTSD, to target internally and externally feared stimuli. The rationale behind the use of imaginal exposure varies according to the specific TFCBT protocol. Imaginal exposure is based on principles of habituation (the reduction of anxiety after prolonged exposure) or information processing (allowing re-evaluation of old information and incorporation of new information into the trauma memory), or a combination of both. In addition, cognitive restructuring has an important role, seeking to identify and modify dysfunctional thoughts by testing and challenging self-held beliefs, based on the assumption that these usually unquestioned thoughts are distorted or unhelpful. EMDR is an integrative trauma-focused therapy encompassing elements from various effective psychotherapies in a structured protocol drawn from an information processing model of PTSD. There is no agreed mechanism by which EMDR is thought to operate. [Shapiro 1989b](#) discovered EMDR accidentally. Her account implicates personal experience of rapid eye movements easing distress. On the basis of this experience, Shapiro elaborated EMDR for the treatment of Vietnam war veterans and abuse sufferers. It is suggested that bilateral stimulation aids the processing of traumatic memories. Non-TFCBT interventions such as SIT operate by teaching the individuals techniques to minimise and control their anxiety. In terms of other psychological therapies considered by this review, psychodynamic psychotherapy places emphasis on the unconscious mind, aiming to resolve inner conflict arising from the traumatic event. Person-centred therapy/supportive counselling allows the individual to talk through problems and resolve difficulties with minimal guidance and direction from the therapist. The therapist is accepting and non-judgemental. This style encourages the individual to feel comfortable in the expression of feelings, facilitating positive change. Unlike trauma-focused therapies, person-centred/supportive counselling does not encourage exploration of the trauma memory.

For a summary of psychological models of PTSD providing the rationale for many of the treatment approaches considered here, see [Brewin 2003](#).

Why it is important to do this review

It is apparent that PTSD causes clinically significant suffering and that developing effective interventions is important. Earlier versions of this review and other meta-analyses have found psychological therapies to be effective (e.g. [Bradley 2005](#)), with trauma-focused treatments being more effective than non-trauma-focused treatments ([Bisson 2007a](#)). This is an update of a Cochrane review first published in 2005 and updated in 2007, bringing together current evidence concerning the psychological treatment of chronic PTSD in adults. Other Cochrane Collaboration reviews have considered single-session psychological 'debriefing' to prevent PTSD ([Rose 2002](#)), multiple-session early psychological interventions for the prevention of PTSD ([Roberts 2009](#)), early psychological therapies to treat acute traumatic stress symptoms ([Roberts 2010](#)), pharmacological treatments ([Stein 2006](#)), combined pharmacotherapy and psychological therapies for

PTSD ([Hetrick 2010](#)), and psychological therapies for the treatment of PTSD in children and adolescents ([Gillies 2012](#)).

OBJECTIVES

To assess the effects of psychological therapies for the treatment of adults with chronic post-traumatic stress disorder (PTSD).

METHODS

Criteria for considering studies for this review

Types of studies

We include randomised controlled trials (RCTs) of psychological therapies for chronic PTSD in adults. Cluster-RCTs and cross-over trials were considered eligible for inclusion. We did not use sample size, language or publication status to determine whether or not a study was included.

Types of participants

Age

This review considered studies of adults only (aged 18 or over).

Diagnosis

Any individual suffering from chronic traumatic stress symptoms, i.e. with a duration of three months or more. At least 70% of participants were required to be diagnosed as suffering from PTSD according to DSM-III ([APA 1980](#)), DSM-III-R ([APA 1987](#)), DSM-IV ([APA 2000](#)), ICD-9 ([WHO 1979](#)) or ICD-10 ([WHO 1992](#)) criteria, by means of a structured interview or diagnosis by a clinician. There was no restriction on the basis of severity of PTSD symptoms or the type of traumatic event.

Co-morbidities

There was no restriction on the basis of comorbidity, although we required that PTSD be the primary diagnosis.

Setting

There was no restriction on the basis of study setting.

Types of interventions

This review considered any psychological therapy designed to reduce symptoms of chronic PTSD. Group interventions were considered separately from those delivered on an individual basis. Psychological therapy provided in a group format is clinically distinct from its individually-delivered counterparts, not least due to the reduced therapist 'dose' associated with group therapy.

Experimental interventions

1. Individual trauma-focused cognitive behavioural therapy (TFCBT): any psychological therapy that predominantly used trauma-focused cognitive, behavioural or cognitive-behavioural techniques. This category included exposure therapy. Examples of therapies within this category are cognitive therapy ([Ehlers 2005](#)), cognitive processing therapy ([Resick 1992](#)) and prolonged exposure ([Foa 2000](#)).
2. Eye movement desensitisation and reprocessing ([Shapiro 1989b](#)).

3. Non-trauma-focused CBT: any psychological therapy that predominantly used non-trauma-focused cognitive, behavioural or cognitive-behavioural techniques, for example stress inoculation training (SIT) ([Meichenbaum 1988](#)).
4. Group TFCBT: any approach delivered in a group setting that predominantly used trauma-focused cognitive, behavioural or cognitive-behavioural techniques.
5. Group non-TFCBT: any approach delivered in a group that predominantly used non-trauma-focused cognitive, behavioural or cognitive-behavioural techniques.
6. Other psychological therapy: any psychological therapy that would not be considered cognitive, behavioural or cognitive-behavioural techniques. This category comprised non-directive/supportive/person-centred counselling ([Rogers 1961](#)), hypnotherapy, psychodynamic therapy ([Brom 1989](#)) and present-centred treatment.

Comparator interventions

1. Waitlist, treatment as usual, symptom monitoring, repeated assessment or other minimal attention control group;
2. An alternative psychological treatment.

Types of outcome measures

Primary outcomes

1. Reduction in the severity of PTSD symptoms using a standardised measure (i.e. a test that is administered and scored in a consistent way) rated by a clinician (e.g. the Clinician Administered PTSD Symptom Scale ([Blake 1995](#))).
2. Drop-out rates.

Secondary outcomes

1. Severity of self-reported traumatic stress symptoms using a standardised measure (e.g. the Impact of Event Scale ([Horowitz 1979](#))).
2. Severity of depressive symptoms (e.g. the Beck Depression Inventory ([Beck 1961](#))).
3. Severity of anxiety symptoms using scales (e.g. the Spielberger State Trait Anxiety Inventory ([Spielberger 1973](#))).
4. PTSD diagnosis after treatment.
5. Any adverse effects, e.g. increased PTSD symptoms.

We produced hierarchies of the standardised measures, based on their frequency of use within the included studies. Where a trial reported data from two or more measures of the same outcome, we used only data from the measure ranked highest.

Timing of outcome assessment

We conducted separate pair-wise meta-analyses of follow-up data at one to four months, five to eight months, nine months to one year, and over one year.

Search methods for identification of studies

Electronic searches

The Cochrane, Depression, Anxiety and Neurosis Group's Specialised Register (CCDANCTR)

The Cochrane Depression, Anxiety and Neurosis Group (CCDAN) maintain two clinical trials registers at their editorial base in

Bristol, UK: a references register and a studies-based register. The CCDANCTR-References Register contains over 33,000 reports of randomised controlled trials in depression, anxiety and neurosis. Approximately 65% of these references have been tagged to individual, coded trials. The coded trials are held in the CCDANCTR-Studies Register and records are linked between the two registers through the use of unique Study ID tags. Coding of trials is based on the EU-Psi coding manual. Please contact the CCDAN Trials Search Co-ordinator for further details. Reports of trials for inclusion in the Group's registers are collated from routine (weekly), generic searches of OVID MEDLINE (1950-), EMBASE (1974-) and PsycINFO (1967-); quarterly searches of the Cochrane Central Register of Controlled Trials (CENTRAL) and review-specific searches of additional databases. Reports of trials are also sourced from international trials registers c/o the World Health Organization's trials portal (ICTRP), ClinicalTrials.gov, drug companies, the handsearching of key journals, conference proceedings and other (non-Cochrane) systematic reviews and meta-analyses. Details of [CCDAN's generic search strategies](#) can be found on the Group's website.

We searched the CCDANCTR (Studies and References Registers, all years to 12th April 2013) on condition alone, using the following terms:

(PTSD or posttrauma* or post-trauma* or "post trauma*" or (combat and disorder*))

Searching other resources

Grey literature

We searched abstracts from meetings of the European and International Societies of Traumatic Stress Studies. We also searched websites and discussion fora related to PTSD.

Handsearching

We handsearched the Journal of Traumatic Stress and the ISTSS Treatment Guidelines (Foa 2000; Foa 2009) for relevant articles.

Reference lists

We scrutinised the reference lists of included studies for additional studies meeting the inclusion criteria.

Correspondence

The main correspondence was with the UK NICE guidelines development group who kindly shared the results of their searches and communications (see [Acknowledgements](#)).

Data collection and analysis

Selection of studies

Two review authors independently read abstracts of all potential trials identified through the search strategy. If we felt an abstract represented a possible RCT, each review author independently read the full report to determine if the trial met the inclusion criteria. Any differences prompted re-evaluation of the study, and we discussed disagreements with a third review author to reach a consensus.

Data extraction and management

We extracted data from published reports and entered them into Review Manager 5 Software ([RevMan 5](#)). We contacted authors to obtain missing information. Extracted data included demographic details of participants, details of the traumatic event, the randomisation process, the therapy used, and outcome data.

Main comparisons

1. Individual TFCBT versus waitlist/usual care
2. Individual TFCBT versus non-TFCBT
3. Individual TFCBT versus other therapies
4. EMDR versus waitlist/usual care
5. EMDR versus individual TFCBT
6. EMDR versus non-TFCBT
7. EMDR versus other therapies
8. Non-TFCBT versus waitlist/usual care
9. Non-TFCBT versus other therapy
10. Group TFCBT versus waitlist/usual care
11. Group TFCBT versus group non-TFCBT
12. Other therapies versus waitlist/usual care
13. Group non-TFCBT versus waitlist/usual care
14. Individual TFCBT versus group TFCBT
15. Individual TFCBT versus group non-TFCBT
16. EMDR versus group TFCBT
17. EMDR versus group non-TFCBT
18. Individual non-TFCBT versus group TFCBT
19. Individual non-TFCBT versus group non-TFCBT

Assessment of risk of bias in included studies

We assessed all included studies for risk of bias, using the standard approach described in the *Cochrane Handbook for Systematic Review of Interventions* ([Higgins 2011](#)). This considered (1) sequence allocation for randomisation; (2) allocation concealment; (3) blinding of personnel and assessors; (4) incomplete outcome data; (5) selective reporting; and (6) any other notable risks of bias. Each was judged to pose a 'high', 'low' or 'unclear' risk of bias. Two review authors conducted the assessments, discussing any disagreements with a third review author to reach a consensus.

1. Sequence allocation randomisation

Randomisation was judged as posing a 'low' risk of bias if each participant had an equal chance of being randomised to a group. Low-risk methods included referring to a random number table, use of a computerised random number generator, shuffling sealed envelopes or throwing a dice. Methods judged as posing a 'high' risk of bias included use of a sequence generated by e.g. date of birth, clinic number, date of admission to the study, or allocation by availability of the intervention. When insufficient information was given to permit judgement of high or low risk of bias, we describe the study as being at an 'unclear' risk of bias attributable to sequence allocation.

2. Allocation concealment

Concealment of intervention allocation was said to be at 'low' risk when there was no chance of the investigator foreseeing a participant's assignment. Methods judged as posing a low risk of bias included central allocation (e.g. by telephone or the internet) or sequentially numbered opaque sealed envelopes. High-risk methods included alternation or rotation of assignment or using an open random allocation schedule (e.g. a list of random numbers). When insufficient information was reported to permit judgement of high or low risk, we describe the study as being at an 'unclear' risk of bias attributable to allocation concealment.

3. Blinding of personnel and assessors

It is not possible to blind either the participants or those administering psychological interventions. However, outcome assessors can be blinded. Those studies which blinded assessors were deemed to be at a low risk of bias, those which did not were judged as being at a high risk of bias. When insufficient information was reported to permit judgement of high or low risk, we describe the study as being at an 'unclear' risk of bias attributable to blinding.

4. Incomplete outcome data

We judged incomplete data to have been handled appropriately when reported completely, including attrition rates and exclusions, with consideration of the issue in terms of analysing the data. Low risk of bias was associated with no missing outcome data, or the use of data imputed using appropriate methods. Methods judged as posing a high risk of bias included analyses that considered only the data of treatment-completers, or potentially inappropriate application of simple imputation. When insufficient information was reported to permit judgement of high or low risk, we describe the study as being at an 'unclear' risk of bias attributable to incomplete data.

5. Selective reporting

We judged a study to be at a low risk of bias if a protocol was available and all prespecified outcomes were reported. If there was no available protocol, the study was assigned a low risk in this domain if it was clear that the published reports included all expected outcomes, including those prespecified. When insufficient information was reported to permit judgement of high or low risk, we describe the study as being at an 'unclear' risk of bias attributable to selective reporting.

6. Other notable risks of bias

We noted any other potential threats to validity and judged them to be at a high or low risk of bias. We describe them as being at 'unclear' risk of bias when there was insufficient information to assess additional risk of bias.

Measures of treatment effect

Continuous data

We analysed continuous outcomes as standardised mean differences (SMDs) to allow ease of comparison across studies. All outcomes are presented using 95% confidence intervals (CIs).

Dichotomous data

We analysed categorical outcomes as risk ratios (RRs), these being more widely used in medical practice than odds ratios. All outcomes are presented using 95% confidence intervals.

Unit of analysis issues

Cross-over trials

We included only outcome data from the first randomisation period when a study adopted a cross-over design.

Studies with multiple treatment groups

If the trial had three (or more) arms, we undertook pair-wise meta-analysis with each arm, depending upon the nature of the intervention in each arm and the relevance to the review objectives. We avoided multiple comparisons as far as possible, to limit the risk of false positive results. When a study had three or more arms that were relevant to the review we considered the appropriateness of combining data from two arms if therapies were sufficiently similar or of using data from the arms of the trial which fit closest to the review objective. Decisions followed guidance provided by the *Cochrane Handbook* (Higgins 2011).

Cluster-randomised trials

We had planned to include cluster-RCTs, although none was identified by the searches to date. In future updates of the review, the methodology for dealing with these types of studies will follow that outlined by the *Cochrane Handbook* (Higgins 2011). We will adjust sample sizes using an estimate of the intracluster or intraclass correlation coefficient (ICC), which describes the 'similarity' of individuals within the same cluster. We will derive this from the trial if possible, or from another source, such as a similar study, or from a resource providing examples of ICCs.

Dealing with missing data

We contacted authors to obtain any data missing from the published report of included studies. We used intention-to-treat (ITT) data where possible, but used data from completers analyses when ITT data were not available.

Assessment of heterogeneity

We initially assessed studies included within each comparison for clinical heterogeneity in terms of variability in the experimental and control interventions, participants and settings, and outcomes. To further assess heterogeneity, we used both the I^2 statistic (Higgins 2003) and the Chi^2 test of heterogeneity, as well as visual inspection of the forest plots.

Assessment of reporting biases

When sufficient studies were available, we constructed funnel plots and scrutinised them for signs of asymmetry. Since reporting bias is just one possible reason for observed asymmetry, we also considered alternative explanations.

Data synthesis

We pooled data from more than one study using a fixed-effect meta-analysis, except where heterogeneity was present, in which case we used a random-effects model.

Subgroup analysis and investigation of heterogeneity

We performed clinical heterogeneity subgroup analyses (when sufficient data were available) as follows:

1. Type of traumatic event (combat-related trauma versus rape and sexual assault versus other civilian trauma)
2. Participant characteristics (men only versus women only)

Sensitivity analysis

We conducted sensitivity analyses to assess the effect of high or unclear risk of bias in any of the following domains:

1. Sequence generation
2. Allocation concealment
3. Blinding of outcome assessment

These analyses were performed for comparisons including 10 or more studies.

RESULTS

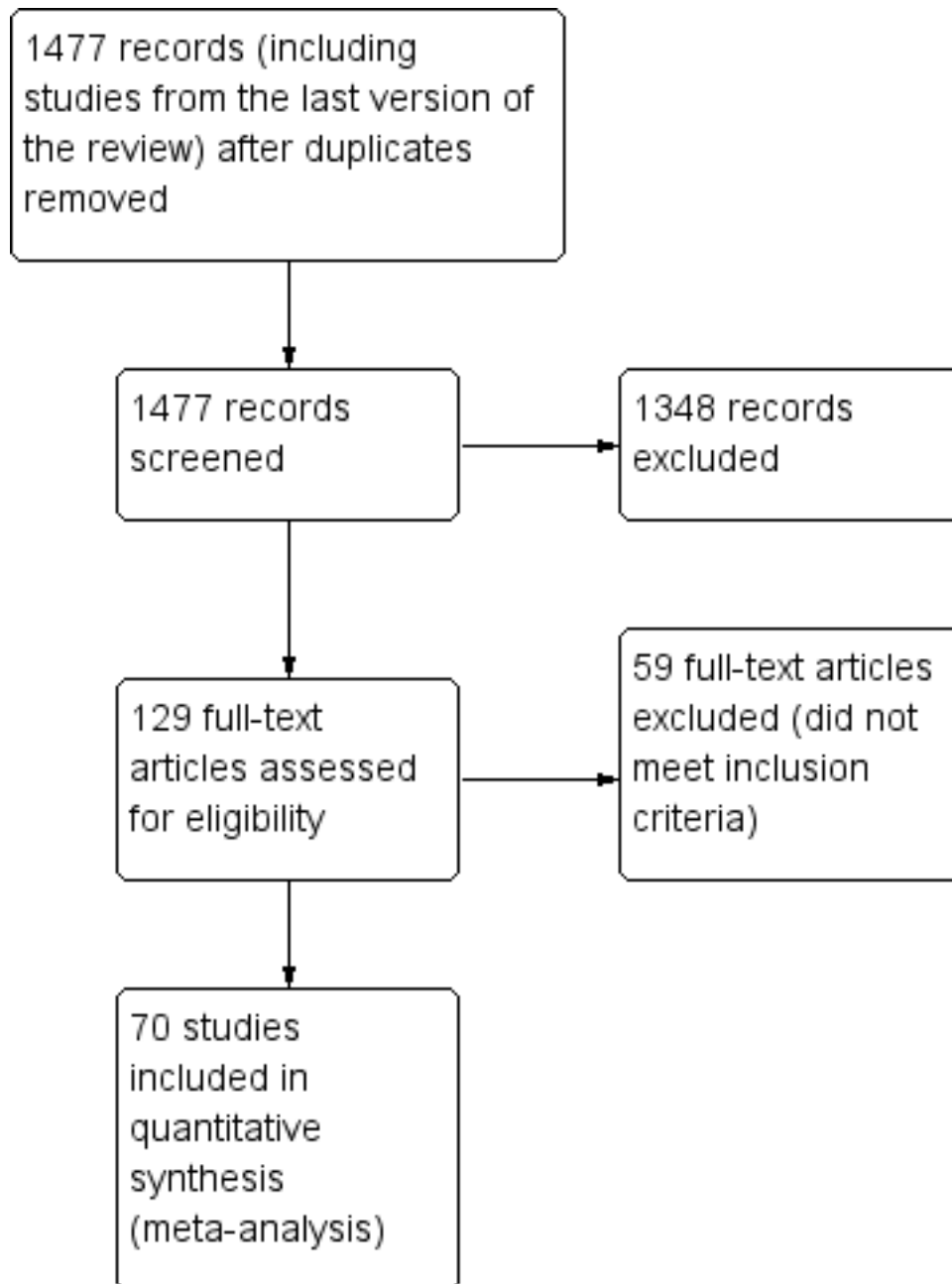
Description of studies

See [Characteristics of included studies](#) and [Characteristics of excluded studies](#).

Results of the search

The search yielded 1477 articles for consideration. We reviewed abstracts and obtained full-text copies for 129 potentially relevant studies. Seventy RCTs (79 comparisons) met the inclusion criteria for the review. [Figure 1](#) presents a flow diagram for study selection.

Figure 1. Study flow diagram.



Included studies

Design

All included studies were RCTs.

Sample sizes

The number of participants randomised in the trials ranged from 9 (Ready 2010) to 360 (Schnurr 2003). Eleven studies included sample sizes of over 100: Brom 1989 (n = 112); Cloitre 2010 (n = 104); Foa 2005 (n = 171); Krakow 2000 (n = 169); Krakow 2001 (n = 114); Mueser 2008 (n = 108); Nijdam 2012 (n = 140); Power 2002 (n = 105); Resick 2002 (n = 121); Schnurr 2003 (n = 360); Schnurr 2007 (n = 284).

Settings

USA (33 studies), UK (6 studies), Australia (7 studies), Netherlands (4 studies), Hawaii (3 studies), Germany (3 studies), Turkey (2 studies), Sweden (2 studies), Uganda (2 studies), Japan (1 study), Romania (1 study), Thailand (1 study), Canada (1 study), Portugal (1 study), Cambodia (1 study), China (1 study), Spain (1 study).

Participants

The study populations were varied and often not directly comparable (i.e. there was significant clinical heterogeneity). Studies included individuals traumatised by combat (13 studies), sexual assault (13 studies), war/persecution (6 studies), road traffic accidents (4 studies), earthquake (3 studies), childhood sexual abuse (3 studies), political detainment (1 study), terrorism (1 study), sexual or physical assault (1 study) and serving in the police force. The remainder of the studies included individuals traumatised by various traumatic events (24 studies).

Time post-trauma

All studies included individuals at least three months after the trauma. The range was large, from three months to over 40 years (Bichescu 2007). There was often a wide range of times since trauma included in individual studies.

Interventions

In order to present the results in a meaningful way, we decided to pool data that used a similar theoretical methodology. This was conducted a priori, resulting in the establishment of six groups: individual TFCBT, non-TFCBT, EMDR, group TFCBT, group non-TFCBT and other therapies (psychodynamic therapy, hypnotherapy, supportive counselling and present-centred counselling).

1. Trauma-focused cognitive behavioural therapy: Forty-nine studies considered individual TFCBT - Adenauer 2011; Asukai 2010; Basoglu 2005; Basoglu 2007; Bichescu 2007; Blanchard 2003; Brom 1989; Bryant 2003; Bryant 2011; Cloitre 2002; Cloitre 2010; Cooper 1989; Devilly 1999; Duffy 2007; Dunne 2012; Echeburua 1997; Ehlers 2005; Fecteau 1999; Feske 2008; Foa 1991; Foa 1999; Foa 2005; Forbes 2012; Galovski 2012; Gamito 2010; Gersons 2000; Hensel-Dittmann 2011; Hinton 2005; Ironson 2002; Keane 1989; Kubany 2003; Kubany 2004; Lindauer 2005; McDonagh 2005; Marks 1998; Monson 2006; Mueser 2008; Neuner 2004; Neuner 2008; Neuner 2010; Paunovic 2011; Peniston 1991; Power 2002; Ready 2010; Resick 2002; Schnurr 2007; Taylor 2003; Vaughan 1994; Nijdam 2012; Zang 2013.

2. Non-TFCBT: Eight studies considered non-TFCBT - Carlson 1998; Echeburua 1997; Foa 1991; Foa 1999; Kearney 2013; Marks 1998; Taylor 2003; Vaughan 1994.

3. Eye Movement Desensitisation and Reprocessing: Sixteen studies considered eye movement desensitisation and reprocessing - Carlson 1998; Devilly 1998; Devilly 1999; Hogberg 2007; Ironson 2002; Jensen 1994; Lee 2002; Marcus 1997; Power 2002; Rothbaum 1997; Rothbaum 2005; Scheck 1998; Taylor 2003; Vaughan 1994; Nijdam 2012.

4. Group TFCBT: Ten studies considered group TFCBT - Beck 2009; Chard 2005; Classen 2001; Hinton 2011; Hollifield 2007; Kearney 2013; Krakow 2000; Krakow 2001; Schnurr 2003; Zlotnick 1997.

5. Group non-TFCBT: One study considered group non-TFCBT: Schnurr 2003

6. Other therapies: Nine studies considered other therapies (supportive counselling, present-centred therapy, hypnotherapy and psychodynamic therapy) - Blanchard 2003; Brom 1989; Bryant 2003; Cloitre 2010; Feske 2008; Foa 1991; McDonagh 2005; Ready 2010; Schnurr 2007.

Comparisons

The included trials compared

- (i) Psychological therapy versus waitlist or usual care control (some studies allowed the control group to receive pharmacological treatments and/or psychological therapies that were not being considered specifically);
- (ii) Psychological therapy versus other psychological therapy.

We made the following specific comparisons:

1. Individual TFCBT versus waitlist/usual care: Adenauer 2011; Asukai 2010; Basoglu 2005; Basoglu 2007; Bichescu 2007; Blanchard 2003; Brom 1989; Cloitre 2002; Cooper 1989; Duffy 2007; Dunne 2012; Ehlers 2003; Ehlers 2005; Fecteau 1999; Foa 1991; Foa 1999; Foa 2005; Forbes 2012; Galovski 2012; Gamito 2010; Gersons 2000; Hinton 2005; Keane 1989; Kubany 2003; Kubany 2004; Lindauer 2005; McDonagh 2005; Monson 2006; Mueser 2008; Neuner 2010; Paunovic 2011; Peniston 1991; Power 2002; Resick 2002; Vaughan 1994; Wells 2012; Zang 2013.

2. Individual TFCBT versus non-TFCBT: Echeburua 1997; Foa 1991; Foa 1999; Hensel-Dittmann 2011; Marks 1998; Taylor 2003; Vaughan 1994.

3. Individual TFCBT versus other therapies: Blanchard 2003; Brom 1989; Bryant 2003; Bryant 2011; Cloitre 2010; Feske 2008; Foa 1991; McDonagh 2005; Neuner 2004; Ready 2010; Schnurr 2007.

4. EMDR versus waitlist/usual care: Carlson 1998; Devilly 1998; Hogberg 2007; Jensen 1994; Power 2002; Rothbaum 1997; Rothbaum 2005; Vaughan 1994.

5. EMDR versus individual TFCBT: Devilly 1999; Ironson 2002; Lee 2002; Nijdam 2012; Power 2002; Rothbaum 2005; Taylor 2003; Vaughan 1994.

6. EMDR versus non-TFCBT: Carlson 1998; Taylor 2003; Vaughan 1994.

7. EMDR versus other therapy: Marcus 1997; Scheck 1998.

- 8. Individual non-TFCBT versus waitlist/usual care: Carlson 1998; Foa 1991; Foa 1999; Vaughan 1994; Wells 2012.
- 9. Non-TFCBT versus other therapy: Foa 1991.
- 10. Group TFCBT versus waitlist/usual care: Beck 2009; Chard 2005; Hinton 2011; Hollifield 2007; Krakow 2001, Krakow 2000, Zlotnick 1997.
- 11. Group TFCBT versus group non-TFCBT: Schnurr 2003.
- 12. Other therapies versus waitlist/usual care: Blanchard 2003; Brom 1989; Foa 1991; McDonagh 2005.
- 13. Group non-TFCBT versus waitlist/usual care: no studies
- 14. Individual TFCBT versus group TFCBT: no studies
- 15. Individual TFCBT versus group non-TFCBT: no studies
- 16. EMDR versus group TFCBT: no studies
- 17. EMDR versus group non-TFCBT: no studies
- 18. Individual non-TFCBT versus group TFCBT: no studies
- 19. Individual non-TFCBT versus group non-TFCBT: no studies

Outcomes

Primary outcomes were reduction in severity of clinician-rated PTSD symptoms and drop-out rate. Secondary outcome measures were severity of self-reported PTSD symptom, severity of depressive symptoms, severity of anxiety symptoms, PTSD diagnosis after treatment and adverse side effects (such as increased PTSD symptoms).

Excluded studies

We excluded studies if they did not satisfy the inclusion criteria. Some studies made no formal diagnosis of PTSD (Abbasnejad 2007; Classen 2001; Classen 2010; Cole 2007; Edmond 1999; Edmond 2004; Falsetti 2001; Ginzberg 2009; Hiari 2005; Knaevelsrud 2007; Lange 2001; Lange 2003; Litz 2007; Price 2007; Ryan 2005; Shapiro 1989a; Sloan 2004; Sloan 2005), and in other studies fewer than 70% of participants met full diagnostic criteria for the disorder (Davis 2007; Difede 2007a; DuHamel 2010; Maercker 2006; Rabe 2008; Van Emmerik 2008; Wilson 1995). Other reasons for excluding specific studies were a duration of less than three months following trauma (Echeburua 1996; some participants within, Foa 2006; Spence 2011), treatment did not target traumatic stress symptoms (Dunn 2007; Chemtob 1997), comparison of two psychological therapies in the same category (Arntz 2007; Mithoefer 2011; Paunovic 2001; Tarrier 1999; Watson 1997), the intervention was not a psychological therapy (Gidron 1996), including individuals under 18 years of age (Jaberghaderi 2004; Najavits 2006; Schaal 2009), comparison of two non-TFCBT therapies, and comparison with pharmacotherapy (Frommberger 2004; Rothbaum 2006).

See Characteristics of excluded studies table for further details.

Studies awaiting classification

Krupnick 2008 is awaiting classification as we need to obtain further information.

Risk of bias in included studies

A graphical representation of the overall risk of bias for each domain and each study is available in Figure 2 and Figure 3 respectively.

Figure 2. Risk of bias graph: review authors' judgements about each risk of bias item presented as percentages across all included studies.

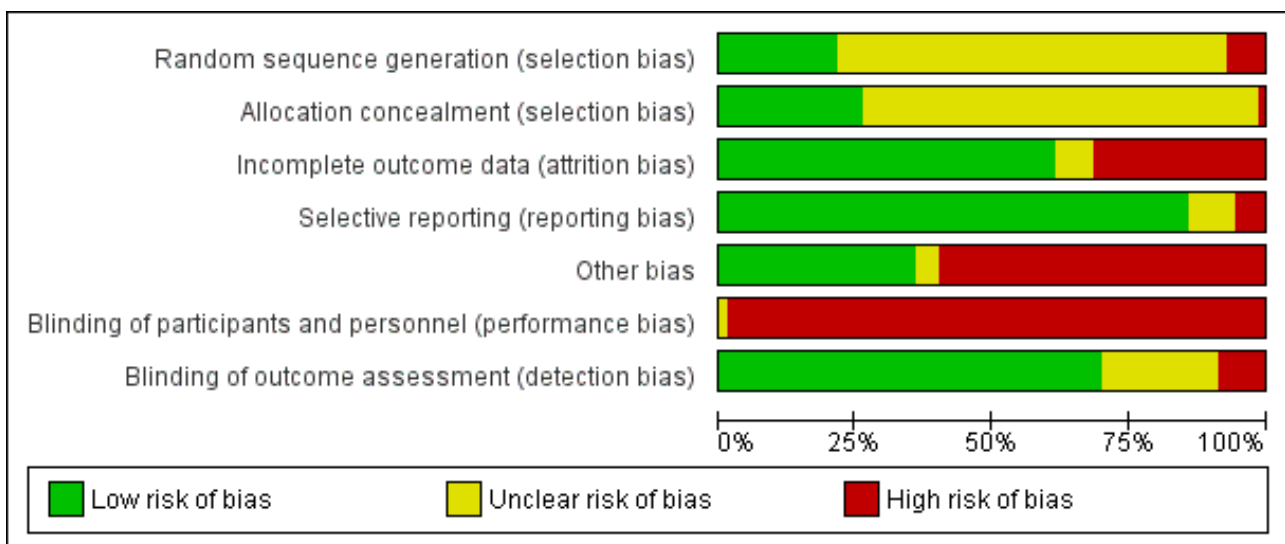


Figure 3. Risk of bias summary: review authors' judgements about each risk of bias item for each included study.

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)
Adenauer 2011	+	?	-	-	-	-	+
Asukai 2010	+	?	+	+	+	-	+
Basoglu 2005	+	+	-	+	+	-	+
Basoglu 2007	+	+	-	+	-	-	-
Beck 2009	?	?	-	+	+	-	+
Bichescu 2007	-	?	+	+	-	-	+
Blanchard 2003	-	?	+	+	+	-	+
Brom 1989	?	?	-	?	-	-	?
Bryant 2003	+	?	+	+	+	-	+
Bryant 2011	+	+	+	+	-	-	+
Carlson 1998	?	?	-	+	?	-	-
Chard 2005	?	?	+	?	+	-	+
Cloitre 2002	?	?	+	-	+	-	+
Cloitre 2010	?	+	+	+	+	-	+
Cooper 1989	-	-	-	+	-	-	?
Deville 1998	?	?	-	+	+	-	+
Deville 1999	-	?	-	+	-	-	?
Duffy 2007	?	+	+	+	-	-	?
Dunne 2012	?	?	+	+	-	-	?
Echeburua 1997	?	?	+	+	-	-	?

Figure 3. (Continued)

Echeburua 1997	?	?	+	+	-	-	?
Ehlers 2003	?	+	-	+	-	-	+
Ehlers 2005	?	?	+	+	-	-	+
Fecteau 1999	+	?	-	+	-	-	?
Feske 2008	?	?	-	+	-	-	?
Foa 1991	?	?	-	+	+	-	+
Foa 1999	?	?	+	+	-	-	+
Foa 2005	?	+	+	+	+	-	+
Forbes 2012	?	+	+	+	-	-	?
Galovski 2012	?	?	+	+	+	-	+
Gamito 2010	?	?	?	-	-	-	?
Gersons 2000	?	?	+	+	-	-	+
Hensel-Dittmann 2011	+	+	+	+	+	-	+
Hinton 2005	?	?	+	+	+	-	+
Hinton 2011	?	?	+	+	-	-	?
Hogberg 2007	+	?	-	+	-	-	+
Hollifield 2007	+	+	+	+	-	-	+
Ironson 2002	?	?	+	+	-	-	-
Jensen 1994	?	?	-	+	-	-	?
Keane 1989	?	?	?	?	-	-	-
Kearney 2013	?	?	+	+	-	-	?
Krakow 2000	?	?	-	-	-	-	?
Krakow 2001	?	+	+	+	-	-	+
Kubany 2003	?	?	+	?	-	-	+
Kubany 2004	?	?	+	+	-	-	+
Lee 2002	?	?	+	+	-	-	+
Lindauer 2005	+	+	+	+	-	-	+
Marcus 1997	?	?	?	+	-	-	-
Marks 1998	?	?	+	+	+	-	+
McDonagh 2005	?	?	+	+	+	-	+
Monson 2006	?	+	+	+	+	-	+

Figure 3. (Continued)

Monson 2006	?	+	+	+	+	-	+
Mueser 2008	?	+	+	+	-	-	+
Neuner 2004	+	?	+	+	-	?	+
Neuner 2008	?	?	+	+	+	-	+
Neuner 2010	?	?	+	+	-	-	+
Nijdam 2012	?	+	+	+	+	-	+
Paunovic 2011	?	?	-	+	-	-	-
Peniston 1991	?	?	?	+	?	-	+
Power 2002	+	+	-	+	+	-	+
Ready 2010	?	?	?	+	-	-	+
Resick 2002	?	?	+	+	-	-	+
Rothbaum 1997	?	?	-	+	?	-	+
Rothbaum 2005	?	?	-	+	+	-	+
Scheck 1998	+	+	-	+	-	-	?
Schnurr 2003	-	?	+	?	+	-	+
Schnurr 2007	?	?	+	+	+	-	+
Taylor 2003	?	?	+	?	+	-	+
Vaughan 1994	?	?	+	+	+	-	+
Wells 2012	+	+	+	+	-	-	+
Zang 2013	?	?	+	+	-	-	+
Zlotnick 1997	?	?	-	+	-	-	+

Allocation

Sequence allocation randomisation

Fifteen studies reported a method of allocation that we felt to be appropriate, and which we judged to be at low risk of bias (Adenauer 2011; Asukai 2010; Basoglu 2005; Basoglu 2007; Bryant 2003; Bryant 2011; Fecteau 1999; Hensel-Dittmann 2011; Hogberg 2007; Hollifield 2007; Lindauer 2005; Neuner 2004; Power 2002; Scheck 1998; Wells 2012). We judged the method of allocation to be at high risk of bias in six studies (Bichescu 2007; Blanchard 2003; Cooper 1989; Devilly 1999; Ehlers 2003; Schnurr 2003). The remainder of the studies reported insufficient information for us to make a judgement.

Allocation concealment

Many studies did not provide full details of the method of randomisation and we therefore judged concealment to be at unclear risk of bias in the majority. Fifteen studies reported adequate allocation concealment, representing a low risk of bias

(Basoglu 2005; Basoglu 2007; Bryant 2011; Cloitre 2010; Duffy 2007; Ehlers 2003; Foa 2005; Forbes 2012; Krakow 2001; Lindauer 2005; Monson 2006; Mueser 2008; Nijdam 2012; Power 2002; Scheck 1998). We judged one study to be at high risk in terms of failure to conceal allocation (Cooper 1989). None of the other studies reported any methods of concealing allocation and we judged them to be at unclear risk of bias in this domain.

Blinding

In common with all studies of psychological therapies a double-blind methodology is virtually impossible, as it is clear to the participant what treatment they are receiving. However, a well-designed study should ensure blinding of the assessor of outcome measures. In six of the included studies, the assessor was aware of the participant's allocation (Basoglu 2005; Carlson 1998; Ironson 2002; Keane 1989; Marcus 1997; Paunovic 2011). It was unclear whether or not the assessor was blind in 14 studies (Brom 1989; Cooper 1989; Duffy 2007; Dunne 2012; Echeburua 1997; Fecteau

1999; Feske 2008; Forbes 2012; Gamito 2010; Hinton 2011; Jensen 1994; Kearney 2013; Krakow 2000; Scheck 1998).

Incomplete outcome data

Loss to follow-up

Drop-out rates were high in many of the studies and reasons for attrition were generally poorly reported. We judged 21 studies to be at high risk of bias for incomplete outcome data (Adenauer 2011; Basoglu 2005; Basoglu 2007; Beck 2009; Brom 1989; Carlson 1998; Cooper 1989; Devilly 1998; Devilly 1999; Ehlers 2003; Fecteau 1999; Feske 2008; Foa 1991; Hogberg 2007; Jensen 1994; Krakow 2000; Paunovic 2011; Power 2002; Rothbaum 1997; Rothbaum 2005; Scheck 1998; Zlotnick 1997). It was unclear how missing data were handled in six studies (Gamito 2010; Keane 1989; Marcus 1997; Peniston 1991; Ready 2010). We judged the remainder to have dealt with drop-outs appropriately, i.e. at low risk of bias.

Selective reporting

It was difficult to draw any meaningful conclusions with regards to the issue of selective reporting. Very few of the included studies had published protocols available. It was therefore impossible to know whether prespecified outcome measures were adequately reported. The majority of studies adequately reported all outcomes outlined within the Methods section of the trial report.

Other potential sources of bias

A strength of the majority of the studies was having clear objectives, but sample sizes were often small and the follow-up period was limited. The treatments delivered were reasonably well-described and the majority of studies reported on the credentials and experience of therapists. A high proportion of the included studies made some assessment of treatment adherence. Most studies used well-validated outcome measures although there was considerable variation in the actual measures used. For practical and ethical reasons there were rarely follow-up data available from waitlist groups. We could not rule out potential researcher allegiance in many of the studies. A number of the included trials were of interventions that were evaluated by their originators.

Effects of interventions

See: **Summary of findings for the main comparison** Trauma-focused CBT/Exposure therapy compared with Waitlist/Usual Care for chronic post-traumatic stress disorder (PTSD) in adults; **Summary of findings 2** Trauma-focused CBT/Exposure therapy compared with non-TFCBT for chronic post-traumatic stress disorder (PTSD) in adults; **Summary of findings 3** Trauma-focused CBT/Exposure therapy compared with other therapies for chronic post-traumatic stress disorder (PTSD) in adults; **Summary of findings 4** EMDR compared with Waitlist/Usual Care for chronic post-traumatic stress disorder (PTSD) in adults; **Summary of findings 5** EMDR compared with Trauma-focused CBT for chronic post-traumatic stress disorder (PTSD) in adults; **Summary of findings 6** EMDR compared with non-TFCBT for chronic post-traumatic stress disorder (PTSD) in adults; **Summary of findings 7** EMDR compared with other therapies for chronic post-traumatic stress disorder (PTSD) in adults; **Summary of findings 8** Non-TFCBT compared with Waitlist/Usual Care for chronic post-traumatic stress disorder (PTSD) in adults; **Summary of findings 9** Non-TFCBT compared with other therapies for chronic post-traumatic stress disorder (PTSD) in adults; **Summary of findings 10**

Group TFCBT compared with Waitlist/Usual Care for chronic post-traumatic stress disorder (PTSD) in adults; **Summary of findings 11** Group TFCBT compared with Group non-TFCBT for chronic post-traumatic stress disorder (PTSD) in adults; **Summary of findings 12** Other therapies compared with Waitlist/Usual Care for chronic post-traumatic stress disorder (PTSD) in adults; **Summary of findings 13** Group non-TFCBT compared with Waitlist/Usual Care for chronic post-traumatic stress disorder (PTSD) in adults

The full results are contained in the Tables and are summarised below.

Comparison 1. Individual TFCBT/Exposure therapy versus waitlist/usual care

37 studies including 1830 participants contributed to this comparison.

Primary outcomes

1.1. Clinician-rated PTSD symptoms

Twenty-eight studies considered this outcome with a total of 1256 individuals (Analysis 1.1). There was heterogeneity between these trials ($\text{Chi}^2 = 237.95$, $P = 0.00001$; $I^2 = 89\%$) and we used a random-effects model to pool the data. The individual TFCBT group did better than the waitlist/usual care group immediately after treatment (standardised mean difference (SMD) -1.62; 95% confidence interval (CI) -2.03 to -1.21).

At 1- to 4-month follow-up four studies compared this outcome with 336 individuals (Analysis 1.2). There was heterogeneity between these trials ($\text{Chi}^2 = 52.30$; $P < 0.00001$; $I^2 = 94\%$). The individual TFCBT group did significantly better than the waitlist/usual care group (SMD -1.18; 95% CI -2.20 to -0.17).

At 5- to 8-month follow-up three studies compared this outcome with 192 individuals (Analysis 1.3). There was little heterogeneity between these trials ($\text{Chi}^2 = 0.68$; $P = 0.71$; $I^2 = 0\%$). The individual TFCBT group did better than the waitlist/usual care group (SMD -0.47; 95% CI -0.77 to -0.18).

At 9- to 12-month follow-up one study reported this outcome with 109 individuals (Analysis 1.4). The individual TFCBT group did significantly better than the waitlist/usual care group (SMD -0.78; 95% CI -1.18 to -0.39).

1.2. Drop-outs

Thirty-four studies with a total of 1776 individuals recorded whether individuals left the study early for any reason by group (Analysis 1.5). There was considerable clinical heterogeneity between these trials. The individual TFCBT group did significantly worse than the waitlist/usual care group (RR 1.64; 95% CI 1.30 to 2.06).

Secondary outcomes

1.3 Self-reported PTSD symptoms

Seventeen studies considered this outcome with a total of 686 individuals (Analysis 1.1.4). There was heterogeneity between these trials ($\text{Chi}^2 = 82.15$; $P < 0.00001$; $I^2 = 81\%$) and we used a random-effects model to pool the data. The individual TFCBT group

did better than the waitlist/usual care group immediately after treatment (SMD -1.60; 95% CI -2.02 to -1.18).

At 1- to 4-month follow-up two studies compared this outcome with 181 individuals (Analysis 1.6). There was marked heterogeneity between these trials ($\text{Chi}^2 = 40.04$; $P = 0.00001$; $I^2 = 98\%$). There were no significant differences between groups (SMD -3.03; 95% CI -6.51 to 0.45).

At 5- to 8-month follow-up two studies compared this outcome with 208 individuals (Analysis 1.7). The individual TFCBT group did better than the waitlist/usual care group (SMD -0.61; 95% CI -0.90 to -0.32).

At 9- to 12-month follow-up one study compared this outcome with 121 individuals (Analysis 1.8). The individual TFCBT group did better than the waitlist/usual care group (SMD -1.22; 95% CI -1.61 to -0.83).

1.4 Depression

Twenty-nine studies considered this outcome with a total of 1233 individuals (Analysis 1.9). There was heterogeneity between these trials ($\text{Chi}^2 = 174.84$, $P < 0.00001$; $I^2 = 84\%$) and we used a random-effects model to pool the data. The individual TFCBT group did better than the waitlist/usual care group immediately after treatment (SMD -1.31; 95% CI -1.65 to -0.98).

At 1- to 4-month follow-up seven studies compared this outcome with 413 individuals (Analysis 1.10). There was heterogeneity between these trials ($\text{Chi}^2 = 41.24$; $P < 0.00001$; $I^2 = 85\%$). The individual TFCBT group did better than the waitlist/usual care group (SMD -0.75; 95% CI -1.33 to -0.18).

At 5- to 8-month follow-up two studies compared this outcome with 150 individuals (Analysis 1.11). The individual TFCBT group did better than the waitlist/usual care group (SMD -0.50; 95% CI -0.82 to -0.17).

At 9- to 12-month follow-up one study compared this outcome with 108 individuals (Analysis 1.12). The individual TFCBT group did better than the waitlist/usual care group (SMD -0.60; 95% CI -0.99 to -0.21).

1.5 Anxiety

Eighteen studies considered this outcome with a total of 664 individuals (Analysis 1.13). There was heterogeneity between these trials ($\text{Chi}^2 = 27.43$; $P = 0.04$; $I^2 = 38\%$) and we used a random-effects model to pool the data. The individual TFCBT group did better than the waitlist/usual care group immediately after treatment (SMD -0.82; 95% CI -1.03 to -0.61).

At 1- to 4-month follow-up three studies compared this outcome with 189 individuals (Analysis 1.14). There was little heterogeneity between trials ($\text{Chi}^2 = 2.16$; $P = 0.34$; $I^2 = 7\%$). The TFCBT group did better than the waitlist/usual care group (SMD -0.32; 95% CI -0.60 to -0.03).

At 9- to 12-month follow-up one study compared this outcome with 108 individuals (Analysis 1.15). There was no difference between the two groups (SMD -0.33; 95% CI -0.71 to 0.05).

1.6 PTSD diagnosis after treatment

Nineteen studies with a total of 910 individuals reported this outcome (Analysis 1.18). There was significant heterogeneity between these trials ($\text{Chi}^2 = 101.56$; $P < 0.00001$; $I^2 = 82\%$) and we used a random-effects model to pool the data. The individual TFCBT group did better than the waitlist/usual care group (RR 0.51; 95% CI 0.41 to 0.64).

1.7 Adverse effects

No studies formally considered adverse effects.

Comparison 2. TFCBT versus non-TFCBT

Seven studies including 267 participants contributed to this comparison.

Primary outcomes

2.1 Clinician-rated PTSD symptoms

Seven studies considered this outcome with a total of 267 individuals (Analysis 2.1). There was evidence of heterogeneity between these trials ($\text{Chi}^2 = 11.25$; $P = 0.08$; $I^2 = 47\%$), and we used a random-effects model to pool the data. There was no difference between TFCBT and non-TFCBT in terms of clinician-rated PTSD symptoms immediately after treatment (SMD -0.27; 95% CI -0.63 to 0.10).

At 1- to 4-month follow-up five studies considered this outcome with a total of 127 individuals (Analysis 2.2). There was evidence of heterogeneity between these trials ($\text{Chi}^2 = 7.30$; $P = 0.12$; $I^2 = 45\%$), and we used a random-effects model to pool the data. The individual TFCBT group did better than the non-TFCBT group (SMD -0.51; 95% CI -1.00 to -0.01).

At 5- to 8-month follow-up two studies compared this outcome with 48 individuals (Analysis 2.3). There was evidence of heterogeneity between these trials ($\text{Chi}^2 = 3.32$; $P = 0.07$; $I^2 = 70\%$) and we used a random-effects model to pool the data. Based on these two trials, there was no difference between TFCBT and non-TFCBT in terms of clinician-rated PTSD symptoms at five to eight months (SMD -1.00; 95% CI -2.17 to 0.17).

At 9- to 12-month follow-up two studies compared this outcome with 48 individuals (Analysis 2.4). There was no evidence of heterogeneity between these trials ($\text{Chi}^2 = 0.08$; $P = 0.78$; $I^2 = 0\%$) and we used a random-effects model to pool the data. Based on these two trials, there was no difference between TFCBT and non-TFCBT in terms of clinician-rated PTSD symptoms at 9 to 12 months (SMD -12.93; 95% CI -18.72 to -7.14).

2.2 Drop-outs

Seven studies with a total of 312 individuals recorded whether individuals left the study early for any reason by group (Analysis 2.5). There was no difference between the TFCBT group and the non-TFCBT on this measure (RR 1.19; 95% CI 0.71 to 2.0).

Secondary outcomes

2.3 Self-reported PTSD symptoms

Three studies considered this outcome with a total of 127 individuals (Analysis 2.6). There was no evidence of significant heterogeneity between these trials. The individual TFCBT group did better than the non-TFCBT group (SMD -0.37; 95% CI -0.74 to 0.01).

At 1- to 4-month follow-up two studies considered this outcome with a total of 54 individuals (Analysis 2.7). There was no significant heterogeneity between these trials ($\text{Chi}^2 = 0.78$; $P = 0.38$; $I^2 = 0\%$). There was no difference between the TFCBT group and the non-TFCBT on this measure (SMD -0.44; 95% CI -0.99 to 0.10).

2.4 Depression

Six studies considered this outcome with a total of 189 individuals (Analysis 2.8). There was no evidence of heterogeneity between these trials ($\text{Chi}^2 = 4.23$; $P = 0.52$; $I^2 = 0\%$). There was no difference between the individual TFCBT group and the non-TFCBT group immediately after treatment (SMD -0.27; 95% CI -0.56 to 0.03).

At 1- to 4-month follow-up five studies considered this outcome with a total of 147 individuals (Analysis 2.9). There was no evidence of significant heterogeneity between these trials ($\text{Chi}^2 = 4.47$; $P = 0.35$; $I^2 = 11\%$). There was no difference between the individual TFCBT group and the non-TFCBT group (SMD -0.28; 95% CI -0.62 to 0.06).

At 5- to 8-month follow-up two studies compared this outcome with 48 individuals (Analysis 2.10). There was no evidence of significant heterogeneity between these trials ($\text{Chi}^2 = 0.26$; $P = 0.61$; $I^2 = 0\%$). The individual TFCBT group did better than the non-TFCBT group (SMD -0.71; 95% CI -1.30 to -0.12).

At 9- to 12-month follow-up one study compared this outcome with 20 individuals (Analysis 2.11). The individual TFCBT group did better than the non-TFCBT group (SMD -8.00; 95% CI -14.44 to -1.86).

2.5 Anxiety

Four studies considered this outcome with a total of 127 individuals (Analysis 2.12). There was no evidence of significant heterogeneity between these trials ($\text{Chi}^2 = 3.12$; $P = 0.37$; $I^2 = 4\%$). There was no difference between the individual TFCBT group and the non-TFCBT group (SMD -0.12; 95% CI -0.49 to 0.26).

At 1- to 4-month follow-up four studies considered this outcome with a total of 117 individuals (Analysis 2.13). There was evidence of heterogeneity between these trials ($\text{Chi}^2 = 5.56$; $P = 0.13$; $I^2 = 46\%$). There was no difference between the individual TFCBT group and the non-TFCBT group (SMD -0.24; 95% CI -0.79 to 0.30).

At 5- to 8-month follow-up one study compared this outcome with 20 individuals (Analysis 2.14). There was no difference between the individual TFCBT group and the non-TFCBT group (SMD -0.62; 95% CI -1.52 to 0.28).

At 9- to 12-month follow-up one study compared this outcome with 20 individuals (Analysis 2.15). There were no significant differences between groups (SMD -0.88; 95% CI -1.81 to 0.04).

2.6 PTSD diagnosis after treatment

Six studies with a total of 284 individuals reported this outcome (Analysis 2.16). There was no difference between the individual TFCBT group and the stress non-TFCBT group (RR 0.83; 95% CI 0.60 to 1.17), using a random-effects model due to moderate heterogeneity ($\text{Chi}^2 = 8.59$; $P = 0.13$; $I^2 = 42\%$).

2.7 Adverse effects

No studies formally considered adverse effects.

Comparison 3. TFCBT versus other therapies

Eleven studies including 762 participants contributed to this comparison.

Primary outcomes

3.1 Clinician rated PTSD symptoms

Ten studies considered this outcome with a total of 625 individuals (Analysis 3.1). There was evidence of heterogeneity between these trials ($\text{Chi}^2 = 29.33$; $P = 0.0006$; $I^2 = 69\%$) and we used a random-effects model to pool the data. The individual TFCBT group did better than the 'other therapies' group immediately after treatment (SMD -0.48; 95% CI -0.83 to -0.14).

At 1- to 4-month follow-up eight studies considered this outcome with a total of 548 individuals (Analysis 3.2). There was evidence of significant heterogeneity between these trials ($\text{Chi}^2 = 15.13$; $P = 0.03$; $I^2 = 54\%$). The individual TFCBT group did better than the 'other therapies' group (SMD -0.34; 95% CI -0.64 to -0.04).

At 5- to 8-month follow-up four studies compared this outcome with 434 individuals (Analysis 3.3). There was evidence of significant heterogeneity between these trials ($\text{Chi}^2 = 19.43$; $P = 0.0002$; $I^2 = 85\%$), and we used a random-effects model to pool the data. There were no differences between groups (SMD -0.58; 95% CI -1.20 to 0.04).

At 9- to 12-month follow-up two studies compared this outcome with 90 individuals (Analysis 3.4). There was significant heterogeneity between these trials ($\text{Chi}^2 = 1.75$; $P = 0.19$; $I^2 = 43\%$), and we used a random-effects model to pool the data. The individual TFCBT group did better than the 'other therapies' group (SMD -0.76; 95% CI -1.35 to -0.17).

3.2 Drop-outs

Eleven studies with a total of 762 individuals reported this outcome (Analysis 3.5). There was little heterogeneity between these trials. 'Other therapies' did better than TFCBT (RR 1.39; 95% CI 1.01 to 1.92).

Secondary outcomes

3.3 Self-reported PTSD symptoms

Six studies considered this outcome with a total of 574 individuals (Analysis 3.6). There was evidence of heterogeneity between these trials ($\text{Chi}^2 = 39.39$; $P < 0.00001$; $I^2 = 87\%$) and we used a random-effects model to pool the data. The individual TFCBT group did better than the 'other therapies' group immediately after treatment (SMD -0.60; 95% CI -1.15 to -0.06).

At 1- to 4-month follow-up five studies considered this outcome with a total of 526 individuals (Analysis 3.7). There was no evidence of heterogeneity between these trials. The individual TFCBT group did better than the 'other therapies' group (SMD -0.29; 95% CI -0.47 to -0.12).

At 5- to 8-month follow-up three studies compared this outcome with 338 individuals (Analysis 3.8). There was significant heterogeneity between these trials ($\text{Chi}^2 = 16.14$; $P = 0.0003$; $I^2 = 88\%$) and we used a random-effects model to pool the data. There

were no differences between groups (SMD -0.90; 95% CI -2.05 to 0.25).

At 9- to 12-month follow-up two studies compared this outcome with 90 individuals ([Analysis 3.9](#)). There was no evidence of heterogeneity between these trials ($\text{Chi}^2 = 0.26$; $P = 0.61$; $I^2 = 0\%$). Based on these two trials, there was no difference between TFCBT and 'other therapies' in terms of clinician-rated PTSD symptoms (SMD -2.66; 95% CI -5.71 to 0.38).

3.4 Depression

Nine studies considered this outcome with a total of 570 individuals ([Analysis 3.10](#)). There was evidence of heterogeneity between these trials ($\text{Chi}^2 = 13.34$; $P = 0.10$; $I^2 = 40\%$), and we used a random-effects model to pool the data. The individual TFCBT group did better than the 'other therapies' group (SMD -0.37; 95% CI -0.63 to -0.11).

At 1- to 4-month follow-up seven studies considered this outcome with a total of 510 individuals ([Analysis 3.11](#)). There was heterogeneity between these trials ($\text{Chi}^2 = 13.28$; $P = 0.04$; $I^2 = 55\%$). There was no difference between the groups (SMD -0.29; 95% CI -0.62 to 0.03).

At 5- to 8-month follow-up five studies considered this outcome with a total of 443 individuals ([Analysis 3.12](#)). There was heterogeneity between these trials ($\text{Chi}^2 = 12.31$; $P = 0.02$; $I^2 = 68\%$), and we used a random-effects model to pool the data. There were no differences between groups (SMD -0.43; 95% CI -0.87 to 0.01).

At 9- to 12-month follow-up

3.5 Anxiety

Seven studies considered this outcome with a total of 539 individuals ([Analysis 3.14](#)). There was heterogeneity between these trials ($\text{Chi}^2 = 14.75$; $P = 0.02$; $I^2 = 59\%$), and we used a random-effects model to pool the data. The individual TFCBT group did better than the 'other therapies' group (SMD -0.45; 95% CI -0.77 to -0.12).

At 1- to 4-month follow-up five studies considered this outcome with a total of 454 individuals ([Analysis 3.15](#)). There was heterogeneity between these trials ($\text{Chi}^2 = 8.54$; $P = 0.07$; $I^2 = 53\%$), and we used a random-effects model to pool the data. There was no difference between the individual TFCBT and the 'other therapies' groups (SMD -0.33; 95% CI -0.68 to 0.02).

Two trials reported this outcome at 5- to 8-month follow-up with a total of 329 individuals ([Analysis 3.16](#)). There was heterogeneity between these trials ($\text{Chi}^2 = 10.28$; $P = 0.001$; $I^2 = 90\%$), and we used a random-effects model to pool the data. There was no difference between groups (SMD -0.56; 95% CI -1.69 to 0.58).

3.6 PTSD diagnosis after treatment

Seven studies with a total of 358 individuals reported this outcome ([Analysis 3.17](#)). There was evidence of significant heterogeneity between these trials ($\text{Chi}^2 = 9.54$; $P = 0.15$; $I^2 = 37\%$), and we used a random-effects model to pool the data. The individual TFCBT group did better than the 'other therapies' group (RR 0.75; 95% CI 0.59 to 0.96).

3.7 Adverse effects

No studies formally considered adverse effects.

Comparison 4. EMDR versus waitlist/usual care

Eight studies including 301 participants contributed to this comparison.

Primary outcomes

4.1 Clinician-rated PTSD symptoms

Six studies considered this outcome with a total of 183 individuals ([Analysis 4.1](#)). There was evidence of heterogeneity between these trials ($\text{Chi}^2 = 31.52$; $P = 0.00001$; $I^2 = 84\%$) and we used a random-effects model to pool the data. The EMDR group did better than the waitlist/usual care group immediately after treatment (SMD -1.17; 95% CI -2.04 to -0.30).

4.2 Drop-outs

Seven studies with a total of 227 individuals recorded whether individuals left the study early for any reason by group ([Analysis 4.2](#)). There was no evidence of heterogeneity between these trials. There was no difference between the EMDR and waitlist/usual care groups (RR 1.05; 95% CI 0.62 to 1.79).

Secondary outcomes

4.3 Self-reported PTSD symptoms

Six studies considered this outcome with a total of 159 individuals ([Analysis 4.3](#)). There was heterogeneity between these trials ($\text{Chi}^2 = 30.66$; $P < 0.00001$; $I^2 = 84\%$) and we used a random-effects model to pool the data. There was no difference between studies (SMD -0.80; 95% CI -1.68 to 0.07).

4.4 Depression

Seven studies considered this outcome with a total of 226 individuals ([Analysis 4.4](#)). There was heterogeneity between these trials ($\text{Chi}^2 = 9.61$; $P = 0.14$; $I^2 = 38\%$), and we used a random-effects model to pool the data. The EMDR group did better than the control group (SMD -1.15; 95% CI -1.52 to -0.78).

4.5 Anxiety

Six studies considered this outcome with a total of 160 individuals ([Analysis 4.5](#)). There was no evidence of significant heterogeneity between these trials ($\text{Chi}^2 = 3.20$; $P = 0.67$; $I^2 = 0\%$). The EMDR group did better than the control group (SMD -1.02; 95% CI -1.36 to -0.69).

4.7 PTSD diagnosis after treatment

Six studies with a total of 209 individuals reported this outcome ([Analysis 4.6](#)). There was no significant heterogeneity between these trials. The EMDR group did better than the controls (RR 0.51; 95% CI 0.42 to 0.62).

4.6 Adverse effects

No studies formally considered adverse effects.

Comparison 5. EMDR versus individual TFCBT/Exposure therapy

Eight studies including 400 participants contributed to this comparison.

Primary outcomes

5.1 Clinician-rated PTSD symptoms

Seven studies considered this outcome with a total of 327 individuals ([Analysis 5.1](#)). There was evidence of heterogeneity between these trials ($\text{Chi}^2 = 16.49$; $P = 0.01$; $I^2 = 64\%$), and we used a random-effects model to pool the data. There was no difference between groups (SMD -0.03; 95% CI -0.43 to 0.38).

At 1- to 4-month follow-up three studies considered this outcome with a total of 76 individuals ([Analysis 5.2](#)). There was significant heterogeneity between these trials ($\text{Chi}^2 = 5.56$; $P = 0.06$; $I^2 = 64\%$), and we used a random-effects model to pool the data. There was no difference between groups (SMD -0.19; 95% CI -0.97 to 0.58).

5.2 Drop-outs

Eight studies with a total of 400 individuals recorded whether individuals left the study early for any reason by group ([Analysis 5.3](#)). There was little heterogeneity ($I^2 = 3\%$) between these trials. There was no difference between groups (RR 1.00; 95% CI 0.74 to 1.35).

Secondary outcomes

5.3 Self-reported PTSD symptoms

Seven studies considered this outcome with a total of 306 individuals ([Analysis 5.4](#)). There was heterogeneity between these trials ($\text{Chi}^2 = 8.82$; $P = 0.18$; $I^2 = 32\%$). There was no significant difference between the EMDR group and the individual TFCBT group immediately after treatment (SMD -0.30; 95% CI -0.60 to 0.01).

At 1- to 4-month follow-up five studies considered this outcome with a total of 111 individuals ([Analysis 5.5](#)). There was evidence of heterogeneity ($\text{Chi}^2 = 8.46$; $P = 0.08$; $I^2 = 53\%$), and we used a random-effects model to pool the data. There was no difference between groups (SMD -0.04; 95% CI -0.61 to 0.52).

At 9- to 12-month follow-up

5.4 Depression

Eight studies considered this outcome with a total of 346 individuals ([Analysis 5.6](#)). There was heterogeneity between these trials ($\text{Chi}^2 = 24.04$; $P = 0.001$; $I^2 = 71\%$), and we used a random-effects model to pool the data. There was no difference between groups (SMD -0.31; 95% CI -0.75 to 0.13).

At 1- to 4-month follow-up five studies considered this outcome with a total of 111 individuals ([Analysis 5.7](#)). There was heterogeneity between these trials ($\text{Chi}^2 = 6.93$; $P = 0.14$; $I^2 = 42\%$). There was no difference between groups (SMD -0.13; 95% CI -0.64 to 0.38).

5.5 Anxiety

Four studies considered this outcome with a total of 236 individuals ([Analysis 5.8](#)). There was little heterogeneity between these trials ($\text{Chi}^2 = 1.94$; $P = 0.58$; $I^2 = 0\%$). The EMDR group did better than the TFCBT group (SMD -0.28; 95% CI -0.53 to -0.02).

At 1- to 4-month follow-up two studies considered this outcome with a total of 48 individuals ([Analysis 5.9](#)). There was little heterogeneity between these trials ($\text{Chi}^2 = 0.70$; $P = 0.40$; $I^2 = 0\%$).

There was no difference between groups (SMD 0.24; 95% CI -0.33 to 0.81).

5.6 PTSD diagnosis after treatment

Eight studies with a total of 400 individuals reported this outcome ([Analysis 5.10](#)). There was heterogeneity between these trials ($\text{Chi}^2 = 15.56$; $P = 0.03$; $I^2 = 55\%$), and we used a random-effects model to pool the data. There was no difference between the groups (RR 0.95; 95% CI 0.74 to 1.22).

5.7 Adverse effects

No studies formally considered adverse effects.

Comparison 6. EMDR versus non-TFCBT

Three studies including 84 participants contributed to this comparison.

Primary outcomes

6.1 Clinician-rated PTSD symptoms

Two studies considered this outcome with a total of 53 individuals ([Analysis 6.1](#)). There was little heterogeneity between these trials ($\text{Chi}^2 = 0.69$; $P = 0.41$; $I^2 = 0\%$). There was no difference between groups (SMD -0.35; 95% CI -0.90 to 0.19).

At 1- to 4-month follow-up three studies considered this outcome with a total of 71 individuals ([Analysis 6.2](#)). There was heterogeneity between these trials ($\text{Chi}^2 = 6.16$; $P = 0.05$; $I^2 = 68\%$), and we used a random-effects model to pool the data. There was no difference between groups (SMD -0.74; 95% CI -1.64 to 0.15).

6.2 Drop-outs

Three studies with a total of 84 individuals recorded whether individuals left the study early for any reason by group ([Analysis 6.3](#)). There was little heterogeneity between these trials. There was no difference between groups (RR 1.03; 95% CI 0.37 to 2.88).

Secondary outcomes

6.3 Self-reported PTSD symptoms

Three studies considered this outcome with a total of 75 individuals ([Analysis 6.4](#)). There was little heterogeneity between these trials ($\text{Chi}^2 = 0.64$; $P = 0.73$; $I^2 = 0\%$). There was no difference between groups (SMD -0.40; 95% CI -0.86 to 0.06).

At 1- to 4-month follow-up three studies considered this outcome with a total of 75 individuals ([Analysis 6.5](#)). There was little heterogeneity between these trials ($\text{Chi}^2 = 0.89$; $P = 0.64$; $I^2 = 0\%$). The EMDR group did significantly better than the non-TFCBT group immediately after treatment (SMD -0.52; 95% CI -0.98 to -0.05).

6.4 Depression

Three studies considered this outcome with a total of 75 individuals ([Analysis 6.6](#)). There was little heterogeneity between these trials. ($\text{Chi}^2 = 1.02$; $P = 0.60$; $I^2 = 0\%$). The EMDR group did better than the non-TFCBT group (SMD -0.67; 95% CI -1.14 to -0.20).

At 1- to 4-month follow-up three studies considered this outcome with a total of 75 individuals ([Analysis 6.7](#)). There was heterogeneity between these trials. ($\text{Chi}^2 = 3.45$; $P = 0.18$; $I^2 = 42\%$), and we used

a random-effects model to pool the data. There was no difference between groups (SMD -0.25; 95% CI -0.86 to 0.36).

6.5 Anxiety

Two studies considered this outcome with a total of 45 individuals (Analysis 6.8). There was little heterogeneity between these trials ($\text{Chi}^2 = 0.37$; $P = 0.54$; $I^2 = 0\%$). The EMDR group did better than the non-TFCBT group (SMD -0.75; 95% CI -1.36 to -0.13).

At 1- to 4-month follow-up two studies considered this outcome with a total of 45 individuals (Analysis 6.9). There was heterogeneity between these trials ($\text{Chi}^2 = 8.09$; $P = 0.004$; $I^2 = 88\%$), and we used a random-effects model to pool the data. There was no difference between groups (SMD -0.42; 95% CI -2.21 to 1.37).

6.6 PTSD diagnosis after treatment

Three studies with a total of 84 individuals reported this outcome (Analysis 6.10). There was significant heterogeneity between these trials. There was no difference between groups (RR 0.71; 95% CI 0.41 to 1.22).

6.7 Adverse effects

No studies formally considered adverse effects.

Comparison 7. EMDR versus 'other therapies'

Two studies including 127 participants contributed to this comparison.

Primary outcomes

7.1 Clinician rated PTSD symptoms

No studies formally considered this outcome.

7.2 Drop-outs

Two studies with a total of 127 individuals recorded whether individuals left the study early for any reason by group (Analysis 7.1). There was little heterogeneity between these trials. There was no difference between groups (RR 1.48; 95% CI 0.26 to 8.54).

Secondary outcomes

7.3 Self-reported PTSD symptoms

Two studies considered this outcome with a total of 124 individuals (Analysis 7.2). There was little heterogeneity between these trials ($\text{Chi}^2 = 0.19$; $P = 0.66$; $I^2 = 0\%$). The EMDR group did better than the 'other therapies' group immediately after treatment (SMD -0.84; 95% CI -1.21 to -0.47).

7.4 Depression

Two studies considered this outcome with a total of 127 individuals (Analysis 7.3). There was little heterogeneity between these trials ($\text{Chi}^2 = 0.05$; $P = 0.82$; $I^2 = 0\%$). The EMDR group did better than the 'other therapies' group (SMD -0.67; 95% CI -1.03 to -0.32).

7.5 Anxiety

Two studies considered this outcome with a total of 126 individuals (Analysis 7.4). There was little heterogeneity between these trials

($\text{Chi}^2 = 0.10$; $P = 0.75$; $I^2 = 0\%$). The EMDR group did better than the 'other therapies' group (SMD -0.72; 95% CI -1.08 to -0.36).

7.6 PTSD diagnosis after treatment (Analysis 7.5)

7.7 Adverse effects

No studies formally considered adverse effects.

Comparison 8. Non-TFCBT versus waitlist/usual care

Five studies including 141 participants contributed to this comparison.

Primary outcomes

8.1 Clinician-rated PTSD symptoms

Four studies considered this outcome with a total of 106 individuals (Analysis 8.1). There was heterogeneity between these trials ($\text{Chi}^2 = 4.62$; $P = 0.2$; $I^2 = 35\%$), and we used a random-effects model to pool the data. The non-TFCBT group did better than the controls (SMD -1.22; 95% CI -1.76 to -0.69).

8.2 Drop-outs

Four studies with a total of 121 individuals recorded whether individuals left the study early for any reason by group (Analysis 8.2). There was no significant heterogeneity between these trials ($\text{Chi}^2 = 1.10$; $P = 0.89$; $I^2 = 0\%$). There was no difference between the groups (RR 1.96; 95% CI 0.70 to 5.48).

Secondary outcomes

8.3 Self-reported PTSD symptoms

Two studies considered this outcome with a total of 44 individuals (Analysis 8.3). There was considerable heterogeneity between the groups ($\text{Chi}^2 = 11.83$; $P = 0.0006$; $I^2 = 92\%$), and we used a random-effects model to pool the data. There was no difference between the non-TFCBT group and the waitlist/usual care group immediately after treatment (SMD -0.86; 95% CI -3.27 to 1.55).

8.4 Depression

Five studies considered this outcome with a total of 129 individuals (Analysis 8.4). There was heterogeneity between these trials ($\text{Chi}^2 = 7.04$; $P = 0.13$; $I^2 = 43\%$), and we used a random-effects model to pool the data. The non-TFCBT group did better than the waitlist/usual care group immediately after treatment (SMD -0.93; 95% CI -1.43 to -0.42).

8.5 Anxiety

Four studies considered this outcome with a total of 102 individuals (Analysis 8.5). There was no heterogeneity between these trials ($\text{Chi}^2 = 2.38$; $P = 0.50$; $I^2 = 0\%$). Non-TFCBT did better than the waitlist/usual care group immediately after treatment (SMD -0.83; 95% CI -1.24 to -0.42).

8.6 PTSD diagnosis after treatment

Four studies with a total of 121 individuals reported this outcome (Analysis 8.6). There was heterogeneity between these trials ($\text{Chi}^2 = 6.15$; $P = 0.10$; $I^2 = 51\%$), and we used a random-effects model to pool the data. The non-TFCBT group did better than the waitlist/usual care group (RR 0.65; 95% CI 0.50 to 0.86).

8.7 Adverse effects

No studies formally considered adverse effects.

Comparison 9. Non-TFCBT versus other therapies

One study including 31 participants contributed to this comparison.

Primary outcomes

9.1 Clinician-rated PTSD symptoms

One study considered this outcome with a total of 25 individuals ([Analysis 9.1](#)). The stress non-TFCBT group did better than the other therapies group immediately after treatment (SMD -1.22; 95% CI -2.09 to -0.35).

At 1- to 4-month follow-up one study considered this outcome with a total of 18 individuals ([Analysis 9.2](#)). The stress non-TFCBT group did no better than the 'other therapies' group (SMD -0.38; 95% CI -1.31 to 0.55).

9.2 Drop-outs

One study with a total of 31 individuals recorded whether individuals left the study early for any reason by group ([Analysis 9.3](#)). There was no difference between groups (RR 0.82; 95% CI 0.20 to 3.46).

Secondary outcomes

9.3 Self-reported PTSD symptoms

No studies considered this outcome.

9.4 Depression

One study considered this outcome with a total of 25 individuals ([Analysis 9.4](#)). There was no difference between groups (SMD -0.51; 95% CI -1.31 to 0.30).

At 1- to 4-month follow-up one study considered this outcome with a total of 18 individuals ([Analysis 9.5](#)). There was no difference between groups (SMD -0.48; 95% CI -1.42 to 0.46).

9.5 Anxiety

One study considered this outcome with a total of 25 individuals ([Analysis 9.6](#)). There was no difference between groups (SMD -0.51; 95% CI -1.32 to 0.29).

At 1- to 4-month follow-up one study considered this outcome with a total of 18 individuals ([Analysis 9.7](#)). There was no difference between groups (SMD -0.68; 95% CI -1.64 to 0.28).

9.6 PTSD diagnosis after treatment

One study with a total of 31 individuals reported this outcome ([Analysis 9.8](#)). There was no difference between groups (RR 0.58; 95% CI 0.30 to 1.11).

9.7 Adverse effects

No studies formally considered adverse effects.

Comparison 10. Group TFCBT versus waitlist/usual care

Seven studies including 573 participants contributed to this comparison.

Primary outcomes

10.1 Clinician-rated PTSD symptoms

Three studies considered this outcome with a total of 185 individuals ([Analysis 10.1](#)). There was heterogeneity between these trials ($\text{Chi}^2 = 15.60$; $P = 0.0004$; $I^2 = 87\%$), and we used a random-effects model to pool the data. The Group TFCBT group did better than the waitlist/usual care group immediately after treatment (SMD -1.28; 95% CI -2.25 to -0.31).

At 5- to 8-month follow-up one study compared this outcome with 97 individuals ([Analysis 10.2](#)). The Group TFCBT group did better than the waitlist/usual care group (SMD -0.72; 95% CI -1.14 to -0.31).

10.2 Drop-outs

Seven studies with a total of 573 individuals recorded whether individuals left the study early for any reason by group ([Analysis 10.3](#)). There was no significant heterogeneity between these trials ($\text{Chi}^2 = 2.28$; $P = 0.81$; $I^2 = 0\%$). There was no difference between the Group TFCBT group and the waitlist/usual care group (RR 1.21; 95% CI 0.94 to 1.55).

Secondary outcomes

10.3 Self-reported PTSD symptoms

Six studies considered this outcome with a total of 274 individuals ([Analysis 10.4](#)). There was heterogeneity between these trials ($\text{Chi}^2 = 17.53$; $P = 0.004$; $I^2 = 71\%$), and we used a random-effects model to pool the data. The Group TFCBT group did better than the waitlist/usual care group immediately after treatment (SMD -1.20; 95% CI -1.70 to -0.69).

At 1- to 4-month follow-up two studies compared this outcome with 73 individuals ([Analysis 10.5](#)). There was some heterogeneity between these trials ($\text{Chi}^2 = 1.45$; $P = 0.23$; $I^2 = 31\%$). The Group TFCBT group did better than the waitlist/usual care group immediately after treatment (SMD -1.14; 95% CI -1.78 to -0.50).

10.4 Depression

Three studies with a total of 137 individuals reported this outcome ([Analysis 10.6](#)). There was heterogeneity between these trials ($\text{Chi}^2 = 9.91$; $P = 0.007$; $I^2 = 80\%$), and we used a random-effects model to pool the data. The Group TFCBT group did significantly better than the waitlist/usual care group (SMD -1.15; 95% CI -1.98 to -0.32).

At 1- to 4-month follow-up one study compared this outcome with 49 individuals ([Analysis 10.7](#)). The Group TFCBT group did better than the waitlist/usual care group (SMD -0.62; 95% CI -1.00 to -0.24).

10.5 Anxiety

Three studies with a total of 106 individuals reported this outcome ([Analysis 10.8](#)). There was little heterogeneity between these trials. The Group TFCBT group did significantly better than the waitlist/usual care group immediately after treatment (SMD -0.66; 95% CI -1.06 to -0.27).

At 1- to 4-month follow-up two studies compared this outcome with 61 individuals ([Analysis 10.9](#)). There was little heterogeneity between these trials ($\text{Chi}^2 = 1.20$; $P = 0.27$; $I^2 = 17\%$). The Group TFCBT group did significantly better than the waitlist/usual care group (SMD -0.43; 95% CI -0.72 to -0.14).

10.6 PTSD diagnosis after treatment

One study with a total of 48 individuals reported this outcome ([Analysis 10.10](#)). There was no significant difference between the Group TFCBT group and the waitlist/usual care group (RR 0.56; 95% CI 0.31 to 1.01).

10.7 Adverse effects

No studies formally considered adverse effects.

Comparison 11. Group TFCBT versus group non-TF CBT

One study including 360 participants contributed to this comparison.

Primary outcomes

11.1 Clinician-rated PTSD symptoms

One study considered this outcome with a total of 325 individuals ([Analysis 11.1](#)). There was no difference between the Group trauma-focused CBT and Group non-trauma-focused CBT (SMD -0.12; 95% CI -0.34 to 0.10).

11.2 Drop-outs

One study with a total of 360 individuals recorded whether individuals left the study early for any reason by group ([Analysis 11.2](#)). There was no significant difference between the Group trauma-focused CBT and Group non-trauma-focused CBT groups (RR 1.38; 95% CI 1.00 to 1.90).

Secondary outcomes

11.3 Self-reported PTSD symptoms

No studies considered this outcome.

11.4 Depression

No studies considered this outcome.

11.5 Anxiety

No studies considered this outcome.

11.6 PTSD diagnosis after treatment

One study with a total of 360 individuals reported this outcome ([Analysis 11.3](#)). There was no difference between the Group trauma-focused CBT and Group non-trauma-focused CBT groups (RR 0.98; 95% CI 0.83 to 1.16).

11.7 Adverse effects

No studies formally considered adverse effects.

Comparison 12. Other therapies versus waitlist/usual care

Four studies including 211 participants contributed to this comparison.

Primary outcomes

12.1 Clinician-rated PTSD symptoms

Three studies considered this outcome with a total of 112 individuals ([Analysis 12.1](#)). There was no heterogeneity between these trials ($\text{Chi}^2 = 1.61$; $P = 0.45$; $I^2 = 0\%$). The 'other therapies' group did better than the waitlist/usual care group immediately after treatment (SMD -0.58; 95% CI -0.96 to -0.20).

12.2 Drop-outs

Four studies with a total of 211 individuals recorded whether individuals left the study early for any reason by group ([Analysis 12.2](#)). There was no heterogeneity between these trials. The waitlist group did better than the 'other therapies' group (RR 2.45; 95% CI 0.99 to 6.10).

Secondary outcomes

12.3 Self-reported PTSD symptoms

Two studies considered this outcome with a total of 132 individuals ([Analysis 12.3](#)). There was no heterogeneity between these trials ($\text{Chi}^2 = 0.29$; $P = 0.59$; $I^2 = 0\%$). The 'other therapies' group did better than the waitlist/usual care group immediately after treatment (SMD -0.61; 95% CI -0.98 to -0.24).

12.4 Depression

Three studies considered this outcome with a total of 112 individuals ([Analysis 12.4](#)). There was little heterogeneity between these trials ($\text{Chi}^2 = 2.62$; $P = 0.27$; $I^2 = 24\%$). The 'other therapies' group did better than the waitlist/usual care group immediately after treatment (SMD -0.45; 95% CI -0.83 to -0.07).

12.5 Anxiety

Four studies considered this outcome with a total of 193 individuals ([Analysis 12.5](#)). There was no heterogeneity between these trials ($\text{Chi}^2 = 0.70$; $P = 0.87$; $I^2 = 0\%$). The 'other therapies' group did significantly better than the waitlist/usual care group immediately after treatment (SMD -0.52; 95% CI -0.82 to -0.22).

12.6 PTSD diagnosis after treatment

Four studies with a total of 210 individuals reported this outcome ([Analysis 12.6](#)). There was heterogeneity between these trials ($\text{Chi}^2 = 8.34$; $P = 0.04$; $I^2 = 64\%$), and we used a random-effects model to pool the data. There was no difference between the 'other therapies' and the waitlist/usual care group (RR 0.80; 95% CI 0.61 to 1.05).

12.7 Adverse effects

No studies formally considered adverse effects.

Comparison 13. Group non-TFCBT versus waitlist/usual care

One study including 47 participants contributed to this comparison.

Primary outcomes

13.1 Clinician-rated PTSD symptoms

No studies considered this outcome.

13.2 Drop-outs

One study with a total of 47 individuals recorded whether individuals left the study early for any reason by group ([Analysis 13.1](#)). There was no difference between groups (RR 1.76; 95% CI 0.17 to 18.11).

Secondary outcomes

13.3 Self-reported PTSD symptoms

One study considered this outcome with a total of 47 individuals ([Analysis 13.2](#)). There was no difference between groups (SMD -0.49; 95% CI -1.07 to 0.09).

At 1- to 4-month follow-up one study considered this outcome with a total of 47 individuals ([Analysis 13.3](#)). There was no difference between groups (SMD -0.40; 95% CI -0.98 to 0.18).

13.4 Depression

One study considered this outcome with a total of 47 individuals ([Analysis 13.4](#)). There was no difference between groups (SMD -0.06; 95% CI -0.64 to 0.51).

At 1- to 4-month follow-up one study considered this outcome with a total of 47 individuals ([Analysis 13.5](#)). There was no difference between groups (SMD -0.03; 95% CI -0.60 to 0.54).

13.5 Anxiety

No studies considered this outcome.

13.6 PTSD diagnosis after treatment

No studies considered this outcome.

13.7 Adverse effects

No studies formally considered adverse effects.

Comparison 14. Individual TFCBT versus group TFCBT

No studies made this comparison.

Comparison 15. Individual TFCBT versus group non-TFCBT

No studies made this comparison.

Comparison 16. EMDR versus group TFCBT

No studies made this comparison.

Comparison 17. EMDR versus group non-TFCBT

No studies made this comparison.

Comparison 18. Individual non-TFCBT versus group TFCBT

No studies made this comparison.

Comparison 19. Individual non-TFCBT versus group non-TFCBT

No studies made this comparison.

19. Risk of bias sensitivity analysis

19.1 Comparison 1. Individual TFCBT/Exposure therapy versus waitlist/usual care

Clinician-rated PTSD symptoms

Only one trial ([Basoglu 2005](#)) including 59 participants had a low risk of bias for sequence generation, allocation concealment and blinding of the outcome assessor. Analysis restricted only to this trial ([Analysis 1.17](#)) showed no difference between TFCBT and waitlist/usual care (SMD -0.44; 95% CI -0.95 to 0.08), which differs from the overall meta-analysis, which showed a statistically significant difference in favour of TFCBT (SMD -1.62; 95% CI -2.03 to -1.21). However, the intervention was a single session of TFCBT.

Drop-outs

The intervention was a single session of TFCBT. On this basis, drop-out was not a relevant comparison.

19.2 Comparison 2. TFCBT versus non-TFCBT

Fewer than 10 studies made this comparison.

19.3 Comparison 3. TFCBT versus other therapies

Clinician-rated PTSD symptoms

Only one trial ([Bryant 2003](#)) including 58 participants had a low risk of bias in terms of sequence generation, allocation concealment and blinding of the outcome assessor. Analysis restricted only to this trial ([Analysis 3.19](#)) favoured TFCBT (SMD -1.52; 95% CI -2.14 to -0.89).

Drop-outs

One study with a total of 58 participants had a low risk of bias in terms of sequence generation, allocation concealment and blinding of the outcome assessor. There was no difference between TFCBT and other therapy when the analysis was restricted to this study ([Analysis 3.20](#)) (RR 1.50; 95% CI 0.47 to 4.8).

19.4 Comparison 4. EMDR versus waitlist/usual care

Fewer than 10 studies made this comparison.

19.5 Comparison 5. EMDR versus individual TFCBT/Exposure therapy

Fewer than 10 studies made this comparison.

19.6 Comparison 6. EMDR versus non-TFCBT

Fewer than 10 studies made this comparison.

19.7 Comparison 7. EMDR versus other therapies

Fewer than 10 studies made this comparison.

19.8 Comparison 8. Non-TFCBT versus waitlist/usual care

Fewer than 10 studies made this comparison.

19.9 Comparison 9. Non-TFCBT versus other therapies

Fewer than 10 studies made this comparison.

19.10 Comparison 10. Group TFCBT versus waitlist/usual care

Fewer than 10 studies made this comparison.

19.11 Comparison 11. Group TFCBT versus group non-TFCBT

Fewer than 10 studies made this comparison.

19.12 Comparison 12. Other therapies versus waitlist/usual care

Fewer than 10 studies made this comparison.

19.13 Comparison 13. Group non-TFCBT versus waitlist/usual care

Fewer than 10 studies made this comparison.

20. Clinical heterogeneity sensitivity analyses

In order to explore clinical heterogeneity, we conducted two subgroup analyses for the two comparisons including more than 10 studies.

20.1 Comparison 1. Individual TFCBT/Exposure therapy versus waitlist/usual care

Twenty-eight studies considered this outcome with a total of 1256 individuals (Analysis 1.1.1). There was heterogeneity between these trials ($\text{Chi}^2 = 237.95$; $P = 0.00001$; $I^2 = 89\%$), and we used a random-effects model to pool the data. The individual TFCBT group did better than the waitlist/usual care group immediately after treatment (SMD -1.62; 95% CI -2.03 to -1.21).

Women-only studies

Nine studies met this criterion, with a total of 562 women (Analysis 1.1.2). There was heterogeneity between these trials ($\text{Chi}^2 = 37.39$; $P = 0.00001$; $I^2 = 79\%$), and we used a random-effects model to pool the data. The individual TFCBT group did better than the waitlist/usual care group immediately after treatment (SMD -1.83; 95% CI -2.31 to -1.36), demonstrating a larger difference in favour of individual TFCBT than in the overall analyses.

Studies excluding Vietnam war veterans

Twenty-seven studies met this criterion, with a total of 1232 individuals (Analysis 1.1.3). There was heterogeneity between these trials ($\text{Chi}^2 = 230.39$; $P = 0.00001$; $I^2 = 89\%$), and we used a random-effects model to pool the data. The individual TFCBT group did significantly better than the waitlist/usual care group immediately

after treatment (SMD -1.67; 95% CI -2.09 to -1.25), demonstrating little difference from the overall analyses. Excluding these two trials made little difference to the observed statistically significant heterogeneity or to the effect estimate.

20.2 Comparison 3. TFCBT versus other therapies

Ten studies considered this outcome with a total of 608 individuals (Analysis 3.1). There was evidence of heterogeneity between these trials ($\text{Chi}^2 = 25.08$; $P = 0.003$; $I^2 = 64\%$), and we used a random-effects model to pool the data. The individual TFCBT group did better than the 'other therapies' group immediately after treatment (SMD -0.46; 95% CI -0.79 to -0.13).

Women-only studies (sexual assault/abuse)

Three studies met this criterion, with a total of 129 women (Analysis 3.21). There was no difference between groups (SMD 0.03; 95% CI -0.42 to 0.47).

Studies excluding Vietnam war veterans

Nine studies met this criterion, with a total of 599 individuals (Analysis 3.22). The individual TFCBT group did better than the 'other therapies' group (SMD -0.46; 95% CI -0.80 to -0.11), demonstrating minimal difference from the overall analyses. Excluding this one trial made little difference to the observed statistically significant heterogeneity or to the effect estimate.

20.3 Publication bias

All the studies identified for this review were published, and many of the trials were undertaken relatively recently. We explored the potential effects of publication bias using funnel plots. We constructed two funnel plots using data from the individual TFCBT versus waitlist/usual care comparison (comparison 1), one involving continuous data in the primary outcome, and the second involving dichotomous data in a secondary outcome. We also looked at the TFCBT versus 'other therapies' comparison (3.1).

The first funnel plot examined the measure of clinician-rated PTSD symptoms (see Figure 4) and was roughly symmetrical with the exception of one outlier and an absence of smaller studies demonstrating no difference or a difference in favour of waitlist/usual care. This suggests the possibility of publication bias. As the studies become less precise the results of the studies tended to be more variable and scattered to either side of the more precise larger studies. The same was found for the comparison of TFCBT with other therapies (see Figure 5).

Figure 4. Funnel plot of comparison: 1 Individual trauma-focused CBT/Exposure therapy vs waitlist/usual care, outcome: 3.1 Severity of PTSD symptoms - clinician-rated.

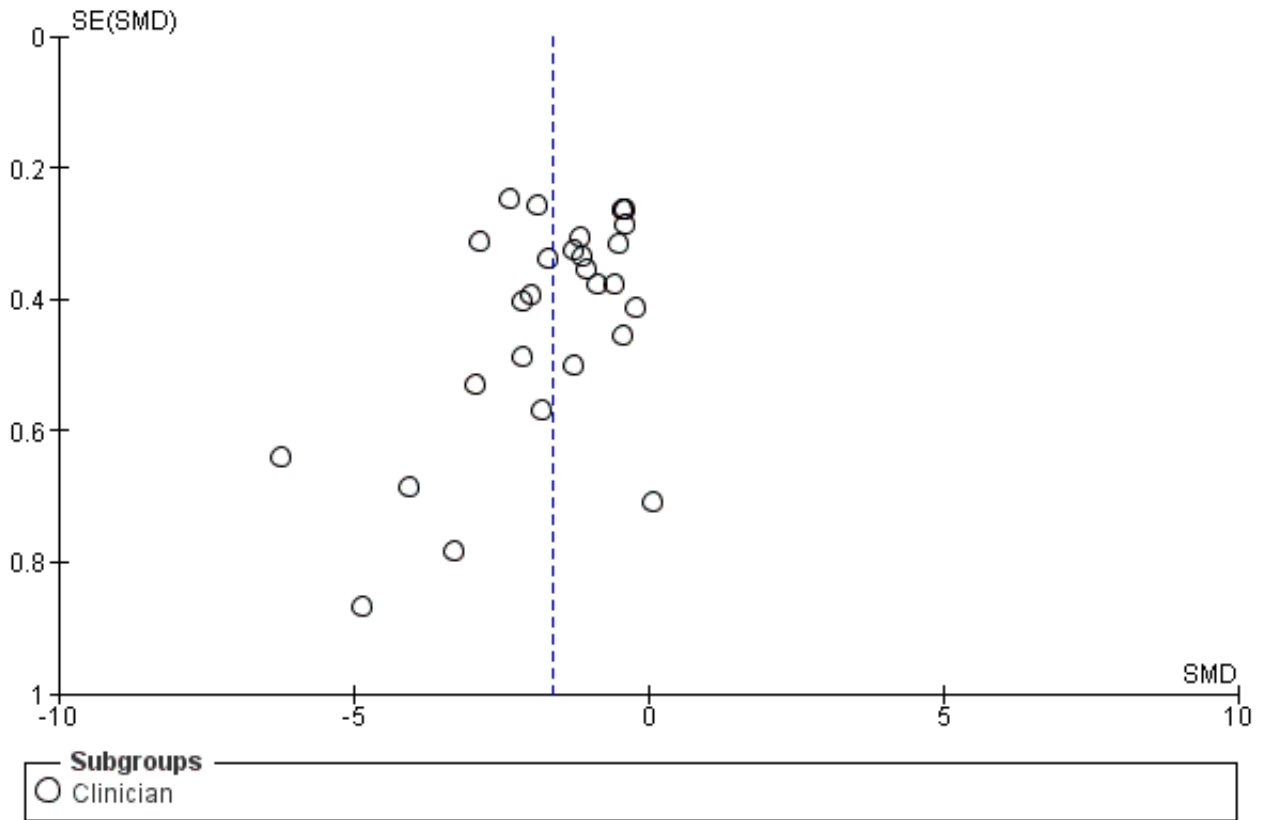
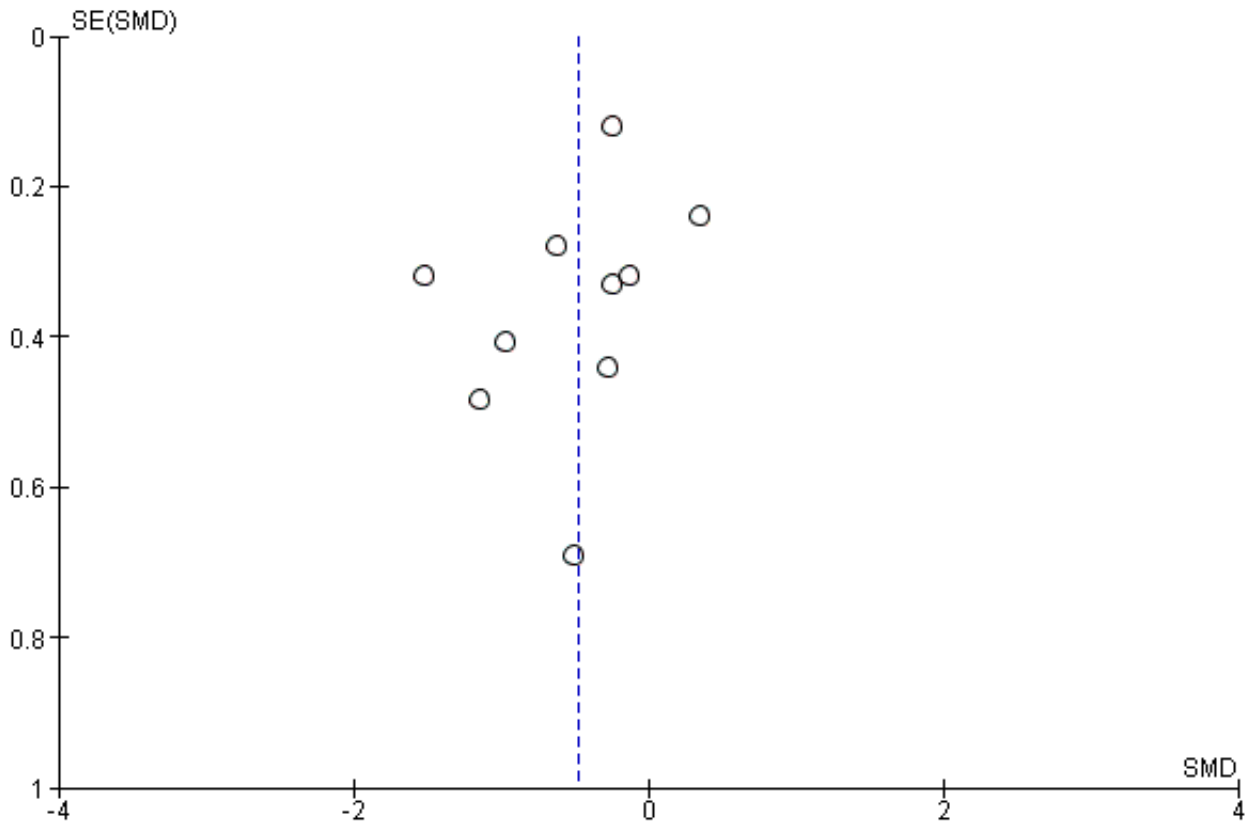


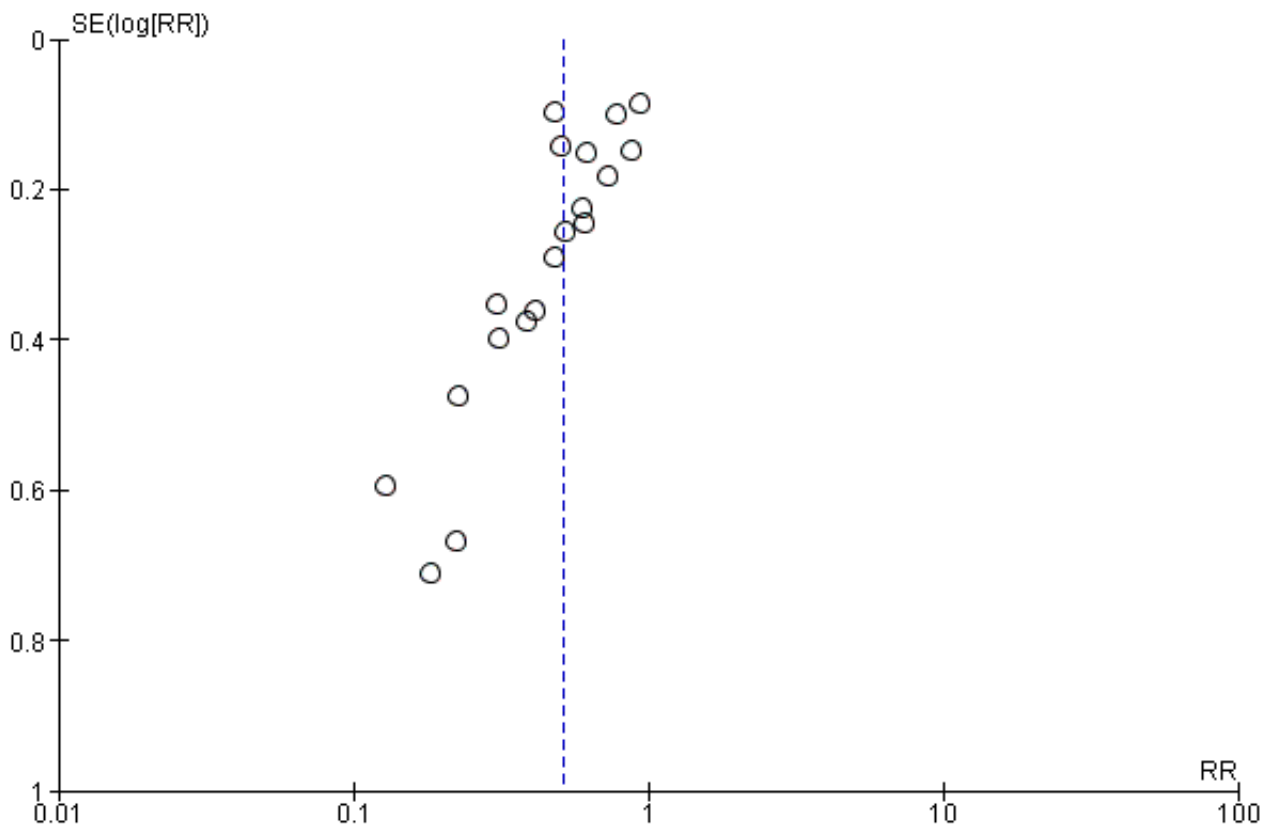
Figure 5. Funnel plot of comparison: 3 Trauma-focused CBT/Exposure Therapy vs other therapies, outcome: 3.1 Severity of PTSD symptoms - clinician-rated.



The second funnel plot using data from the individual TFCBT versus waitlist/usual care comparison examined the dichotomous measure of PTSD diagnosis after treatment (see Figure 6). This funnel plot shows that larger studies demonstrated smaller differences between individual TFCBT and waitlist/usual care, and also suggests an absence of smaller studies demonstrating no

difference or a difference in favour of waitlist/usual care. This funnel plot therefore shows some evidence of publication bias. It is possible that, due to the greater likelihood of publication of positive studies, the true difference between groups is smaller than is suggested by this review.

Figure 6. Funnel plot of comparison: 1 Individual trauma-focused CBT/Exposure therapy vs waitlist/usual care, outcome: 1.7 PTSD diagnosis after treatment.



DISCUSSION

Summary of main results

We include 70 studies of 4761 participants in this review. We have created a 'Summary of findings' table for each of the 13 comparisons we were able to conduct. We assessed the quality of the evidence for each comparison as very low. Statistically, individual trauma-focused cognitive behavioural therapy (TFCBT) and eye movement desensitisation and reprocessing (EMDR) did better than waitlist/usual care in reducing clinician-assessed post-traumatic stress disorder (PTSD) symptoms. Non-TFCBT did significantly better than waitlist/usual care and other therapies. Other therapies did significantly better than waitlist/usual care control, as did group-TFCBT. There was no difference between group non-TFCBT and waitlist/usual care. There was no statistically significant difference between individual TFCBT, EMDR and non-TFCBT immediately post-treatment although there was some evidence that individual TFCBT and EMDR are superior to non-TFCBT at between one and four months following treatment, and that individual TFCBT, EMDR and non-TFCBT were more effective than other therapies. There was some evidence of greater drop-out in active treatment groups. The considerable unexplained heterogeneity observed in these comparisons, and the potential impact of publication bias on these data, suggest the need for caution in interpreting the results of this review.

Trauma-focused cognitive behavioural therapy

There was very low quality evidence that individual TFCBT was better than waitlist/usual care in reducing traumatic stress symptoms and associated symptoms of depression and anxiety. The overall standardised mean difference for traumatic stress symptoms post-treatment represents an effect size generally accepted as indicating a strong positive effect. After exploration of heterogeneity this finding remains robust although there is statistically significant heterogeneity present in all analyses. There is not enough evidence to confirm whether this advantage is maintained over time. There is evidence that individual TFCBT is a more effective treatment than non-trauma-focused therapies classed as 'other therapies'. There is also evidence that individual TFCBT is superior to non-TFCBT, although this is not apparent immediately after treatment.

Eye movement desensitisation and reprocessing

There was very low quality evidence that EMDR was better than waitlist/usual care in reducing traumatic stress symptoms and additionally associated symptoms of depression and anxiety. The overall standardised mean differences for clinician-rated and self-rated traumatic stress symptoms post-treatment represents a strong positive effect size. There is not enough evidence to determine whether these improvements are maintained in the long-term as there were no follow-up comparisons of EMDR and waitlist groups. There were limited data to suggest a better outcome than non-TFCBT at between one- and four-month follow-

up. EMDR appeared to have similar effectiveness to individual TFCBT in the studies that compared them directly. There was some evidence that EMDR was a more effective treatment than other therapies.

Non-trauma-focused cognitive behavioural therapy

There was very low quality evidence that non-TFCBT was better than waitlist/usual care in reducing traumatic stress symptoms and additionally associated symptoms of depression and anxiety. It is worth noting that the meta-analyses of non-TFCBT included fewer participants than TFCBT and EMDR, and demonstrated high heterogeneity, indicating that these results should be interpreted with caution. There was some evidence that non-TFCBT is a more effective treatment than other non-trauma-focused therapies, but this was from the results of one study only. Non-TFCBT was less effective than TFCBT at follow-up. Whilst this might indicate insufficient statistical power, it may also indicate that non-TFCBT provides only temporary relief of symptoms, or that TFCBT provides a basis for continued improvement.

Other therapies

There was very low quality evidence that other therapies were better than waitlist/usual care in reducing traumatic stress symptoms and associated symptoms of depression and anxiety. As stated above, other therapies were statistically significantly worse in terms of the primary outcome measure of reducing traumatic stress symptoms when directly compared with individual TFCBT and non-TFCBT. There was a statistically significant difference in favour of other therapies in comparison with individual TFCBT in terms of drop-out. This finding suggests the possibility of non-trauma-focused therapies being easier to tolerate than individual TFCBT, although this finding is based on studies of variable quality.

Group TFCBT

There was very low quality evidence that group TFCBT was better than waitlist/usual care in reducing traumatic stress symptoms. There was no difference between group TFCBT and non-trauma-focused group CBT.

Group non-TFCBT

There was no evidence that group non-TFCBT was any better than waitlist/usual care in reducing traumatic stress symptoms or depression immediately after treatment or at four-month follow-up in the one study making this comparison.

Drop-outs

Individual TFCBT and other therapies both did worse than waitlist/usual care on this outcome measure. There was also some evidence that individual TFCBT incurred a greater drop-out rate than other therapies.

Adverse effects

Unfortunately no studies reported adverse effects. It is well recognised that these may occur, such as increased re-experiencing following exposure treatment (e.g. [Pitman 1991](#)), and the absence of any reporting of them is of major concern.

Anxiety and depression

Symptoms of anxiety and depression generally improved in line with improvements in traumatic stress symptoms. This is no surprise for treatments such as cognitive restructuring where many of the approaches used for PTSD would also be used for anxiety and depression. However other treatments such as exposure therapy do not address depressive symptoms per se yet still appeared to reduce depressive and anxiety symptoms. This suggests that the anxiety and depressive symptoms found in many PTSD sufferers in these studies were secondary to the PTSD rather than being discrete conditions requiring specific treatment.

Heterogeneity

The forest plots of the pooled results demonstrated statistically significant heterogeneity between the studies. For example, heterogeneity levels of $P < 0.00001$ were observed in several analyses of the primary outcome measure. There are likely to be several factors that contribute to this heterogeneity. There is clearly considerable clinical diversity within the studies considered. We attempted to explore this by performing subgroup analyses on the primary outcome measure of individual TFCBT versus waitlist/usual care. Those studies including only women, all of whom had been sexually or non-sexually assaulted, produced more positive results than the overall results. Possible explanations include the treatments having been superior, women being more responsive to individual TFCBT than men, traumatisation by assault being more responsive to individual TFCBT, a combination of these and/or other factors. Those studies that did not include only Vietnam war veterans produced a slightly more positive result than all studies. However there was only one study excluded from this subgroup analysis, which may therefore lack power to show a real difference; great caution must be exercised in interpreting this finding.

Overall completeness and applicability of evidence

This review considers randomised controlled trials (RCTs) of a wide range of psychological therapies for chronic PTSD, including individual TFCBT, EMDR, non-TFCBT, group TFCBT, group non-TFCBT, and other psychological therapies (see [Types of interventions](#)). Studies included participants from different countries and backgrounds, who had been exposed to a variety of different traumatic events (see [Types of participants](#)). The majority of studies reported on the use of qualified and experienced therapists, and a high proportion included assessment of adherence to a treatment protocol (see [Characteristics of included studies](#)). Many factors, however, limit the generalisability of conclusions reached by this review. Most studies to date have been conducted in the USA, Canada, Australia and Europe, limiting generalisability of results to the rest of the world. Although we have included the full range of psychological therapies for PTSD considered by RCTs to date, insufficient data preclude meta-analysis of a number of outcomes in some treatment groups. There are many more studies of individual TFCBT than other therapies, for example, those taking a person-centred only or psychodynamic approach, which were considered within a single category. The majority of studies did not include participants with comorbid psychiatric diagnoses and substance dependence, excluding individuals who are arguably more difficult to treat. This may have resulted in the exclusion of individuals with complicated histories and the experience of multiple traumatic events. Generalising the results to more complex presentations of

the disorder is therefore problematic. There were very limited long-term follow-up data, especially for waitlist groups. This prevents determination of the long-term efficacy of therapies, but the incremental improvement of the active treatment groups in the trials with longer follow-ups suggests that benefits are maintained. Comparison on the basis of trauma type, study setting and participant variables would be an interesting addition to future versions of this review.

Most studies reported on drop-outs by group; drop-out rates are likely to be influenced by adverse effects along with other factors. The major distinction between the treatments classed as TFCBT and those classed as 'other therapies' was the inclusion of exposure-based components. Since the treatments that included exposure had a significantly greater drop-out rate, this raises questions surrounding the tolerability of exposure work. Although it is well documented that exposure-based treatments can cause short-term exacerbation of symptoms (e.g. [Tarrier 1999](#)), we have little understanding of how this impacts on drop-out rates. Given that the included studies provide little disclosure of adverse events and few explanations for drop-outs, it is difficult to ascertain why participants were less able to tolerate exposure-based treatments. This is an important finding and one that should stimulate the development of interventions that are more acceptable to those who receive them.

Quality of the evidence

Methodological quality varied considerably (see [Characteristics of included studies](#)). Risk of bias was high or unclear for multiple domains in a large proportion of older studies, especially those published before 2000. Most studies rated as having a low risk of bias were of individual TFCBT. In a large proportion of studies, the information provided by the published report was insufficient to determine the risk of bias associated with key methodological indicators. There was considerable unexplained heterogeneity for some analyses and the quality of evidence for each of the comparisons was rated as very low.

As with all psychological therapy trials, there are issues with the control groups. The development of a 'psychological therapy placebo' is very difficult, if not impossible, as is blinding of participants and therapists. It is possible that the efficacy of psychological therapies is stronger than suggested by the data, as in several studies the waitlist/usual care group received some contact and the expectation that they would be treated, which may have been therapeutic. It is, however, also possible that waitlist groups do worse than usual care groups because they do not expect to improve until they receive the active therapy.

Potential biases in the review process

The review followed guidelines set out by The Cochrane Collaboration ([Higgins 2011](#)). Two authors independently read all the candidate studies, assessed them for inclusion, and rated them for risk of bias. We discussed any disagreements with a third review author with the aim of reaching a consensus. This will have minimised potential bias, but several unavoidable issues remain. For example, all studies included in the review were published, resulting in the possibility of publication bias. We explored and confirmed this using funnel plots (Figures 4, 5 and 6). Several studies reported incomplete data, although we contacted authors to obtain missing results where possible. Although we searched

numerous online databases systematically, scrutinised reference lists, contacted experts in the field, and handsearched relevant additional sources, we cannot rule out the possibility of missed RCTs. There was a great deal of heterogeneity between trials of the psychological therapies included within specific categories. This was especially notable within the 'other therapies' group. Although all were examples of non-trauma-focused psychological therapies that were not based on the principles of CBT, interventions included psychodynamic therapy, hypnotherapy, supportive counselling and present-centred counselling, which differ in terms of proposed active ingredients and the way in which they are delivered. There was also considerable statistical heterogeneity evident in many of the comparisons. In circumstances where heterogeneity was thought to be an issue, we used a random-effects model, and reported this. In addition, therapies within the 'other therapies' category were not always delivered with the intention of being as effective as the other treatment under study, but to act as a control (e.g. [Bryant 2003](#); [Bryant 2011](#); [Feske 2008](#)). It is clear that TFCBT performed very well versus waitlist/usual care comparison, but it must also be considered that this comparison included by far the most studies. It is fair to say that other categories (e.g. other therapies) may have performed better had they been represented by a larger number of studies. Finally, it is worth noting that there were differences in terms of acceptance into treatment protocols (for example, the requirement of diagnosis through structured interview versus self-reported measures), which is likely to have resulted in some studies that were overly inclusive and others that exercised more conservative guidelines.

Agreements and disagreements with other studies or reviews

This review supports the efficacy of psychological therapy for chronic PTSD, which is consistent with the results of many other reviews (e.g. [Bisson 2007b](#); [Bradley 2005](#); [Van Etten 1988](#)). It is also consistent with current practice guidelines which recommend individual TFCBT and EMDR as frontline treatments for the disorder ([ACPMH 2007](#); [NICE 2005](#)).

AUTHORS' CONCLUSIONS

Implications for practice

1. Psychological therapies are more effective than waitlist or usual care in treating adults with chronic PTSD.
2. Trauma-focused cognitive behavioural therapy and eye movement desensitisation and reprocessing have the best evidence for efficacy at present.
3. There is evidence that non-TFCBT is effective in the short term.
4. There is more limited evidence that some other non-trauma-focused psychological therapies may be effective.
5. Drop-out from treatment is an issue with currently available psychological therapies. Issues of engagement are an important consideration.

Although a substantial number of studies were included in the review, the conclusions are compromised by methodological issues evident in some. Sample sizes were small, and it is apparent that many of the studies were underpowered. There were limited follow-up data, which compromise conclusions regarding the long-term effects of psychological treatment. We assessed the evidence for each of the comparisons made in this review as of very low quality.

Implications for research

1. Further well-designed trials of psychological therapies are required, incorporating appropriate methods of randomisation, blinding of assessors, long-term follow up and appropriate training of therapists and monitoring of treatment adherence.
2. There is a requirement for further comparison studies of one type of psychological therapy against another.
3. Future trials should consider adverse events and tolerability of treatment in more detail.
4. The role of psychological therapy in combination and as an alternative to medication is unclear. Further research in this area would be useful.

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* Indicates the major publication for the study

CHARACTERISTICS OF STUDIES

Characteristics of included studies [ordered by study ID]

Adenauer 2011

Methods	Randomised controlled trial
Participants	34 refugees (in Germany) with a history of violence and persecution, suffering PTSD (15 women, 19 men)
Interventions	12 sessions of Narrative Exposure Therapy (NET) (n = 16) vs waitlist control (n = 18) in parallel
Outcomes	CAPS, HDRS, ssVEF
Notes	Experienced therapists delivered therapy. Treatment adherence was not assessed, but monitored in supervision sessions.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote: "Participants that fulfilled the inclusion criteria were randomized into the two groups using a computer-generated list of random numbers".
Allocation concealment (selection bias)	Unclear risk	Comment: Allocation concealment was not reported.
Incomplete outcome data (attrition bias) All outcomes	High risk	Quote: " As this study focuses on brain changes through psychotherapy rather than examining the clinical efficacy of the treatment, we restricted all analyses to the sample of study completers". Drop-out rates were one participant from treatment and two from waitlist, all due to deportation. Data for a further 4 participants were excluded from the treatment group, and another 8 from waitlist, due to no/poor-quality MEG data.
Selective reporting (reporting bias)	High risk	www.clinicaltrials.gov/-/ct2/show/NCT00563888 specified the CAPS as primary outcome and ssVEFs as secondary. The paper is written in terms of ssVEF as primary outcome. The paper trials register also specifies a 4- and 9-month follow-up.
Other bias	High risk	There was a mean difference of 16 points in pretreatment CAPS scores between the two groups (NET being greater).
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "Two independent female masters-level psychologists, who were unaware of the patients' treatment group, performed all assessments at pre-treatment, posttreatment, and 3- and 6-month follow-up. The 12-month follow-up assessment was conducted via mail. Blindness was maintained by ensuring that the assessors had no access to group allocation and never talked with patients about which group they were in."

Asukai 2010

Methods	Randomised controlled trial
Participants	24 individuals (Japanese) with DSM-IV PTSD after various traumas (21 women, 3 men)

Asukai 2010 (Continued)

Interventions	8 - 15 90-minute sessions of Prolonged Exposure (TFEBT) (n = 12) sessions vs treatment as usual (TAU) (n = 12)
Outcomes	CAPS, IES-R, CES-D, GHQ-28
Notes	Therapists were masters level psychologists. TAU included pharmacotherapy. Baseline demographics were similar within both groups. The difference in scores between both groups was nonsignificant at baseline on any of the assessment scales. Treatment adherence was measured.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote: "randomized by the study site based on computer-generated random digit numbers by permuted blocks between 4 and 8."
Allocation concealment (selection bias)	Unclear risk	Comment: Allocation concealment was not reported. Participants were randomised at the study site.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Quote: "intention-to-treat analysis was performed to determine the relative effect between the two treatment groups for each periodic posttreatment assessment, and those between pre-PE (after the waiting period) and post-PE treatment in the control group (CAPS total score, IES-R, CES-D, and GHQ-28)." Comment: 3 dropped out from TFCBT, and one from TAU. A reason was only reported for one of these drop-outs.
Selective reporting (reporting bias)	Low risk	Comment: All specified and expected outcomes appear to have been reported.
Other bias	Low risk	Comment: There were no other obvious sources of bias.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "Two independent female masters-level psychologists, who were unaware of the patients' treatment group, performed all assessments at pre-treatment, posttreatment, and 3- and 6-month follow-up. The 12-month follow-up assessment was conducted via mail. Blindness was maintained by ensuring that the assessors had no access to group allocation and never talked with patients about which group they were in."

Basoglu 2005

Methods	Randomised controlled trial
Participants	59 earthquake survivors in Turkey with DSM-IV PTSD (50 women, 9 men)
Interventions	Single session of CBT (n = 31) vs waitlist control (n = 28)
Outcomes	CAPS, TSSC, FAQ, BDI, WSA
Notes	Treatment delivered by psychologists trained in the approach. Treatment adherence was measured.

Basoglu 2005 (Continued)

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote: "Random allocation was conducted according to a computer-generated randomization list. Blocking was used to ensure approximately equal cell sizes."
Allocation concealment (selection bias)	Low risk	Quote: "The participants were recruited into the study by four independent assessors, who did not have access to the random assignment schedule. The latter was implemented by the project coordinator, who did not take part in the assessments at any stage during the trial."
Incomplete outcome data (attrition bias) All outcomes	High risk	Quote: "As a result of case attrition after week 6, two types of end-point imputation analyses were carried out. First, the treatment effects were examined at each follow-up, carrying forward the scores of the non-improved non-completers at their last available assessment to subsequent follow-up points. As this procedure did not involve the improved non-completers and assumed that the non-improved non-completers would have remained non-improved had they stayed in the study, it led to a conservative analysis of the treatment effects." Comment: participants who did not have at least one follow-up after treatment were replaced. Eight individuals dropped out of treatment group and 2 from waitlist. No reasons were given.
Selective reporting (reporting bias)	Low risk	Comment: All specified and expected outcomes appear to have been reported.
Other bias	Low risk	Comment: Baseline demographics are poorly reported. Groups were reported to be similar in every baseline variable but gender (only 1 man in WL group vs 8 in the treatment group).
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote "The assessments were conducted by four independent assessors (three psychologists and one psychiatrist), who were blind as to the participants' experimental condition. A Blindness Integrity Assessment Form was used to elicit information about whether assessor blindness was maintained at the second assessment and the assessor's guess as to the study participant's experimental condition."

Basoglu 2007

Methods	Randomised controlled trial
Participants	31 earthquake survivors in Turkey with DSM-IV PTSD (27 women, 4 men)
Interventions	Single session of CBT (n = 16) vs repeated assessments (n = 15)
Outcomes	CAPS, FAQ, BDI, WSA, GIS-S, GIS-A

Basoglu 2007 (Continued)

Notes Treatment was delivered by therapists who were experienced in delivering the intervention on the basis of having done so as part of earlier trials.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote "A computer-generated sequence of random numbers that ensured equal cell sizes and did not lead to allocation of more than two consecutive cases to the same experimental condition was used in the randomization."
Allocation concealment (selection bias)	Low risk	Quote "Participants were enrolled by two independent assessors (psychologists) and randomizations was conducted by the second author, who did not participate in baseline assessments."
Incomplete outcome data (attrition bias) All outcomes	High risk	Comment: Participants who did not have at least one follow-up after treatment were replaced. ITT analyses were performed after this point. One person dropped out of treatment group. No one dropped out from waitlist group. No reasons were given.
Selective reporting (reporting bias)	Low risk	Comment: All specified and expected outcomes appear to have been reported.
Other bias	High risk	Comment: Treatment adherence was not assessed, since the treatment was said to closely reflect the way treatment was delivered in routine fieldwork. Poor reporting of baseline characteristics.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	High risk	Quote: "The assessors were blind as to the participants' experimental condition at the week 4 and week 8 assessments." Test of blinding included. However, 6 cases were followed up by therapists due to an unexpected shortage of funding.

Beck 2009

Methods	Randomised controlled trial
Participants	44 motor vehicle accident survivors (in the USA) with DSM-IV PTSD (36 women, 8 men)
Interventions	Group TF CBT (n = 17) vs minimum contact (n = 16)
Outcomes	CAPS, IES-R, BAI, BDI, ODI, PS-MPI
Notes	Experienced therapists. Treatment adherence was assessed, as was competence.

Risk of bias

Bias	Authors' judgement	Support for judgement
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Beck 2009 (Continued)

Random sequence generation (selection bias)	Unclear risk	Quote "Groups of four to seven individuals were formed as participants became eligible; a given group then was randomly assigned to either GCBT or MCC conditions." Comment: Method used to generate the allocation sequence is not described in sufficient detail to assess the probability that it would produce comparable groups.
Allocation concealment (selection bias)	Unclear risk	Quote "Groups of four to seven individuals were formed as participants became eligible; a given group then was randomly assigned to either GCBT or MCC conditions." Comment: There is no mention of any measures taken to conceal allocation
Incomplete outcome data (attrition bias) All outcomes	High risk	Comment: Completers data were analysed. 7 individuals dropped out of the treatment group and 2 from minimum contact. No reasons were given for drop-out.
Selective reporting (reporting bias)	Low risk	All specified outcomes appear to have been reported, although results are discussed in terms of completers.
Other bias	Low risk	Comment: There were no other obvious sources of bias.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote "Interviews for the POST and FU assessments were administered by an individual who had not conducted the pre-treatment assessment and was unaware of patients' treatment status and their time of assessment (POST versus FU)."

Bichescu 2007

Methods	Randomised controlled trial
Participants	18 former political detainees (in Romania) with PTSD (17 men, 1 woman)
Interventions	Narrative Exposure Therapy (n = 9) vs psychoeducation (n = 9)
Outcomes	CIDI, BDI
Notes	All treatment carried out by a PhD psychology student. Unclear whether adherence was measured, but supervision was provided by email.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	High risk	Quote: "Participants were assigned through a random selection procedure of participants name-cards to one of two treatment groups: NET and PED." Comment: It is unclear how exactly this was performed.

Bichescu 2007 (Continued)

Allocation concealment (selection bias)	Unclear risk	Comment: The authors do not report any methods of allocation concealment.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: No drop-outs.
Selective reporting (reporting bias)	Low risk	Comment: All specified and expected outcomes appear to have been reported.
Other bias	High risk	Comment: Very small sample size
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "Our intent was to perform a blinded assessment by keeping the interviewers unaware of the treatment condition and pre-test scores of the individual patients and by instructing the patients not to inform the interviewers about their treatment. However, due to the large differences in procedures and number of sessions between the two treatment conditions, it was not possible for us to achieve complete blindness in all cases. Occasionally, a patient revealed details about his treatment that might have affected the blindness of the interviewer."

Blanchard 2003

Methods	Randomised controlled trial
Participants	98 road traffic accident survivors in the USA (72 women, 26 men)
Interventions	8 - 12 sessions TFCBT (n = 27) vs 8 - 12 sessions supportive psychotherapy (n = 27) vs waiting list (n = 24) (all three arms included in meta-analyses)
Outcomes	IES,STAI
Notes	Therapists were practising psychologists, with over 5 years experience. Each had a cognitive behavioural orientation, but treated participants in both active treatment arms. Adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	High risk	Quote "The senior author matched participants into triads, based on the CAPS score and diagnosis, and then randomly assigned triads to a therapist and to conditions within the triad." Comment: Indicates that the method of sequence generation poses the potential for bias.
Allocation concealment (selection bias)	Unclear risk	Comment: there were no reported measures of allocation concealment.
Incomplete outcome data (attrition bias)	Low risk	Quote "When we could not obtain dropout assessment data, we substituted the initial assessment data in the intent to treat analysis." However, no re-

Blanchard 2003 (Continued)

All outcomes		sons were reported for drop-outs (10 from CBT, 9 from supportive psychotherapy, and 1 from waitlist).
Selective reporting (reporting bias)	Low risk	Comment: All specified and expected outcomes appear to have been reported.
Other bias	Low risk	Comment: no other sources of bias detected.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote "The assessors were kept blind to treatment condition."

Brom 1989

Methods	Randomised controlled trial
Participants	112 outpatients in the Netherlands. Various traumas, 89 bereaved. (88 women, 24 men)
Interventions	14 - 18 sessions of trauma desensitisation (n = 31), hypnotherapy (n = 29), psychodynamic therapy (n = 29) or waiting list (n = 23) (data could not be entered into meta-analysis, included only intrusion and avoidance sub-scales)
Outcomes	"trauma symptoms" on SCL-90
Notes	Therapists with over 10 years experience in the specific method. Therapists conducted the therapies they preferred outside the research setting (i.e. there were different therapists treating each treatment arm). Supervision sessions ensured adherence.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation is not reported. It is simply stated that treatment assignment was random.
Allocation concealment (selection bias)	Unclear risk	Comment: The method of sequence allocation is not reported,
Incomplete outcome data (attrition bias) All outcomes	High risk	Comment: There were no reported reasons for drop-out. There was inadequate statistical correction for these drop-outs. 3 individuals dropped out of each of the treatment arms.
Selective reporting (reporting bias)	Unclear risk	Quote: "We focus in this article on the data from the standardized questionnaires, disregarding the physiological and behavioral tests that were administered. The domains that were covered by the questionnaires were general symptoms, symptoms of the coping process, and personality." Comment: It is unclear whether it had originally been the intention to report the behavioural tests.

Brom 1989 (Continued)

Other bias	High risk	Comment: Inadequate reporting of baseline characteristics. Each treatment arm had its own dedicated therapists (i.e. differences in outcome may have been attributable to expertise as opposed to the intervention).
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Unclear risk	Comment: There is no mention of blinding outcome assessors.

Bryant 2003

Methods	Randomised controlled trial
Participants	58 outpatient survivors of non-sexual assaults or road traffic accidents in Australia (30 women, 28 men)
Interventions	8 weekly 90-minute sessions of imaginal exposure (n = 20), imaginal exposure/cognitive restructuring (n = 20) or supportive counselling (n = 18). (imaginal exposure and imaginal exposure/cognitive restructuring were combined for meta-analysis).
Outcomes	CAPS, IES, STAI, BDI
Notes	Therapists were masters level clinical psychologists. Treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote: "Randomization was conducted by a process of minimization stratified on gender, trauma type, and PTSD total score. Participants were randomly assigned according to a random numbers system and each month Richard A. Bryant amended the allocation to ensure that gender, trauma type, and PTSD severity were balanced across conditions."
Allocation concealment (selection bias)	Unclear risk	Comment: It is unclear if/how allocation was concealed.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Quote "Intent-to-treat values were devised by using a last-value-carried forward procedure to provide data for missing values that occurred because of dropout." Comment: Reasons for drop-out are not fully reported. ITT analyses were however reported. Drop-out by group was as follows: imaginal exposure (5), imaginal exposure/cognitive restructuring (5) or supportive counselling (3).
Selective reporting (reporting bias)	Low risk	Comment: All specified and expected outcomes appear to have been reported.
Other bias	Low risk	Comment: no other sources of bias detected.
Blinding of participants and personnel (performance bias)	High risk	Comment: Participants were aware of their allocation.

Bryant 2003 (Continued)

All outcomes

Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "Initial assessments were conducted at pretreatment, posttreatment, and 6-month follow-up by independent clinicians who were unaware of the treatment condition of participants. Blindness was maintained by ensuring that clinicians who conducted assessments did not have access to (a) participant notes, (b) treatment allocation of participants, or (c) supervision discussions of therapy sessions."
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Bryant 2011

Methods	Randomised controlled trial
Participants	28 survivors of terrorist attacks in Southern Thailand (27 women, 1 man)
Interventions	8 weekly 60-minute sessions of CBT (n = 16) vs TAU (n = 12)
Outcomes	PSS, BDI, ICG
Notes	Therapy was conducted by Thai psychologists or psychiatric nurses who were trained to use the treatment manual in 3 2-day workshops occurring over 12 months. They had no previous experience of CBT. During the trial itself, therapists conducted treatment without formal supervision. TAU comprised the equivalent number of sessions of supportive counselling being provided by psychiatrists who were not trained in CBT. Adherence was not assessed, but checklists indicated components of treatment completed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote: "Patients were randomised according to a random numbers system administered by health officials in Bangkok (fully independent of counsellors and the study co-ordinator)."
Allocation concealment (selection bias)	Low risk	Quote: "Patients were randomised according to a random numbers system administered by health officials in Bangkok (fully independent of counsellors and the study co-ordinator)." Comment: Allocation was independent and remote from study site.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Quote: "There were no treatment drop-outs, and so analyses focus on all patients who were randomised into the study."
Selective reporting (reporting bias)	Low risk	Comment: All specified and expected outcomes appear to have been reported.
Other bias	High risk	Recruitment was terminated prematurely due to health workers being targeted by the terrorists. Small sample size (n = 28)
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.

Bryant 2011 *(Continued)*

Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "Assessments conducted at post-treatment and 3 months following treatment were conducted by independent personnel unaware of patients' treatment condition."
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Carlson 1998

Methods	Randomised controlled trial
Participants	35 men with combat-related PTSD in Hawaii
Interventions	12 bi-weekly sessions of 60-75 minutes EMDR (n = 10) vs 40 minutes biofeedback-assisted relaxation vs routine care (n = 13) vs TAU (n = 12) (all interventions included in meta-analysis)
Outcomes	Mississippi PTSD scale, IES, STAI, BDI
Notes	Experienced therapists

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: The method of allocation concealment (if any) was not reported.
Incomplete outcome data (attrition bias) All outcomes	High risk	Comment: There was 1 drop-out from the biofeedback-assisted relaxation. There was no reason given for this drop-out. These were not properly accounted for in terms of statistical tests.
Selective reporting (reporting bias)	Low risk	Comment: All specified and expected outcomes appear to have been reported. The CAPS is emphasised as the primary outcome measure throughout.
Other bias	Unclear risk	Comment: There were no other obvious sources of bias.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	High risk	Comment: Assessors were not blind, although a second CAPS was administered by a blind assessor.

Chard 2005

Methods	Randomised controlled trial
Participants	71 female child sexual abuse survivors in the USA

Chard 2005 (Continued)

Interventions	17 weekly 90-minute group sessions of cognitive processing therapy for sexual abuse survivors and a 60-minute individual session for first 9 weeks and 17th week (n = 36) vs minimal attention (weekly 5 to 10-minute phone call providing supportive counselling) (n = 35)
Outcomes	CAPS, MPSS, BDI-II, DES-II
Notes	Experienced therapists delivered therapy and treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: The method of allocation concealment (if any) was not reported.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: ITT analyses were conducted. No reasons were given for withdrawals from the study (8 in the treatment arm and 7 from the minimal-attention group.)
Selective reporting (reporting bias)	Unclear risk	Comment: All specified and expected outcomes appear to have been reported.
Other bias	Low risk	Comment: There were no other obvious sources of bias.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "Research assistants blind to the assigned condition of the subject conducted all interviews, and treatment completers were asked not to mention having been in therapy at posttreatment assessments."

Cloitre 2002

Methods	Randomised controlled trial
Participants	58 female child sexual abuse survivors in the USA
Interventions	16 bi-weekly sessions of 1½ hours of prolonged exposure and affect regulation (n = 22) vs waitlist (n = 24)
Outcomes	CAPS, BDI, STAI
Notes	Experienced therapists. Treatment adherence measured.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.

Cloitre 2002 (Continued)

Allocation concealment (selection bias)	Unclear risk	Comment: The method of allocation concealment (if any) was not reported.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: There was a relatively high drop-out rate (9 from active treatment, 3 from the waitlist). There were no reasons given for drop-outs, but there were said to be no sociodemographic, clinical or symptom differences between completers and drop-outs. ITT analyses were performed
Selective reporting (reporting bias)	High risk	There is emphasis on reporting improvements in affect regulation and interpersonal skills as opposed to PTSD symptoms. The Methods section does not seem to indicate that these were the primary outcome measures.
Other bias	Low risk	Comment: There were no other obvious sources of bias.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "Clinician raters were blind to treatment condition at pre- and post-treatment."

Cloitre 2010

Methods	Randomised controlled trial
Participants	104 female child sexual abuse survivors in the USA
Interventions	STAIR/exposure vs support/exposure vs STAIR/support
Outcomes	CAPS, PSS-SR, negative mood regulation scale, BDI, STAI, Inventory of Interpersonal Problems, Interpersonal Support Evaluation List
Notes	Treatment was delivered by doctoral level psychologists, who had been trained by leading experts in the field. Adherence was measured.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Low risk	Quote "Randomization blocks of nine (three instances of each of the three conditions) were employed, generated by an individual not otherwise involved with the study. Within each randomly assigned condition, the participant was assigned to one of three therapists, based on a match in availability."
Incomplete outcome data (attrition bias) All outcomes	Low risk	Quote: "Analyses for all symptom outcome measures were performed on the intent-to-treat sample using data from all participants according to their randomizations assignment. Missing data were imputed using PROC MI in SAS (SAS Institute, Cary, N.C.) to generate 10 imputed data sets."

Cloitre 2010 (Continued)

Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	Low risk	Comment: There were no other obvious sources of bias.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Comment: Assessors were blinded.

Cooper 1989

Methods	Randomised controlled trial
Participants	16 male Vietnam War veterans in the USA. All DSM-III PTSD
Interventions	6 - 14 90-minute flooding sessions plus standard treatment (n = 8) vs standard treatment (n = 8)
Outcomes	STAI, BDI
Notes	No information was provided with regards to the therapists delivering treatment or any measures of treatment adherence.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	High risk	Quote: "Efforts were made to preclude bias in assessment by maintaining as nearly random a procedure as possible" Comment: There were no details of the method of sequence generation, but the authors indicate that it was not entirely random.
Allocation concealment (selection bias)	High risk	Quote: "In all cases group assignment was pre-decided before the participant agreed to participate...there were three exceptions to the rule of pre-determined random assignment" Comment: Allocation does not seem to have been concealed.
Incomplete outcome data (attrition bias) All outcomes	High risk	All 16 participants provided posttreatment data, but 2 were removed from the analysis of data from the experimental group due to not completing therapy (1 from each group). These individuals were said to have a more severe presentation.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: Very small sample.
Blinding of participants and personnel (performance bias)	High risk	Comment: Participants were aware of their allocation.

Cooper 1989 (Continued)

All outcomes

Blinding of outcome assessment (detection bias) All outcomes	Unclear risk	Self-report measures only, but it is not clear how these were administered.
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Devilley 1998

Methods	Randomised controlled trial
Participants	51 male combat veterans with DSM-III-R PTSD in Australia
Interventions	12 sessions of EMDR (n = 19) vs biofeedback-assisted relaxation (n = 16) vs routine clinical care (n = 16) (all interventions included in meta-analyses)
Outcomes	Mississippi scale, PTSD symptom scale, IES, STAI, BDI
Notes	Therapist trained by Francine Shapiro. No mention of an assessment of treatment adherence.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	High risk	Comment: There were no reasons given for drop-outs (6 drop-outs from EMDR, 4 drop-outs from relaxation and 6 drop-outs from usual care). Data from the completers were analysed.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported,
Other bias	Low risk	There were no other obvious sources of bias.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Comment: All measures were self-reported and administered by post.

Devilley 1999

Methods	Randomised controlled trial
Participants	32 participants with DSM-III-R PTSD (11 men, 21 women) in Australia

Devilley 1999 (Continued)

Interventions	8 sessions EMDR (n = 17) vs 9 sessions TFCBT (n = 15) in parallel.
Outcomes	BDI, SCL-90 Global distress, CMS, IES, PSS-SR, PTSD Interview (DSM-III-R)
Notes	Therapists were appropriately trained and experienced. Treatment adherence was measured.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	High risk	Quote: "Participants were assigned to their experimental group using a stratified randomization technique: the first 10 referrals were assigned to the TTP condition (after a 50% chance of either TTP or EMDR) and the following 10 were assigned to the EMDR condition. This was done in order to consolidate therapist skills in each protocol and offset cross-pollination of the two, different, therapeutic protocols. Subsequently, subjects were assigned alternatively to the two conditions until a full cohort was obtained in each condition."
Allocation concealment (selection bias)	Unclear risk	Comment: It is unclear whether any measures were in place for concealing allocation.
Incomplete outcome data (attrition bias) All outcomes	High risk	Comment: Only the data of completers were included in analyses.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: There were differences in the baseline characteristics of the two groups, for example, medication profiles (which were continued through the course of the trial).
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Unclear risk	Comment: It is unclear whether outcome assessors were blinded.

Duffy 2007

Methods	Randomised controlled trial
Participants	58 participants mostly resulting from the troubles in Northern Ireland (23 women, 35 men)
Interventions	12 weekly sessions of cognitive therapy (n = 29) vs waiting list (n = 29). Cross-over trial.
Outcomes	PDS, BDI, SDS
Notes	Experienced therapists (1 social worker, 1 psychiatrist, and 3 nurse therapists). Treatment adherence does not seem to have been assessed.

Risk of bias

Duffy 2007 (Continued)

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported. Participants were randomised remotely.
Allocation concealment (selection bias)	Low risk	Quote: "An independent office allocated patients to immediate therapy or to wait followed by therapy on a stratified random basis using the minimisation method of Pocock. Assessors were not aware of the allocation algorithm".
Incomplete outcome data (attrition bias) All outcomes	Low risk	Quote: "We carried out analyses on an intention to treat basis". Reasons for drop-out were reported (9 from cognitive therapy and 3 from waiting list).
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported,
Other bias	High risk	Treatment adherence was not measured.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Unclear risk	Comment: Measures were self-reported, but it is unclear how these were administered.

Dunne 2012

Methods	Randomised controlled trial
Participants	26 adults (13 men, 13 women) with chronic motor vehicle collision PTSD with chronic whiplash-associated disorders, in Australia
Interventions	10 weekly sessions of TFCBT (n = 13) vs waiting list (n = 13)
Outcomes	SCID-PTSD, PDS, IES-R, DASS, SF-36
Notes	Comment: All therapy delivered by 1 psychologist with 12 months experience of delivering TFCBT. It is unclear whether or not treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: Reasons for leaving the study were fully reported, ITT analyses were performed. Appropriate methods of imputing data were used. One participant dropped out of the treatment group and 2 from the waitlist group. Reasons for attrition were not fully reported.

Dunne 2012 (Continued)

Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: All therapy delivered by 1 psychologist with 12 months experience of delivering TFCBT. It is unclear whether or not treatment adherence was assessed.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Unclear risk	Comment: It is unclear whether the outcome assessor was blind.

Echeburua 1997

Methods	Randomised controlled trial
Participants	20 female sexual aggression survivors in Spain
Interventions	6 weekly sessions of graded self exposure (n = 10) vs relaxation therapy (n = 10)
Outcomes	Global PTSD scale, STAI, BDI
Notes	Treatment delivered by an experienced clinical psychologist. Treatment adherence was not measured.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: No drop-outs.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: Small sample size. Treatment adherence was not measured.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Unclear risk	Comment: It is unclear whether assessors were blinded.

Ehlers 2003

Methods	Randomised controlled trial
Participants	69 participants with duration of PTSD greater than 3 months from a larger RCT of 85 participants with DSM-IV PTSD in the UK. Various traumas.
Interventions	12 x weekly sessions of CT (n = 22) vs repeated assessment (n = 20) vs self help (n = 27) (CT and repeated assessment included in a meta-analysis).
Outcomes	CAPS, PDS, BDI, BAI
Notes	Therapist details/credentials are not reported and it is unclear whether treatment adherence was measured.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Quote: "Randomization was stratified by sex and severity of PTSD symptoms using the random permuted blocks within strata algorithm." Comment: The method of random sequence generation was not reported.
Allocation concealment (selection bias)	Low risk	Quote: "Assessors who decided whether patients were suitable for inclusion in the study could not predict what treatment condition would be assigned to the patient, as (1) the allocation list was kept locked in a separate central office and the patient's allocation was only revealed 3 weeks later, following the self-monitoring assessment, and (2) the study was conducted at 2 sites."
Incomplete outcome data (attrition bias) All outcomes	High risk	Quote: "As the most conservative estimate of the efficacy of CT, we report a completer analysis for the continuous outcome measures, comparing the full sample of patients allocated to CT (as there were no dropouts) with the completers in the SH and RA conditions." There were three drop-outs from self help and two from repeated assessment. Reasons for drop-outs were fully reported.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: Therapist details/credentials are not reported and it is unclear whether treatment adherence was measured.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "Independent assessors (trained clinical psychologists or research nurses) who were not aware of the treatment condition gave the Clinician-Administered PTSD Scale (CAPS-SX) interview." Comment: There was a test of blinding.

Ehlers 2005

Methods	Randomised controlled trial
Participants	28 individuals with DSM-IV PTSD in the UK. Various traumas.
Interventions	12 x weekly sessions of CT (n=14) vs WL (n=14)
Outcomes	CAPS, PDS, BDI, BAI
Notes	Therapist details/credentials are not reported and it is unclear whether treatment adherence was measured.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Quote: "Patients were randomly allocated to either immediate cognitive therapy" Comment: The method of randomisation is clear.
Allocation concealment (selection bias)	Unclear risk	Comment: The method of allocation concealment was unclear.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: ITT analyses were performed.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: Therapist details/credentials are not reported and it is unclear whether treatment adherence was measured.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: Independent assessors were used.

Fecteau 1999

Methods	Randomised controlled trial
Participants	23 road traffic accidents in Canada. 14 women, 6 men completed the study. It is unclear how many men and women entered the study originally
Interventions	8 - 10 hours CBT (n = 12) vs waitlist (n = 11)
Outcomes	CAPS, IES, BDI, BAI
Notes	Experienced therapists delivered therapy and treatment adherence was assessed

Fecteau 1999 (Continued)

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote: "participants were then randomly assigned to the treatment or WLC groups by the flip of a coin".
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	High risk	Comment: 2 participants dropped out of the treatment group and 1 dropped off the waitlist. Reasons for attrition are reported. Only the data of completers are included in the analysis.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported, although the lack of effect on the measure of depression is not divulged in the abstract.
Other bias	High risk	Comment: Small sample size.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Unclear risk	Comment: Outcome measures were rated by an "independent assessor".

Feske 2008

Methods	Randomised controlled trial
Participants	27 low-income African-Americans with complex trauma histories and
Interventions	9 - 12 weekly sessions of PE vs 9 - 12 sessions of non-TF supportive counselling DSM-IV PTSD
Outcomes	PTSD Diagnostic Scale, BDI, BAI, BSQ, Anger Expression Inventory, Brief Symptom Inventory
Notes	

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	High risk	Comment: Drop-outs reported (2 for unknown reasons). Completers Analysis.

Feske 2008 (Continued)

Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: Small sample size.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Unclear risk	Comment: It is unclear whether outcome assessors were blinded.

Foa 1991

Methods	Randomised controlled trial
Participants	55 female rape victims in the USA. All DSM-III-R PTSD
Interventions	9 1½-hour sessions of prolonged exposure (n = 14) vs stress inoculation training (n = 17) vs supportive counselling (n = 14) vs waiting list (n = 10) control (all interventions included in meta-analyses).
Outcomes	PTSD severity, BDI, STAI
Notes	Experienced therapists delivered therapy and treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	High risk	Quote: "Subsequent analyses were conducted on data from the 45 completers." Comment: 10 participants dropped out of treatment (prolonged exposure (4) vs stress inoculation training (3) vs supportive counselling (3) vs waiting list control (0)). No reasons reported for drop-outs.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	Low risk	Comment: There were no other obvious sources of bias.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.

Foa 1991 (Continued)

Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "Assessments at pre-treatment, posttreatment, and follow-up consisted of clinical interviews conducted by an independent assessor, who was blind to treatment conditions, and self report questionnaires"
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Foa 1999

Methods	Randomised controlled trial
Participants	96 female sexual assault victims (69 sexual assault) in the USA
Interventions	9 sessions (2 x 2 hours, 7 x 1½ hours) prolonged exposure (n = 25) vs stress inoculation training (n = 26) vs combination PE-SIT (n = 30) vs waiting list (n = 15) (all interventions included in meta-analyses).
Outcomes	PSS-I, BDI, STAI
Notes	Experienced therapists delivered therapy and treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: ITT analyses performed. 17 participants dropped out of treatment (2 from prolonged exposure, 7 from SIT and 8 from PE-SIT).
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: There were no other obvious sources of bias.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "Independent evaluators... were unaware of treatment assignment".

Foa 2005

Methods	Randomised controlled trial
Participants	171 female sexual assault survivors in the USA

Foa 2005 (Continued)

Interventions	9 - 12 weekly 90- to 120-minute sessions of prolonged exposure (n = 79) vs 9 - 12 weekly 90- to 120-minute sessions of prolonged exposure and cognitive restructuring (n = 74) vs waiting list (n = 26) (all interventions included in meta-analyses).
Outcomes	PSS-I, BDI, SAS
Notes	Experienced therapists delivered therapy and treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Quote: "The study statistician assigned participants who provided informed consent to one of the three conditions using a weighted randomizations procedure such that participants were assigned to one of the active treatment conditions at a greater rate than to WL." Comment: Although reported to be carried out by a statistician, the method of sequence generation is unclear.
Allocation concealment (selection bias)	Low risk	Quote: "The study statistician assigned participants who provided informed consent to one of the three conditions using a weighted randomizations procedure such that participants were assigned to one of the active treatment conditions at a greater rate than to WL." Comment: Participants were assigned to a group by an external person.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: ITT analyses were performed. Reasons for drop-out were not fully reported. There were many drop-outs (1 from waiting list, 30 from PE/CR and 27 from PE).
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported
Other bias	Low risk	Comment: There were no other obvious sources of bias.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "All evaluations were conducted by trained doctoral or master's level CTSA clinicians who were blind to study condition." "Participants were instructed by their therapists and the evaluators to not reveal any information that might unblind the evaluator to treatment condition."

Forbes 2012

Methods	Randomised controlled trial
Participants	59 veterans (57 men) with military-related PTSD in Australia
Interventions	12 sessions of cognitive processing therapy (n = 30) vs treatment as usual (n = 29)

Forbes 2012 (Continued)

Outcomes	CAPS, PCL, BDI-II, STAI-State, DAR-7, AUDIT, PTCI, ADAS, WHOQOL	
Notes	Experienced therapists delivered therapy and treatment adherence was assessed.	
Risk of bias		
Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of random sequence generation was not reported.
Allocation concealment (selection bias)	Low risk	Comment: A central method of allocation was employed.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: Reasons for leaving the study were fully reported, ITT analyses were performed. Appropriate methods of imputing data were used. 9 participants dropped out of each group. Reasons for attrition are not fully reported.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: Different therapists provided CPT and TAU.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Unclear risk	Quote: "All assessments were conducted by an independent clinical assessor blind to allocation and treatment. To maintain blindness at post-treatment and 3 month follow-up appointments the participants were reminded not to reveal what treatment they had received."

Galovski 2012

Methods	Randomised controlled trial (cross-over)	
Participants	100 individuals (unclear how many were men and women) with PTSD after sexual or physical assault in childhood or adulthood in the USA	
Interventions	CPT (n = 47) vs symptom monitoring delayed treatment (n = 53)	
Outcomes	CAPS, BDI-II, TRGI, QOLI, SF-36	
Notes	Experienced therapists delivered therapy and treatment adherence was assessed.	
Risk of bias		
Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.

Galovski 2012 (Continued)

Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: 7 participants dropped out of symptom monitoring delayed treatment and 14 dropped out of CPT. The reason for drop-out was unknown in 50% of cases. ITT analyses were performed.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	Low risk	Comment: There were no other obvious sources of bias.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "Posttreatment and follow-up assessments were conducted by raters blind to both randomization and dropout status."

Gamito 2010

Methods	Randomised controlled trial
Participants	10 male war veterans of the Portugese Colonial War between 1963 and 1970 with DSM-IV PTSD
Interventions	Virtual reality exposure (n = 5) vs exposure in imagination versus WL (n = 3) vs exposure in imagination (n = 3) in parallel
Outcomes	CAPS, IES
Notes	Comment: It is unclear who delivered the therapy

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Quote: "The participants were randomly assigned to three study groups". Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Unclear risk	Comment: There was 1 drop-out (from virtual reality exposure) without a reason. It is unclear how these missing data were handled.
Selective reporting (reporting bias)	High risk	Comment: Improvements in depression and anxiety were emphasised, despite measures of PTSD being indicated as the primary outcome measure.
Other bias	High risk	Very small sample size. It is unclear who delivered the therapy. Treatment adherence was not measured. Baseline characteristics are poorly reported. The issue of researcher allegiance cannot be ruled out.
Blinding of participants and personnel (performance bias)	High risk	Comment: Participants were aware of their allocation.

Gamito 2010 (Continued)

All outcomes

Blinding of outcome assessment (detection bias) All outcomes	Unclear risk	Comment: It is unclear whether outcome assessors were blinded.
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Gersons 2000

Methods	Randomised controlled trial
Participants	42 police officers. DSM-III-R PTSD. Various workplace traumas (5 women, 37 men) in the Netherlands
Interventions	16 x 60-minute sessions of brief eclectic therapy (n = 22) vs wait list (n = 20) in parallel
Outcomes	SI-PTSD, SCL-90
Notes	Experienced therapists delivered therapy. It is unclear whether or not treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: ITT analyses were conducted. Only 1 participant dropped out, from the waitlist. A reason was given for this individual leaving the study.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: The issue of researcher allegiance cannot be ruled out.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "All assessments were performed by one of three independent assessors".

Hensel-Dittmann 2011

Methods	Randomised controlled trial
Participants	28 asylum seekers who had experienced war and torture

Hensel-Dittmann 2011 (Continued)

Interventions	Narrative Exposure Therapy (n = 15) vs Stress Inoculation Therapy (n = 13)
Outcomes	CAPS, HAM-D
Notes	Experienced therapists delivered therapy and treatment adherence was assessed

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote: "Subjects were randomly assigned to either NET or SIT. Participants were matched pairwise according to gender, age, and region of origin and were then allocated to NET or SIT by flipping a coin."
Allocation concealment (selection bias)	Low risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Quote: "Aiming at an intention-to-treat analysis, all subjects who were randomised were included in the outcome analysis. Much of the recent literature indicates that last-observation- carried-forward procedures may produce seriously biased results. Hence we used mixed effects models." Comment: There were 3 drop-outs from TFCBT and 2 from non-TFCBT.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	Low risk	Comment: There were no other obvious sources of bias.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote "We aimed to keep the assessors blind to the treatment conditions of the subjects; however, occasionally the treatment condition was revealed to the rater by responses from the patient."

Hinton 2005

Methods	Randomised controlled trial
Participants	40 treatment-resistant Cambodian refugees with comorbid panic attacks (24 women, 16 men)
Interventions	12 weekly sessions of CBT (n = 10) vs delayed treatment (n = 10)
Outcomes	CAPS, ASI, N-PASS, O-PASS, N-FSS, O-FSS, SCL
Notes	Experienced therapists delivered therapy. It is unclear whether or not treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
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Hinton 2005 (Continued)

Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Quote: "All randomised patients completed the study, and there were no missing data."
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	Low risk	Comment: There were no other obvious sources of bias.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "Blind to treatment condition, all assessments were made by a Cambodian bicultural worker (D.C., V.P.) with over 2 years of mental health experience."

Hinton 2011

Methods	Randomised controlled trial
Participants	24 Latino women with treatment-resistant PTSD
Interventions	14 weekly sessions of TF CBT (n = 12) vs applied muscle relaxation (n = 12)
Outcomes	PTSD checklist, nervios scale, emotion regulation scale, SCL anxiety scale
Notes	Experienced therapists delivered therapy. It is unclear whether or not treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: There were no drop-outs.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Small sample size.

Hinton 2011 (Continued)

		Participants continued medication and supportive therapy. Details were not reported.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Unclear risk	Self-report questionnaires were used, but not clear how they were administered

Hogberg 2007

Methods	Randomised controlled trial
Participants	24 transportation workers with DSM-IV PTSD (19 men, 5 women) in Sweden.
Interventions	EMDR (n = 13) vs waitlist (n = 11)
Outcomes	GAF, HAM-A, HAM-D, IES, BAI
Notes	Experienced therapists delivered therapy and treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote "The randomisation was done by picking a sealed ballot in the presence of a research nurse who coordinated the study and followed the participants through all phases."
Allocation concealment (selection bias)	Unclear risk	Comment: The method of random sequence generation was not reported.
Incomplete outcome data (attrition bias) All outcomes	High risk	Quote: "We decided not to use an intention to treat analysis because there were no drop-outs during EMDR". Comment: 2 individuals dropped out of the waitlist group.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: Small sample size.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "by a psychiatrist not otherwise engaged in the study and blind to the experimental condition of the participants."

Hollifield 2007

Methods	Randomised controlled trial
Participants	84 individuals with DSM-IV PTSD, various traumas in the USA
Interventions	CBT (n = 28) vs acupuncture (n = 29) vs WL (n = 27) (CBT and WL included in a meta-analysis).
Outcomes	PSS-SR, HSCL-25, Sheehan Disability Scale
Notes	There were no reported assessments of treatment fidelity, and little information about the individuals who delivered the treatments.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote: "before enrolling participants, 90 study ID numbers were pre-randomized using a computerized random numbers procedure without restrictions. This allocation procedure was concealed from clinicians."
Allocation concealment (selection bias)	Low risk	Quote: "before enrolling participants, 90 study ID numbers were pre-randomized using a computerized random numbers procedure without restrictions. This allocation procedure was concealed from clinicians."
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: ITT analyses were performed using acceptable methods. Reasons for withdrawal were fully reported (10 from acupuncture, 7 from CBT and 27 from wait list).
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: Each intervention was delivered by a single practitioner. There were no reported assessments of treatment fidelity, and little information about the individuals who delivered the treatments.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Self-report measures only. Quote "The RC collected the data which were concealed from investigator/clinician."

Ironson 2002

Methods	Randomised controlled trial
Participants	22 victims of various traumas with DSM-III-R PTSD (17 women, 5 men) in the USA
Interventions	3 preparatory sessions followed by 1 - 3 sessions of EMDR (n = 10) or prolonged exposure (n = 12)
Outcomes	PSS-SR, BDI

Ironson 2002 (Continued)

Notes Experienced therapists delivered therapy and treatment adherence was assessed. Therapists delivered both treatments.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: ITT analyses were performed. Reasons for drop-out were not fully reported (1 from EMDR, 6 from TFCBT).
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: Baseline characteristics are poorly reported. Small sample size.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	High risk	Comment: All measures were self report, but assessors were not blind.

Jensen 1994

Methods	Randomised controlled trial
Participants	29 male Vietnam War veterans with PTSD in the USA
Interventions	3 sessions of EMDR (n = 15) usually within 10 days vs usual care (n = 14)
Outcomes	SI-PTSD
Notes	Experienced therapists delivered therapy. It is unclear whether or not treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.

Jensen 1994 (Continued)

Incomplete outcome data (attrition bias) All outcomes	High risk	Comment: Only the data of completers are included in the analysis. Reasons for drop-outs were not fully reported. 2 participants dropped out from each group.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: Small sample size. Baseline characteristics are poorly reported. Unclear whether treatment adherence was measured.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Unclear risk	Comment: It is unclear whether outcome assessors were blinded.

Keane 1989

Methods	Randomised controlled trial
Participants	24 male Vietnam War veterans with DSM-III-R PTSD in the USA
Interventions	14 - 16 sessions implosive (flooding) (n = 11) versus waiting list control (n = 13)
Outcomes	PTSD subscale, BDI, STAI
Notes	Experienced therapists delivered therapy. It is unclear whether or not treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Unclear risk	There is emphasis in the reporting on those scales where improvements were evident.
Selective reporting (reporting bias)	Unclear risk	Comment: Only the data of completers are included in the analysis. One participant dropped out of each group.
Other bias	High risk	Comment: Small sample size. Poor reporting of baseline characteristics. Unclear whether or not treatment adherence was measured.
Blinding of participants and personnel (performance bias)	High risk	Comment: Participants were aware of their allocation.

Keane 1989 *(Continued)*

All outcomes

Blinding of outcome assessment (detection bias) All outcomes	High risk	Quote: "therapists rated their own patients progress following treatment."
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Kearney 2013

Methods	Randomised controlled trial
Participants	47 veterans (37 men) with chronic PTSD in the USA
Interventions	Mindfulness-Based Stress Reduction (MBSR) (n = 25) group intervention vs TAU (n = 22)
Outcomes	PCL, PHQ-9, BADS, SF-8, FFMQ
Notes	Therapist credentials/experience is not reported. It is unclear whether or not treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of random sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Quote: "assessment subjects were randomized using concealed allocation to the intervention group" - precise methods of allocation concealment were not reported.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: Reasons for leaving the study were fully reported, ITT analyses were performed. Appropriate methods of imputing data were used. 2 participants dropped out from the treatment group and 1 from the waitlist.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: Therapist credentials/experience is not reported. It is unclear whether or not treatment adherence was assessed.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Unclear risk	There is no mention of the blinding of assessors. Measures were self report.

Krakow 2000

Methods	Randomised controlled trial
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Krakow 2000 (Continued)

Participants	169 female sexual abuse survivors reporting nightmares at least once a week in the USA
Interventions	3 sessions (2 x 3-hour 1 week apart and 1 x 1-hour follow-up 3 weeks later) of cognitive imagery rehearsal for nightmares (n = 87) vs waiting list (n = 82).
Outcomes	Nightmare Frequency Questionnaire, PSS, Pittsburgh Sleep Quality Index, Nightmare Effects Survey
Notes	It is unclear who delivered the intervention or whether or not treatment adherence was measured.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	High risk	Quote: "The main analysis was conducted on the 91 completers". The drop-out rate was very high and reasons for leaving the study were not fully reported.
Selective reporting (reporting bias)	High risk	Comment: Completer data were reported despite a very high drop-out rate.
Other bias	High risk	Comment: The issue of researcher allegiance cannot be ruled out.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Unclear risk	Comment: All measures were self-reported but it is unclear how these were administered.

Krakow 2001

Methods	Randomised controlled trial
Participants	168 female sexual assault survivors. 95% DSM-III-R PTSD in the USA
Interventions	2 x 3-hour and 1 x 1-hour sessions of group imagery rehearsal (n = 88) versus waiting list (n = 80)
Outcomes	PSS
Notes	Therapist credentials/experience is not reported. It is unclear whether or not treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
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Krakow 2001 (Continued)

Random sequence generation (selection bias)	Unclear risk	Quote: "To mask treatment assignment, patients mailed back a postcard after intake to complete entry into the protocol The postcard's time and date were logged into a computer and entered into a previously generated list of numbers that randomly assigned participants to treatment and control groups. All numbers and group assignments were generated at the start of the protocol". Comment: The method of sequence generation was not reported
Allocation concealment (selection bias)	Low risk	Quote: "To mask treatment assignment, patients mailed back a postcard after intake to complete entry into the protocol The postcard's time and date were logged into a computer and entered into a previously generated list of numbers that randomly assigned participants to treatment and control groups. All numbers and group assignments were generated at the start of the protocol".
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: ITT analyses were performed. 20 withdrew from waitlist and 22 from the treatment group. Reasons for attrition are not fully reported.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported
Other bias	High risk	Comment: The issue of researcher allegiance cannot be ruled out. Therapist credentials/experience is not reported. It is unclear whether or not treatment adherence was assessed.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote "To limit external bias, blinding occurred at 3 points of data collection: (1) at intake, group assignment had not been established; (2) at 3-month follow-up, questionnaires were completed through the mail; and (3) at 6-month follow-up, interviewers were unaware of group status."

Kubany 2003

Methods	Randomised controlled trial
Participants	37 female survivors of assault in Hawaii
Interventions	8 - 11 bi-weekly 90-minute sessions of cognitive trauma therapy (n = 19) vs waitlist with delayed treatment (n = 18)
Outcomes	CAPS, BDI
Notes	Lead author was therapist for all participants. It is unclear whether treatment adherence was addressed

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Quote: "After these assessments, the women were randomly assigned to either an Immediate or a Delayed CTT-BW condition."

Kubany 2003 (Continued)

		Comment: The method of random sequence generation was not reported,
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: ITT analyses. 1 participant dropped out from the treatment group and 4 from the waitlist.
Selective reporting (reporting bias)	Unclear risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: The issue of researcher allegiance cannot be ruled out. Lead author originated CTT-BW and conducted all therapy.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "The assessors were blind to participants' condition assignments."

Kubany 2004

Methods	Randomised controlled trial
Participants	125 female survivors of assault in Hawaii
Interventions	8 - 11 bi-weekly 90-minute sessions of cognitive trauma therapy (n = 63) vs waitlist (n = 62)
Outcomes	CAPS, BDI
Notes	Experienced therapists delivered therapy and treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: ITT analyses. Data were only available for 84 participants posttreatment. 22 dropped out of waitlist and 18 from TFCBT.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: The issue of researcher allegiance cannot be ruled out.

Kubany 2004 (Continued)

Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Comment: Assessors were blinded

Lee 2002

Methods	Randomised controlled trial
Participants	24 DSM-IV PTSD sufferers. Various traumas (11 women, 13 men) in Australia.
Interventions	7 weekly 90-minute sessions of stress inoculation training with prolonged exposure (n = 12) vs EMDR (n = 12)
Outcomes	SI-PTSD, IES, BDI
Notes	Experienced therapists delivered therapy and treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Quote: "There was random assignment to all conditions and multiple therapists were used to deliver each of the treatments." Comment: The method of random sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Quote: "treatment non-completers were included in the analysis". Comment: 3 participants dropped out from treatment, 1 from EMDR and one from stress management. It is unclear what group the third drop-out was in. Reasons for drop-out were not fully reported.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: Small sample size.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "assessments by a blind independent observer".

Lindauer 2005

Methods	Randomised controlled trial
Participants	24 DSM-IV PTSD sufferers. Various traumas (11 men, 13 women) in the Netherlands
Interventions	16 weekly 45- to 60-minute sessions of Brief Eclectic Psychotherapy (n = 12) vs waiting list (n = 12)
Outcomes	SI-PTSD, HADS
Notes	Experienced therapists delivered therapy and treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote: "A colleague who had done no assessments used a computer program to randomly assign 12 patients to each condition in a block design."
Allocation concealment (selection bias)	Low risk	Quote: "A colleague who had done no assessments used a computer program to randomly assign 12 patients to each condition in a block design."
Incomplete outcome data (attrition bias) All outcomes	Low risk	Quote: "Intention-to-treat and per-protocol analyses were calculated." Comment: 5 participants dropped out of the treatment group and 1 from the waitlist group. Reasons were fully reported.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: Small sample size.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation. The issue of researcher allegiance cannot be ruled out.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "Each patient was assessed by a researcher (R.J.L.L. or E.P.M.M.), who were blind to all patients' condition."

Marcus 1997

Methods	Randomised controlled trial
Participants	67 DSM-III-R PTSD. Various traumas. (53 women, 14 men) in the USA
Interventions	Variable number of 50-minute sessions of EMDR (n = 34) vs standard care (n = 33)
Outcomes	IES, M-PTSD, BDI, STAI, SCL-90
Notes	Therapists were psychologists with experience ranging from less than one year to over 18. It is unclear what experience the therapists delivering usual care had. There was no report of assessing treatment adherence.

Risk of bias

Marcus 1997 (Continued)

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Unclear risk	Comment: 1 participant dropped out of each group. It is unclear how this was handled.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: The usual care group, which included an array of interventions was not aimed at being optimally effective in terms of reducing symptom severity. There is little detail regarding the interventions offered as part of usual care and the credentials/experience of therapists delivering these interventions is not reported.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	High risk	Quote: "It was not possible to keep the independent evaluator blind to the treatment condition".

Marks 1998

Methods	Randomised controlled trial
Participants	87 DSM-III-R PTSD, various traumas, in the UK
Interventions	10 x 90-minute sessions of exposure (n = 23) vs cognitive restructuring (n = 19) vs exposure and cognitive restructuring (n = 24) vs relaxation therapy (n = 21) (the three exposure/cognitive-restructuring groups were combined).
Outcomes	CAPS, IES, BDI, STAI
Notes	Experienced therapists delivered therapy. Treatment adherence was assessed, as was homework compliance.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.

Marks 1998 (Continued)

Incomplete outcome data (attrition bias) All outcomes	Low risk	Quote: "analyses were also done on end-point imputed-scores carrying forward non-completers last available ratings". Comment: There were drop-outs from each group: exposure (3) cognitive restructuring (1) exposure and cognitive restructuring (5) and relaxation therapy (1). Reasons for drop-out were not fully reported.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	Low risk	Comment: no other sources of bias detected.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "assessors were kept unaware of the treatment condition".

McDonagh 2005

Methods	Randomised controlled trial
Participants	74 female childhood sexual abuse survivors with DSM-IV PTSD in the USA
Interventions	7 x 2-hour and 7 x 1½-hour sessions of CBT (n = 29) versus 7 x 2-hour and 7 x 1½-hour sessions of PCT (n = 22) versus waitlist control (n = 23). (all interventions included in meta-analyses).
Outcomes	CAPS, BDI, STAI, TSI, DES, STAXI
Notes	Experienced therapists delivered therapy and treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: ITT analyses using the LOCF method were performed. Reasons for drop-out were not fully reported. 12 participants dropped out of CBT, 2 from PCT and 3 from the waitlist.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	Low risk	Comment: There were no other obvious sources of bias.
Blinding of participants and personnel (performance bias)	High risk	Comment: Participants were aware of their allocation.

McDonagh 2005 (Continued)

All outcomes

Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "A separate group of female clinicians, who were blind to treatment condition and who had no other role in the study conducted the four CAPS interviews".
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Monson 2006

Methods	Randomised controlled trial
Participants	60 DSM-IV-TR PTSD. Combat veterans (54 men, 6 women) in the USA
Interventions	12 sessions of cognitive processing therapy conducted twice weekly when possible (n = 30) vs waitlist (n = 30)
Outcomes	CAPS, PCL, BDI, STAI
Notes	Experienced therapists delivered therapy and treatment adherence was assessed

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Quote "Eligible participants were randomised to receive the treatment immediately or to wait for 10 weeks to receive the treatment (10 weeks was equivalent to the ideal 6 weeks of twice weekly sessions and the 1-month follow-up period for those in the CPT condition). The study biostatistician provided the participants' condition assignment to the study coordinator." Comment: The method of random sequence generation was not reported.
Allocation concealment (selection bias)	Low risk	Quote "Eligible participants were randomised to receive the treatment immediately or to wait for 10 weeks to receive the treatment (10 weeks was equivalent to the ideal 6 weeks of twice weekly sessions and the 1-month follow-up period for those in the CPT condition). The study biostatistician provided the participants' condition assignment to the study coordinator."
Incomplete outcome data (attrition bias) All outcomes	Low risk	Quote "Primary analyses were performed according to the intention-to-treat principle; data from all participants were used regardless of their treatment completion." Comment: 6 participants dropped out from the treatment group. 4 participants dropped out from the waitlist group.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	Low risk	Comment: There were no other obvious sources of bias.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.

Monson 2006 (Continued)

Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote "The independent clinician assessors were blinded to condition assignment and participants were instructed to not disclose their condition assignment to them."
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Mueser 2008

Methods	Randomised controlled trial
Participants	108 DSM-IV PTSD individuals with severe mental illness receiving treatment at community health centres (46 men, 62 women) in the USA
Interventions	12 - 16 sessions of TFCBT (n = 54) or TAU (n = 54)
Outcomes	CAPS, PTSD knowledge test, BAI, BDI, BPRS, WAI, SF-12
Notes	Experienced therapists delivered therapy and treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of random sequence generation was not reported.
Allocation concealment (selection bias)	Low risk	Quote: "Randomization was conducted at a central location in the research centre by a computer-based randomizations program, with assignments not known in advance by either clinical or research staff."
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: ITT analyses were performed. 11 participants dropped out of the treatment group and 11 from TAU.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: There were no other obvious sources of bias.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "All assessments were conducted by master's or Ph.D. level trained clinical interviewers who were blind to treatment assignment. Clients were instructed at the beginning of interviews to not talk about any treatments for trauma-related problems they may have received. Interviewers were requested to inform the project coordinator if the client broke the blind during an interview. Interviewers were not asked to guess clients' treatment assignments, to avoid directly encouraging them to formulate hypotheses about how treatment may have affected clients' symptoms, which could have influenced subsequent ratings. No specific instances of blind breaking were noted in the study."

Neuner 2004

Methods	Randomised controlled trial
Participants	43 Sudanese refugees in Uganda. All diagnosed with PTSD. (16 men, 27 women)
Interventions	4 sessions of NET (n = 17) vs 4 sessions of supportive counselling (n = 14) vs one session of psychoeducation (n = 12) (NET and supportive counselling groups included in meta-analysis).
Outcomes	PDS
Notes	Experienced therapists delivered therapy. Treatment adherence was not monitored,

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote: "Each participant was randomly assigned (using a dice) to one of three treatment groups: narrative exposure therapy, supportive counselling, or psychoeducation only."
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: One participant dropped out from NET and two from supportive counselling. ITT analyses were performed. Reasons for drop-out were not fully reported.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: The issue of researcher allegiance cannot be ruled out. Treatment adherence was not monitored.
Blinding of participants and personnel (performance bias) All outcomes	Unclear risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "The local and expert interviewers who carried out the posttests, as well as the follow-up tests, were blind for the individual participant's treatment condition."

Neuner 2008

Methods	Randomised controlled trial
Participants	277 Rwandan and Somalian refugees diagnosed with PTSD (142 women, 135 men)
Interventions	NET (n = 111) vs trauma counselling (n = 111) vs monitoring (n = 55) (NET and monitoring included in meta-analysis).
Outcomes	PDS, DFMQ, SRQ-20, SF-12
Notes	Experienced therapists delivered therapy. Treatment adherence was not monitored,

Risk of bias

Neuner 2008 (Continued)

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Quote: "The participants were assigned to the groups in the following way: The list of participants was ordered randomly; the first 4 were consecutively assigned to the NET, TC, NET, and TC groups; and the fifth was assigned to the MG (monitoring) group. This procedure was repeated until all 277 participants were assigned." Comment: The method of random sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Quote: "Aiming at an intention-to-treat analysis, we included in the outcome analysis all participants who were randomised. In anticipation of a high rate of missing data, we considered a last observation- carried-forward procedure as too conservative. Instead we chose to apply mixed-effects models that allow the inclusion of all available data without the arbitrary replacement or imputation of missing values."
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	Low risk	Comment: A large number of participants could not be located for follow-up.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "The participants who received treatment were reassessed 3 and 6 months later by the same local research assistants who had carried out the interviews for the survey. They were blind with respect to the particular treatment condition."

Neuner 2010

Methods	Randomised controlled trial
Participants	32 asylum seekers with DSM-IV PTSD (22 men, 10 women) in Germany
Interventions	NET (n = 16) vs TAU (n = 16)
Outcomes	Posttraumatic Stress Diagnostic Scale, Hopkins Symptom Checklist-25 depression Scale, Composite International Diagnostic Interview - C Pain Score
Notes	Experienced therapists delivered therapy. Treatment adherence was not monitored

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.

Neuner 2010 (Continued)

Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation
Incomplete outcome data (attrition bias) All outcomes	Low risk	Quote: "all the participants who were randomised were included in the outcome analysis." Comment: 2 participants dropped out of the treatment group. Reasons for drop-out are not fully reported.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: The authors acknowledged having little information about the interventions prescribed as part of TAU. The issue of researcher allegiance cannot be ruled out. Treatment adherence was not monitored.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "we aimed at keeping interviewers blind to each participants condition."

Nijdam 2012

Methods	Randomised controlled trial
Participants	140 adults with PTSD after a variety of different traumas (79 women, 61 men)
Interventions	Brief eclectic psychotherapy (n = 70) or EMDR (n = 70)
Outcomes	IES-R, SI-PTSD, HADS depression, HADS anxiety
Notes	Experienced therapists delivered therapy. It is unclear whether or not treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of random sequence generation was not reported.
Allocation concealment (selection bias)	Low risk	A method of central allocation was employed, whereby a psychologist unassociated with the rest of the study used a computer programme.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: ITT analyses were performed. Reasons for treatment drop-out are fully reported, and unlikely to have caused bias. Missing data were imputed using appropriate methods. 28 individuals dropped out of EMDR and 22 from BEP.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.

Nijdam 2012 (Continued)

Other bias	Low risk	Comment: The issue of researcher allegiance cannot be ruled out. Treatment adherence was not monitored.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "To ensure masking of assessors, one psychologist who had no other engagement in the study, had access to the computer program, kept a log file of all random assignments and assigned the patients to the therapists."

Paunovic 2011

Methods	Randomised controlled trial
Participants	29 adult victims of crime with chronic PTSD (12 men, 17 women)
Interventions	Exposure Inhibition Therapy (n = 14) vs waitlist (n = 15)
Outcomes	CAPS, PCL, IES-R, BAI, BDI, CSE, PTSI
Notes	Experienced therapists delivered therapy. It is unclear whether or not treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of random sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: The method of allocation concealment (if any) was not reported.
Incomplete outcome data (attrition bias) All outcomes	High risk	Comment: Reasons for drop-outs are not given. It is unclear how missing data were handled. There was one drop-out from each group.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	There was only one author, who was seemingly responsible for all aspects of the study (recruitment, randomisation, assessment, therapy, analysis). The author had conceived the therapy that was being evaluated, based on a theory of PTSD they had previously formulated. The author acknowledged "this study must be replicated with a more rigorous design that fulfills all of the golden criteria for a randomized controlled study."
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias)	High risk	Quote: "The assessor was both the therapist and the author of the current study."

Paunovic 2011 (Continued)

All outcomes

Peniston 1991

Methods	Randomised controlled trial
Participants	29 male Vietnam War combat veterans with DSM-III PTSD
Interventions	48 x 30-minute sessions of EMG (n = 15) assisted desensitisation vs no treatment (n = 14)
Outcomes	Nightmare and flashback frequency
Notes	Therapist credentials/experience is not reported. It is unclear whether or not treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Unclear risk	Comment: It is unclear if there were any missing data, or how this was handled.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	Unclear risk	Comment: The study is not well-reported. It is difficult to judge other sources of bias.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Comment: Blind assessors were used.

Power 2002

Methods	Randomised controlled trial
Participants	105 outpatients with DSM-IV PTSD. Various traumas (gender of those starting the study unclear)
Interventions	10 x 90-minute weekly sessions of EMDR (n = 39) vs exposure plus cognitive restructuring (n = 37) vs waitlist (n = 29) (all interventions included in meta-analyses).

Power 2002 (Continued)

Outcomes	CAPS, HAM-A, MADRS	
Notes	Experienced therapists delivered therapy, and treatment adherence was assessed.	
Risk of bias		
Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote: "Following completion of the entire initial assessment, for those patients who met entry criteria, the blind assessor then opened a sealed envelope that informed as to which group patients were to be allocated."
Allocation concealment (selection bias)	Low risk	Quote: "Following completion of the entire initial assessment, for those patients who met entry criteria, the blind assessor then opened a sealed envelope that informed as to which group patients were to be allocated."
Incomplete outcome data (attrition bias) All outcomes	High risk	Quote: "Comparison between the 33 drop-outs and the 72 completers regarding presentation at time of initial assessment produced no significant differences on any of the demographic characteristics or treatment outcome measures with the sole exception of a higher frequency score on the CAPS-C Avoidance subscale for the drop-outs t D 2.2, df D 103, p < 0.05. Subsequent analysis was conducted on the 72 completers." Comment: There were 12 drop-outs from EMDR, 16 from EMDR plus cognitive restructuring and 5 from the waiting list. Reasons for drop-out were not fully reported.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	Low risk	Comment: no other sources of bias detected.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "However, assessment at entry, end-point and follow-up were conducted by 'blind' assessors."

Ready 2010

Methods	Randomised controlled trial
Participants	11 Vietnam War veterans with DSM-IV PTSD with a CAPS score greater than 60 in the USA
Interventions	10 sessions of Virtual Reality Exposure (n = 6) vs 10 sessions of person-centred therapy (n = 5)
Outcomes	CAPS, BDI
Notes	Therapist credentials/experience is not reported. It is unclear whether or not treatment adherence was assessed.

Risk of bias

Ready 2010 (Continued)

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Unclear risk	Comment: One participant dropped out of each group. Reasons for drop-out are not reported. It is unclear how missing data were handled.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: PCT was developed as a control condition for the purposes of the study.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "Participants were administered the measures or interviews at pre-treatment, posttreatment, and six-month follow-up by a licensed clinical psychologist with 3 years of experience working with Vietnam veterans. She remained blind to treatment condition."

Resick 2002

Methods	Randomised controlled trial
Participants	171 female rape victims with DSM-IV PTSD
Interventions	13 hours of cognitive processing therapy or exposure bi-weekly over 6 weeks (n = 124) versus minimal attention (n = 47).
Outcomes	CAPS, PSS, BDI
Notes	Experienced therapists delivered therapy, and treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: ITT analyses using LOCF. 33 participants dropped out from TFCBT and 47 from the waitlist.

Resick 2002 (Continued)

Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: The issue of researcher allegiance cannot be ruled out.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "Independent raters who were not otherwise involved in the project conducted assessments of treatment adherence and therapist competence."

Rothbaum 1997

Methods	Randomised controlled trial
Participants	21 female sexual assault victims with DSM-III-R PTSD in the USA
Interventions	3 weekly 90-minute sessions of EMDR (n = 11) vs wait list control (n = 9) (1 dropped out immediately after assessment).
Outcomes	PSS, IES, BDI, STAI
Notes	Experienced therapists delivered therapy, and treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	High risk	Comment: 3 participants dropped out: 1 immediately after assessment, and 1 from each of the groups. ITT analyses were not performed.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	Unclear risk	Comment: Small sample size.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "independent assessor kept blind to the treatment condition".

Rothbaum 2005

Methods	Randomised controlled trial
Participants	74 female rape victims in the USA
Interventions	9 x 90-minute sessions of EMDR (25) vs 9 x 90-minute sessions of prolonged exposure (23) vs waiting list (24) (two dropped out prior to randomisation).
Outcomes	CAPS, SLESQ, PSS-SR, IES-R, BDI, DES-II, STAI
Notes	Experienced therapists delivered therapy, and treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Quote "If the participant met criteria and gave consent, she was then randomised and scheduled accordingly". Comment: It is unclear how the sequence was generated.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	High risk	Quote: "Because only 2 of 14 participants who did not complete the study (1 in each of the active treatments) provide data other than baseline, intent-to-treat analyses provide no consequentially different results and are not included here."
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	Low risk	Comment: No other sources of bias detected.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "All assessments were conducted by IAs who were kept blind to the treatment condition."

Scheck 1998

Methods	Randomised controlled trial
Participants	60 16- to 25-year old female victims of various traumas. 77% DSM-IV PTSD in the USA
Interventions	2 usually weekly sessions of EMDR (n = 30) vs active listening (n = 30)
Outcomes	BDI, STAI, PENN, IES, TSCS

Scheck 1998 (Continued)

Notes Experienced therapists (volunteers) delivered therapy. It is unclear whether or not treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote: "Envelopes filled with papers labelled either EMDR or AL were shuffled and numbered 1 through 100. During each interview, envelopes were opened consecutively".
Allocation concealment (selection bias)	Low risk	Quote: "Envelopes filled with papers labelled either EMDR or AL were shuffled and numbered 1 through 100. During each interview, envelopes were opened consecutively".
Incomplete outcome data (attrition bias) All outcomes	High risk	Comment: Reasons for drop-out were not fully reported (1 participant from AL, 1 from EMDR) . Only the data of completers are included in the analysis.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: It is unclear whether or not treatment adherence was assessed. Active listening was not intended as an effective intervention. The aim was to create a control that offered rapport, expectation of gain and sympathetic attention.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Quote: Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Unclear risk	Comment: Insufficient information.

Schnurr 2003

Methods	Randomised controlled trial
Participants	360 male Vietnam War veterans with DSM-IV PTSD in the USA
Interventions	Weekly present-focused group CBT for 30 weeks (n = 180) vs weekly trauma-focused CBT group therapy for 30 weeks (n = 180)
Outcomes	CAPS, GHQ, SF36
Notes	Experienced therapists delivered therapy, and treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	High risk	Quote: "The randomizations were performed using permuted blocks of 4 in 3 blocks of CAPS severity scores to ensure balance in treatment groups by CAPS score."

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Schnurr 2003 (Continued)

		Comment: The method of random sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Quote: "Often, intention-to-treat analysis is performed by using an individual's last measurement before treatment dropout as the last outcome or by carrying it forward. This method has been criticized for the bias it can introduce. Instead, we attempted to measure participants regardless of the number of treatment sessions they attended or their treatment dropout status. To our knowledge, no previous studies of PTSD treatment have taken this approach, which is standard in clinical trials in other fields of medicine. Therefore, we also performed secondary analyses to examine the effect of TFGT among participants who completed most of the scheduled sessions." Comment: 62 dropped out from the TF group and 45 from the non-TF group.
Selective reporting (reporting bias)	Unclear risk	Comment: All specified outcomes were reported.
Other bias	Low risk	Comment: no other sources of bias detected.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote "Assessments were performed by a master's- or doctoral level clinician who was unaware of treatment assignment."

Schnurr 2007

Methods	Randomised controlled trial
Participants	284 female veterans and active duty personnel in the USA
Interventions	10 weekly 90-minute sessions of prolonged exposure (n = 141) vs 10 weekly 90-minute sessions of present-centred therapy (n = 143)
Outcomes	CAPS, SF36, SSAI, BDI, ASI, PTSD checklist
Notes	Experienced therapists delivered therapy, and treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Quote: "Verified eligible participants were randomised within each site to prolonged exposure or present-centred therapy using permuted blocks with random block sizes of 4 or 6. All study data were stored at the study coordinating center." Comment: The method of random sequence generation was not reported.

Schnurr 2007 (Continued)

Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Quote: "Primary analyses were performed on the intention-to-treat sample, using data from all randomised participants." Reasons for drop-out were fully reported (21 from PE and 17 from PCT).
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	Low risk	Comment: No other sources of bias detected.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "Blinded assessors collected data before and after treatment and at 3- and 6-month follow-up."

Taylor 2003

Methods	Randomised controlled trial
Participants	60 outpatients. Various traumas. DSM-IV PTSD.(45 women, 15 men) in the USA
Interventions	8 90-minute sessions of exposure therapy (n = 22), EMDR (n = 19) or relaxation training (n = 19) (all interventions included in meta-analyses).
Outcomes	CAPS, PDS, BDI
Notes	Experienced therapists delivered therapy. It is unclear whether or not treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: ITT analyses. Drop-outs were from each group (exposure therapy (7), EMDR (4) or relaxation training (4).
Selective reporting (reporting bias)	Unclear risk	Comment: Only measures of PTSD and depression are reported. It is unclear whether any other data were collected.
Other bias	Low risk	Comment: no other sources of bias detected.

Taylor 2003 (Continued)

Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "All interviews were conducted by clinic staff, who were blind to the participants' treatment assignment."

Vaughan 1994

Methods	Randomised controlled trial
Participants	36 various traumas. 78% DSM-III-R PTSD. (23 women, 13 men) in Australia
Interventions	3 - 5 50-minute sessions of image habituation training (n = 13), EMDR (n = 12) or applied muscular relaxation (n = 11) (all interventions included in meta-analyses).
Outcomes	PTSD structured interview, IES, STAI, BDI
Notes	Therapist credentials/experience is not reported. It is unclear whether or not treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of random sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Quote: "After assessment each subject was randomly assigned to a treatment group and also to a wait list or non-waitlist group. The procedure resulted in unequal numbers of subjects in the treatment groups -12 in EMD, 13 in IHT and 11 in AMR."
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: No drop-outs.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	Low risk	Comment: no other sources of bias detected.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "As a check of the independent rater's blindness as to patients' treatment categories, the rater was asked to guess the category post-treatment but was unable to do this better than by chance ($\chi^2 = 3.72$, $P = ns$)."

Wells 2012

Methods	Randomised controlled trial
Participants	20 individuals with DSM-IV PTSD (11 women, 9 men) in the UK
Interventions	Meta cognitive therapy (n = 10) vs delayed treatment (n = 10)
Outcomes	PDS, IES, BDI, BAI, TSQ
Notes	Therapist credentials/experience is not reported. Treatment adherence was not formally assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Comment: Allocated by a coin toss.
Allocation concealment (selection bias)	Low risk	Comment: Allocation was performed by an individual otherwise not involved with the study.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: ITT analyses were performed. One participant dropped out of the MCT group.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: Small sample size.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Comment: The assessor was blind.

Zang 2013

Methods	Randomised controlled trial
Participants	22 (17 women, 5 men) adult survivors of the Sichuan earthquake with PTSD
Interventions	NET (n = 11) versus WL (n = 11)
Outcomes	IES-R, GHQ-28, HADS, CIOQ, MSPSS, SCSQ
Notes	

Risk of bias

Bias	Authors' judgement	Support for judgement

Zang 2013 (Continued)

Random sequence generation (selection bias)	Unclear risk	Comment: The method of random sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: Specific methods of allocation concealment were not reported.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Comment: No-one left the study early.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.
Other bias	High risk	Comment: Very small sample size.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Quote: "The pre and post treatment assessments were carried out by a researcher not involved in treatment and blind to the treatment conditions."

Zlotnick 1997

Methods	Randomised controlled trial
Participants	48 female sexual abuse survivors. All DSM-III-R PTSD in the USA
Interventions	15 2-hour sessions of group affective management (n = 24) vs waiting list control (n = 24)
Outcomes	DTS, CR-PTSD, DES
Notes	Therapist credentials/experience is not reported. It is unclear whether or not treatment adherence was assessed.

Risk of bias

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Comment: The method of sequence generation was not reported.
Allocation concealment (selection bias)	Unclear risk	Comment: There is no mention of any measures taken to conceal allocation.
Incomplete outcome data (attrition bias) All outcomes	High risk	Comment: There were no reported reasons for drop-out (7 from treatment and 6 from the waitlist). Only the data of completers are included in the analysis.
Selective reporting (reporting bias)	Low risk	Comment: All specified outcomes were reported.

Zlotnick 1997 (Continued)

Other bias	High risk	Therapist credentials/experience is not reported. It is unclear whether or not treatment adherence was assessed.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Comment: Participants were aware of their allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Self report measures only.

ADAS - Abbreviated Dyadic Adjustment Scale
 ADIS-R - Anxiety Disorders Interview Schedule -Revised
 ASI - Addiction Severity Index
 AUDIT - Alcohol Use Disorders Identification Test
 BADS - Behavioural Activation for Depression Scale
 BAI - Beck Anxiety Inventory
 BDI - Beck Depression Inventory
 BPRS - Brief Psychiatric Rating Scale
 BSQ - Body Sensations Questionnaire
 CAPS - Clinician-Administered PTSD Scale
 CES-D - Centre for Epidemiologic Studies Depression Scale
 CIDI - Composite International Diagnostic Interview
 CIOQ - Changes in Outlook Questionnaire
 CMS - Civilian Mississippi Scale
 CPT - Continuous Performance Test
 CT - Cognitive Therapy
 CTSA - Centre for Treatment and Study of Anxiety
 DAR-7 - Dimensions of Anger Reactions
 DASS - Depression Anxiety and Stress Scale
 DES-II - Dissociative Experiences Scale II
 DFMQ - Demography of Forced Migration Scale
 DTS - Davidson Trauma Scale
 EMDR - eye movement desensitisation and reprocessing
 EMG -Electromyographic
 FAQ - Fear and Avoidance Scale
 FFMQ - Five Facet Mindfulness Questionnaire
 GAF - Global Assessment of Functioning
 GHQ-28 - General Health Questionnaire 28
 GIS-A - Global Improvement Scale - Assessor
 GIS-S - Global Improvement Scale - Self
 HADS - Hospital Anxiety and Depression Scale
 HAM-A - Hamilton Rating Scale for Anxiety
 HAM-D - Hamilton Rating Scale for Depression
 HDRS - Hamilton Rating Scale for Depression
 HSCL-25 - Hopkins Symptom Checklist-25
 IES - Impact of Event Scale
 IES-R Impact of Event Scale - Revised
 ICG - Inventory of Complicated Grief
 ITT - intention-to-treat
 LOCF - last observation carried forward
 MADRS - Montgomery-Asberg Depression Rating Scale
 MEG -Magnetoencephalography
 M-PTSD - Mississippi Post-Traumatic Stress Disorder Scale
 MPSS - Modified PTSD Symptom Scale
 N-FSS - Neck-Focused Flashback Severity Scale
 N-PASS - Neck-Focused Panic Attack Severity Scale
 NET - narrative exposure therapy

ODI – Oswestry Disability Index
 O-FSS – Orthostatic-Focused Panic Attack Severity Scale
 O-PASS - Orthostatic Panic Attack Severity Scale
 PCL - PTSD Checklist
 PCT - Psychological Commitment to Team Scale
 PDS – Posttraumatic Diagnostic Scale
 PE-SIT - Prolonged Exposure - Stress Innoculation Training
 PENN - Penn Inventory for PTSD
 PHQ-9 - Patient Health Questionnaire - 9
 PS-MPI – Pain Subscale – Multidimensional Pain Inventory
 PSS-I - PTSD Symptom Scale - Interview
 PSS-SR - PTSD Symptom Scale – Self Report
 PTCI - Posttraumatic Cognitions Inventory
 QOLI - Quality of Life Inventory
 SAS – Social Adjustment Scale
 SAS-SR - Social Adjustment Scale Self Report
 SCID-PTSD - Structured Clinical Interview for DSM-IV - PTSD
 SCL-90 - Symptom Checklist - 90
 SDS - Sheehan Disability Scale
 SF-8 - 8-item Short Form Health Survey
 SF-36 - 36-item Short Form Health Survey
 SI-PTSD – Structured Interview for PTSD
 SLESQ - Stressful Life Events Screening Questionnaire
 SPSI - Social Problem Solving Inventory
 SRQ-20 - Self Regulation Questionnaire - 20
 SSAI - Spielberger State Anxiety Inventory
 ssVEF - steady-state visual evoked fields
 STAI - Spielberger State–Trait Anxiety Inventory
 STAXI - State-Trait Anger Expression Inventory
 TAU - treatment as usual
 TRGI - Trauma Related Guilt Inventory
 TSCS - Tennessee Self Concept Scale
 TSI – Trauma Symptom Inventory
 TSQ - Trauma Screening Questionnaire
 TSSC – Traumatic Stress Symptom Checklist
 WAI - Working Alliance Inventory
 WHOQOL - World Health Organisation Quality of Life
 WSA – Work and Social Adjustment Scale

Characteristics of excluded studies [ordered by study ID]

Study	Reason for exclusion
Abbasnejad 2007	No formal diagnosis of PTSD.
Arntz 2007	TFCBT vs TFCBT.
Barabasz 2013	Unclear how many participants were suffering ASD as opposed to PTSD (length of time since trauma was not reported). Not a true RCT.
Boudewyns 1990	Group treatment with exposure or conventional one-to-one counselling.
Chemtob 1997	Treatment designed for anger vs PTSD with anger measures used as primary outcomes.
Classen 2001	No formal diagnosis of PTSD.
Classen 2010	No formal diagnosis of PTSD.
Cole 2007	No formal diagnosis of PTSD.

Study	Reason for exclusion
Davis 2007	Only 67.3% of participants met diagnostic criteria for PTSD before entry into study.
Difede 2007a	Only 67.7% of participants met diagnostic criteria for PTSD before entry into study.
DuHamel 2010	Only 19% of participants met diagnostic criteria for PTSD before entry into study.
Dunn 2007	Treatment for depression not PTSD.
Echeburua 1996	Trauma < 3 months before entry into study.
Edmond 1999	No formal diagnosis of PTSD.
Falsetti 2001	No formal diagnosis of PTSD.
Falsetti 2005	
Foa 2006	Trauma < 3 months before entry into study.
Frommberger 2004	Psychological therapy vs pharmacotherapy.
Gidron 1996	Not psychological treatment.
Ginzberg 2009	No diagnosis of PTSD.
Glynn 1999	Not an individual or group therapy.
Hiari 2005	Participants only required to meet re-experiencing and avoidance criteria of DSM-IV criteria for PTSD.
Jaberghaderi 2004	Participants under 18 (study included in Gillies 2012).
Knaevelsrud 2007	No formal diagnosis of PTSD.
Lange 2001	No formal diagnosis of PTSD.
Lange 2003	No formal diagnosis of PTSD.
Litz 2007	No formal diagnosis of PTSD.
Maercker 2006	Only 48% of participants met diagnostic criteria for PTSD. Remainder had a diagnosis of "sub-syndromal PTSD".
Mithoefer 2011	TFCBT vs TFCBT.
Najavits 2006	Mean age of participants 16 years [study included in Gillies 2012]
Paunovic 2001	TFCBT vs TFCBT.
Price 2007	No formal diagnosis of PTSD made.
Rabe 2008	Only 48.5% of participants met diagnostic criteria for PTSD before entry into study.
Rothbaum 2006	Pharmacotherapy versus pharmacotherapy plus psychological therapy.
Ryan 2005	No formal diagnosis of PTSD.

Study	Reason for exclusion
Schaal 2009	Age range 14 - 28.
Shapiro 1989a	No formal diagnosis of PTSD.
Sloan 2004	No formal diagnosis of PTSD.
Sloan 2005	No formal diagnosis of PTSD.
Spence 2011	Information on duration was not collected. Unkown whether participants had acute/chronic PTSD.
Tarrier 1999	Compared trauma focused cognitive therapy with exposure therapy therefore both treatments = TFCBT.
Tucker 2007	Pharmacotherapy versus placebo.
Van Emmerik 2008	Only 46.6% diagnosis of PTSD.
Watson 1997	Considered 3 different types of relaxation training with no other comparison group.
Wilson 1995	< 50% PTSD at entry to study.
Yeomans 2010	No formal diagnosis of PTSD.

Characteristics of studies awaiting assessment *[ordered by study ID]*

Krupnick 2008

Methods	Randomised Controlled Trial
Participants	37 female victims of domestic violence with DSM-III R PTSD
Interventions	Group interpersonal psychotherapy (n = 32) versus WL (n = 16).
Outcomes	CAPS, Interpersonal Sensitivity, Need for Social Approval, Lack of Sociability, and Interpersonal Ambivalence
Notes	

DATA AND ANALYSES

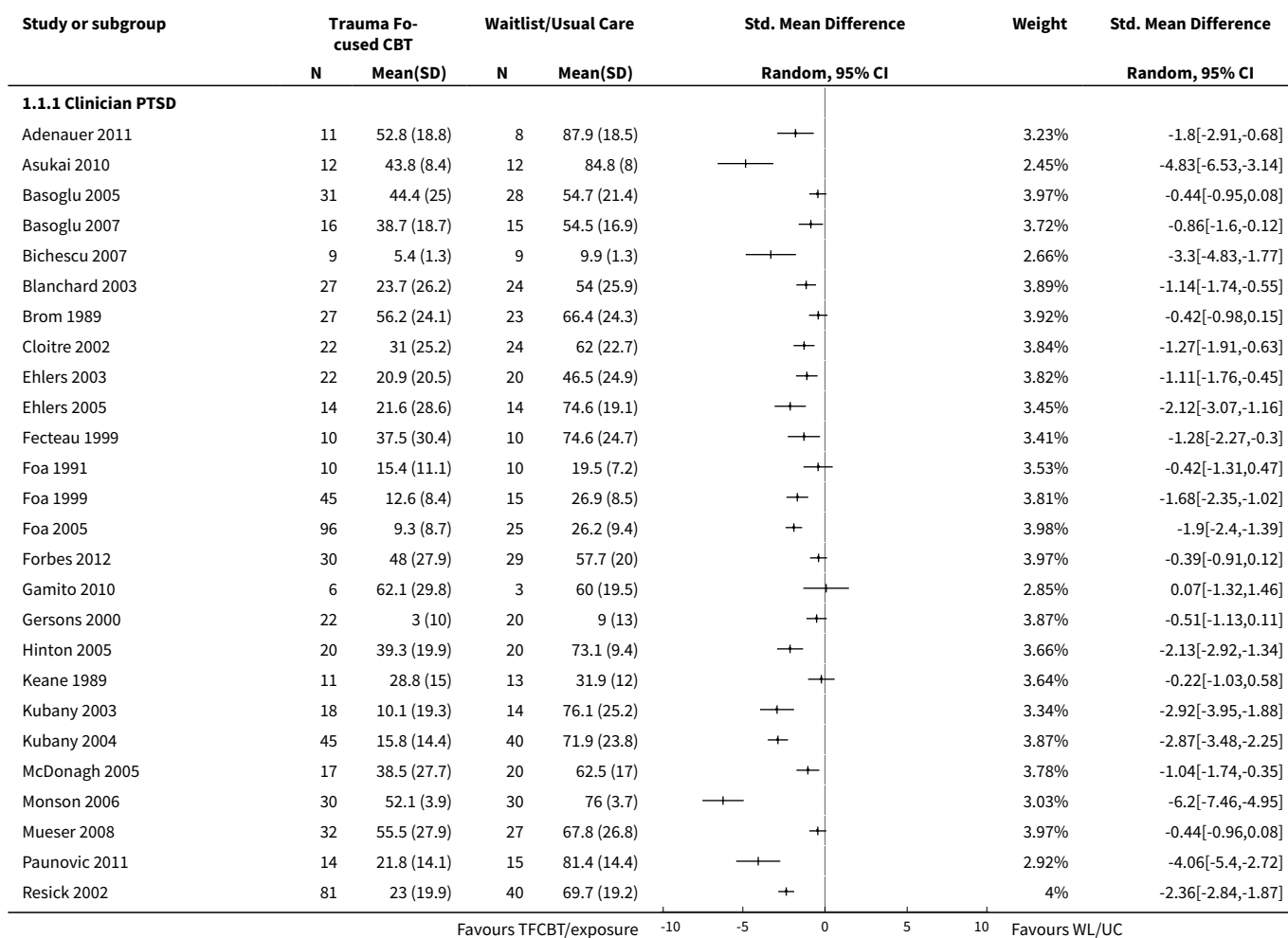
Comparison 1. Trauma-focused CBT/Exposure therapy vs waitlist/usual care

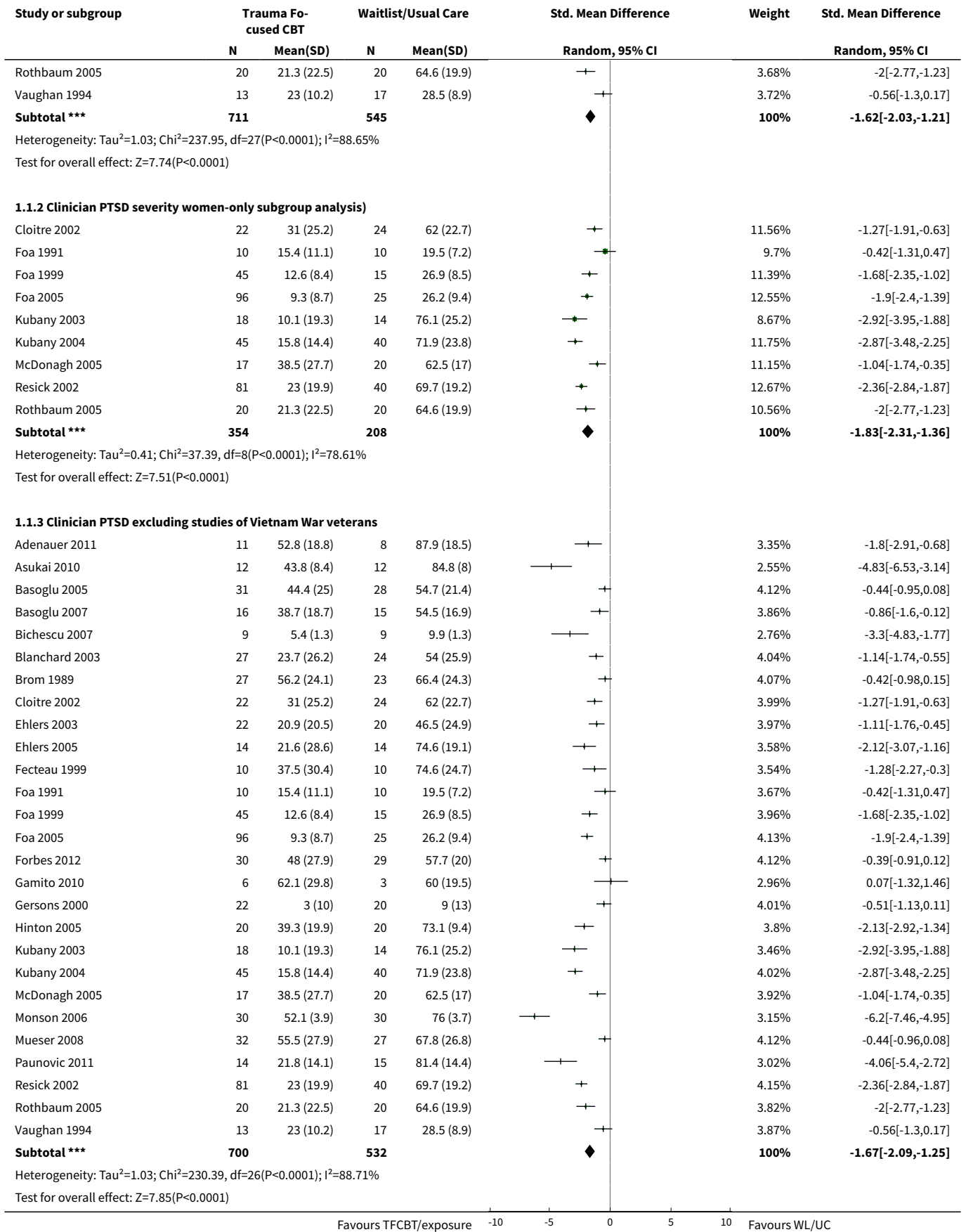
Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Severity of PTSD symptoms - clinician	32		Std. Mean Difference (IV, Random, 95% CI)	Subtotals only

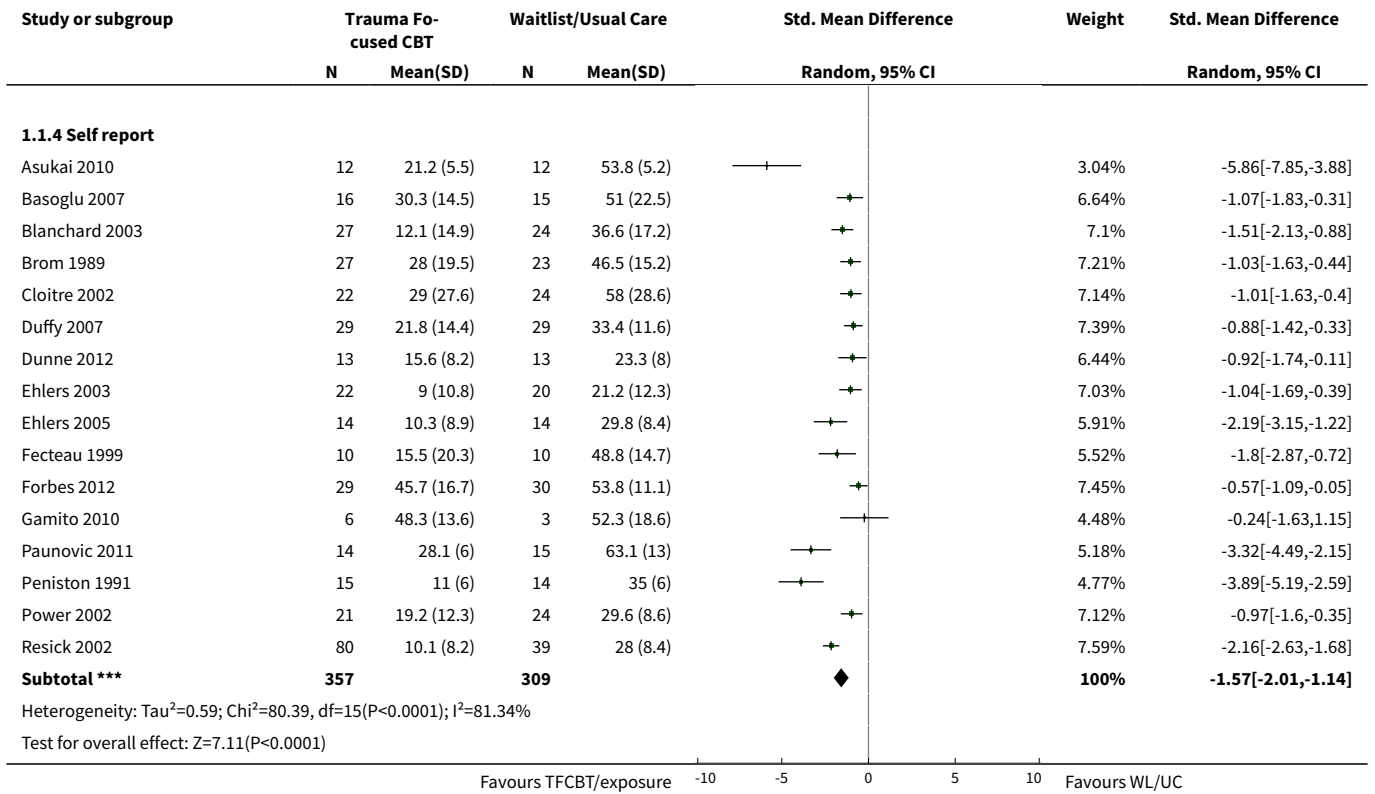
Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1.1 Clinician PTSD	28	1256	Std. Mean Difference (IV, Random, 95% CI)	-1.62 [-2.03, -1.21]
1.2 Clinician PTSD severity women-only subgroup analysis)	9	562	Std. Mean Difference (IV, Random, 95% CI)	-1.83 [-2.31, -1.36]
1.3 Clinician PTSD excluding studies of Vietnam War veterans	27	1232	Std. Mean Difference (IV, Random, 95% CI)	-1.67 [-2.09, -1.25]
1.4 Self report	16	666	Std. Mean Difference (IV, Random, 95% CI)	-1.57 [-2.01, -1.14]
2 Severity of PTSD symptoms at 1 - 4 month follow-up	4		Std. Mean Difference (IV, Random, 95% CI)	Subtotals only
2.1 Clinician	4	336	Std. Mean Difference (IV, Random, 95% CI)	-1.18 [-2.20, -0.17]
3 Severity of PTSD symptoms at 5 - 8 month follow-up.	3	192	Std. Mean Difference (IV, Fixed, 95% CI)	-0.47 [-0.77, -0.18]
4 Severity of PTSD symptoms 9 - 12 month follow-up	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
5 Leaving the study early for any reason	33	1756	Risk Ratio (M-H, Fixed, 95% CI)	1.64 [1.30, 2.06]
6 Severity of PTSD symptoms - self report: 1 - 4 month follow-up	2	181	Std. Mean Difference (IV, Random, 95% CI)	-3.03 [-6.51, 0.45]
7 Severity of PTSD symptoms - self report: 5 - 8 months)	2	208	Std. Mean Difference (IV, Fixed, 95% CI)	-0.61 [-0.90, -0.32]
8 Severity of PTSD symptoms - self report: 9 - 12 month follow up	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
9 Depression	28	1213	Std. Mean Difference (IV, Random, 95% CI)	-1.28 [-1.62, -0.94]
10 Depression 1 - 4 month follow-up	7	413	Std. Mean Difference (IV, Random, 95% CI)	-0.75 [-1.33, -0.18]
11 Depression 5 - 8 month follow-up	2	150	Std. Mean Difference (IV, Fixed, 95% CI)	-0.50 [-0.82, -0.17]
12 Depression 9 - 12 month follow-up	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
13 Anxiety	17	644	Std. Mean Difference (IV, Random, 95% CI)	-0.81 [-1.03, -0.59]
14 Anxiety 1 - 4 month follow-up	3	189	Std. Mean Difference (IV, Fixed, 95% CI)	-0.32 [-0.60, -0.03]

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
15 Anxiety 9 - 12 month follow-up	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
16 Exploration of publication bias	28		Std. Mean Difference (IV, Random, 95% CI)	Subtotals only
16.1 Clinician	28	1256	Std. Mean Difference (IV, Random, 95% CI)	-1.62 [-2.03, -1.21]
17 Sensitivity analysis - clinician-rated PTSD symptoms - studies at low risk of bias only	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
18 PTSD diagnosis after treatment	19	910	Risk Ratio (M-H, Random, 95% CI)	0.51 [0.41, 0.64]

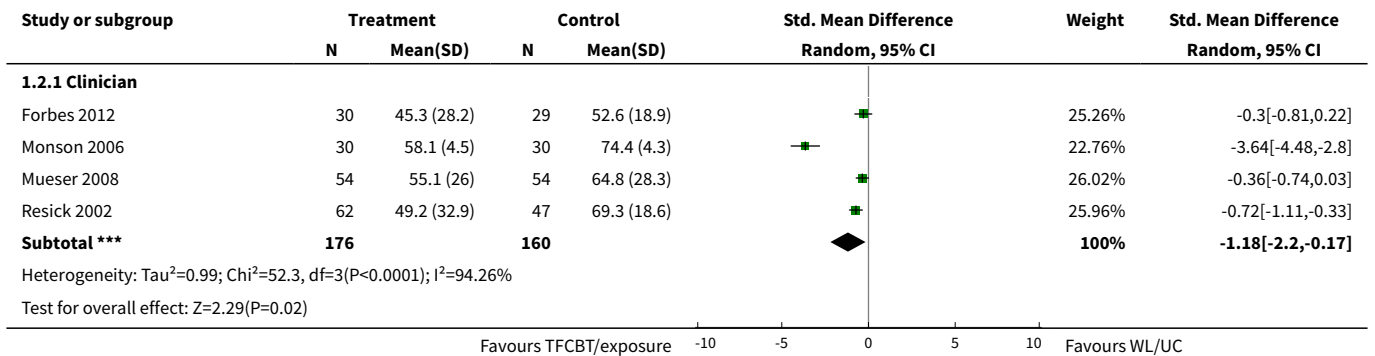
Analysis 1.1. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/usual care, Outcome 1 Severity of PTSD symptoms - clinician.



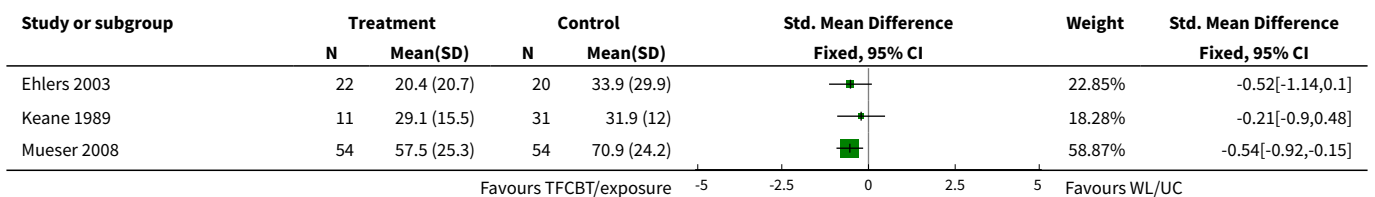


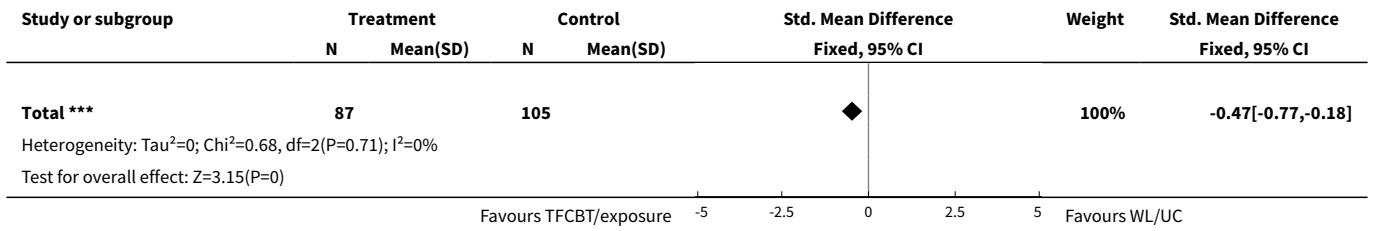


Analysis 1.2. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/ usual care, Outcome 2 Severity of PTSD symptoms at 1 - 4 month follow-up.

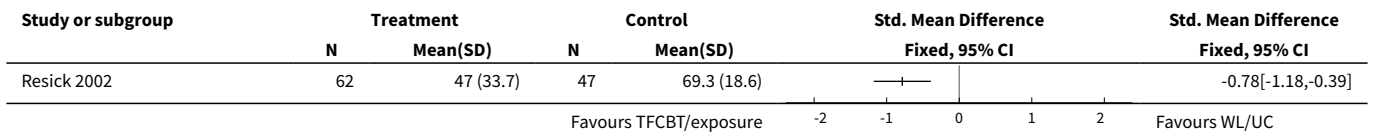


Analysis 1.3. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/ usual care, Outcome 3 Severity of PTSD symptoms at 5 - 8 month follow-up..

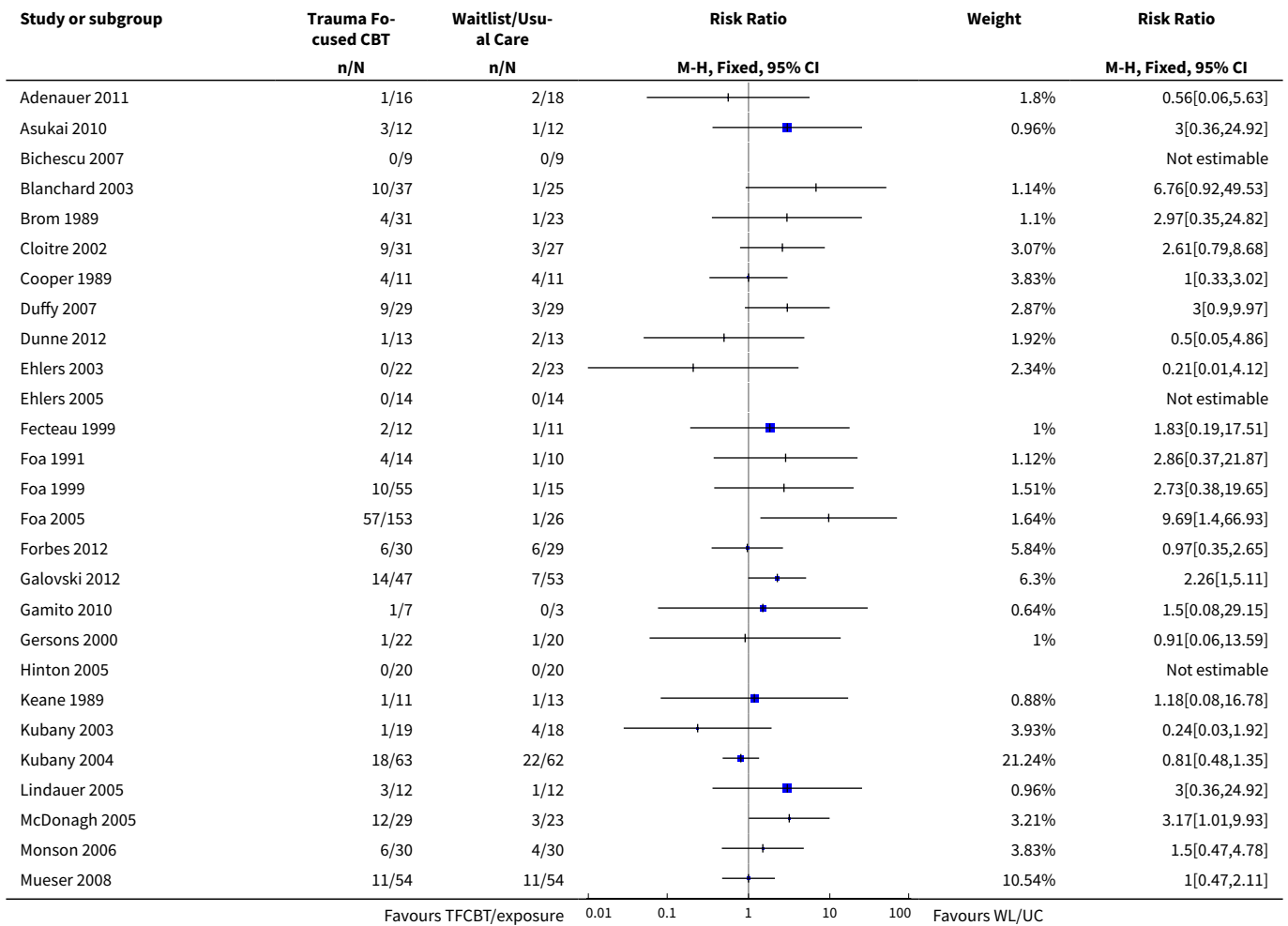


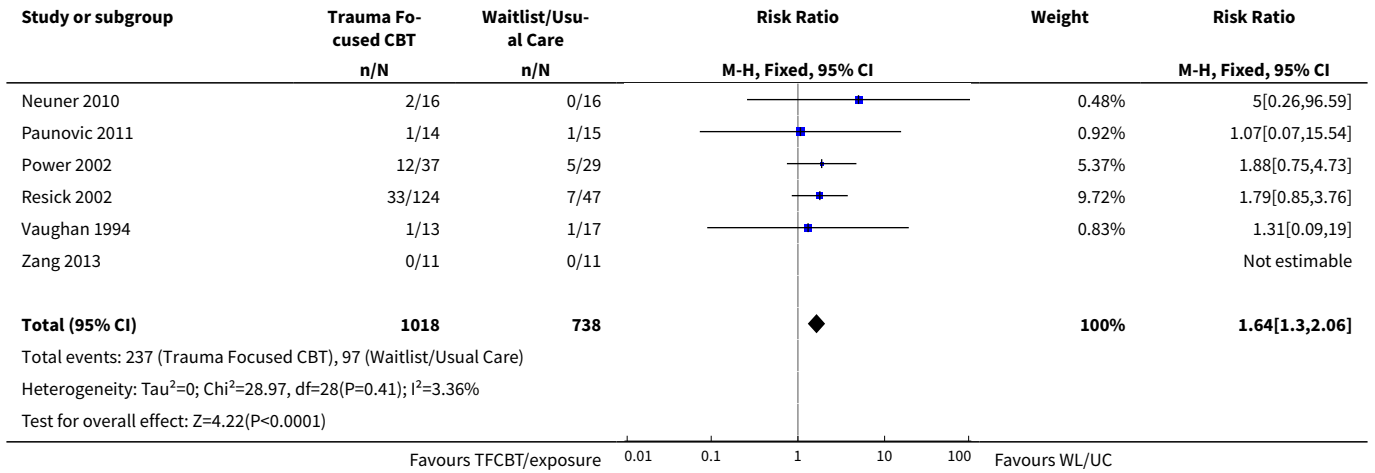


Analysis 1.4. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/usual care, Outcome 4 Severity of PTSD symptoms 9 - 12 month follow-up.

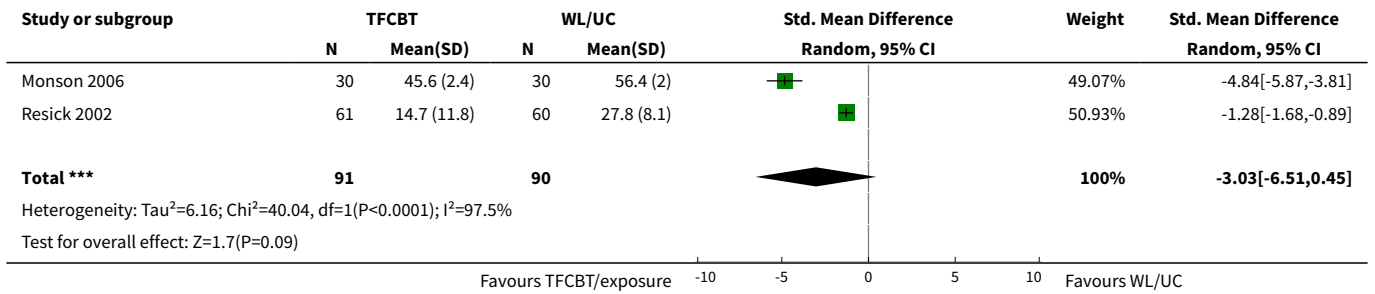


Analysis 1.5. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/usual care, Outcome 5 Leaving the study early for any reason.

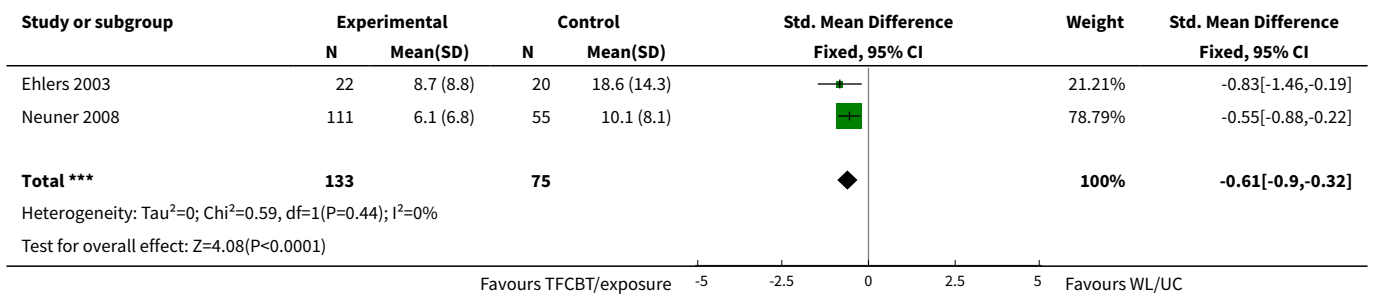




Analysis 1.6. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/ usual care, Outcome 6 Severity of PTSD symptoms - self report: 1 - 4 month follow-up.



Analysis 1.7. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/ usual care, Outcome 7 Severity of PTSD symptoms - self report: 5 - 8 months).



Analysis 1.8. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/usual care, Outcome 8 Severity of PTSD symptoms - self report: 9 - 12 month follow up.

Study or subgroup	Experimental		Control		Std. Mean Difference	
	N	Mean(SD)	N	Mean(SD)	Fixed, 95% CI	Std. Mean Difference Fixed, 95% CI
Resick 2002	61	15.1 (12)	60	27.8 (8.1)		-1.22[-1.61,-0.83]

Favours TFCBT/exposure Favours WL/UC

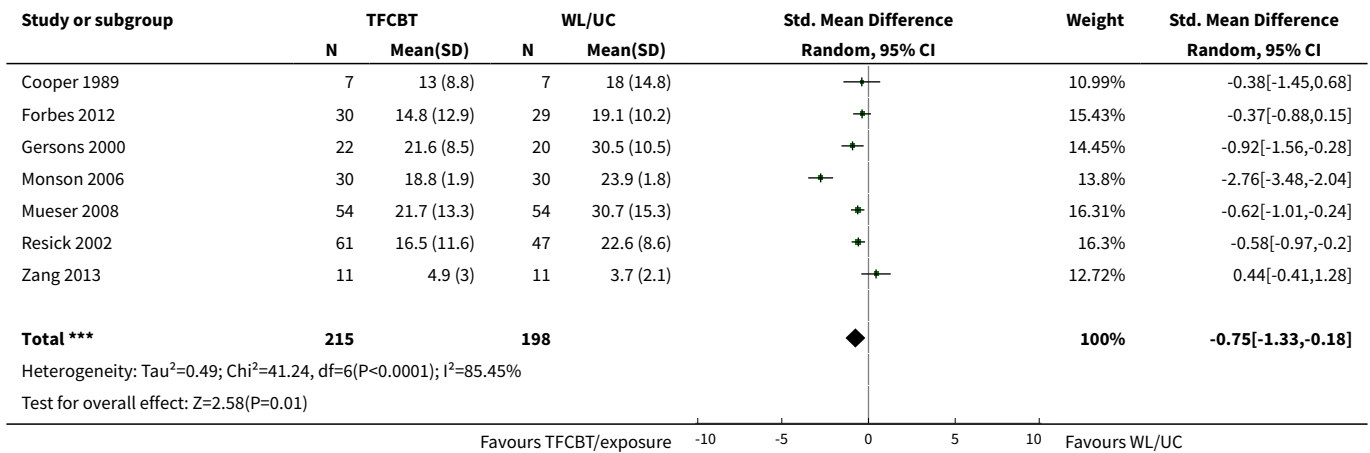
Analysis 1.9. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/usual care, Outcome 9 Depression.

Study or subgroup	Trauma Fo- cused CBT		Waitlist/Usual Care		Std. Mean Difference		Weight	Std. Mean Difference
	N	Mean(SD)	N	Mean(SD)	Random, 95% CI	Random, 95% CI		
Adenauer 2011	11	14.9 (5.5)	8	27.9 (7.4)		2.94%	-1.96[-3.1,-0.81]	
Asukai 2010	12	20.3 (4)	12	34.8 (3.7)		2.54%	-3.67[-5.06,-2.28]	
Basoglu 2007	16	13.1 (6.2)	15	20.5 (7.4)		3.63%	-1.06[-1.82,-0.3]	
Bichescu 2007	9	5.8 (2.6)	9	15.3 (8.7)		3.1%	-1.41[-2.47,-0.35]	
Blanchard 2003	27	11.6 (12.3)	24	24 (12.1)		3.92%	-1[-1.59,-0.41]	
Cloitre 2002	22	8 (7.8)	24	20 (11.4)		3.85%	-1.2[-1.83,-0.57]	
Cooper 1989	7	12 (8.2)	7	17 (12.1)		3.09%	-0.45[-1.52,0.61]	
Duffy 2007	29	22.6 (14.1)	29	33.4 (11.6)		3.99%	-0.83[-1.36,-0.29]	
Dunne 2012	13	6.4 (6.6)	13	13.5 (7.3)		3.52%	-1[-1.83,-0.18]	
Ehlers 2003	22	7.4 (6.7)	20	17 (10.2)		3.81%	-1.1[-1.76,-0.45]	
Ehlers 2005	14	10.6 (8.6)	14	19.3 (7.2)		3.56%	-1.07[-1.86,-0.27]	
Fecteau 1999	10	20.1 (17.1)	10	24.7 (8.1)		3.41%	-0.33[-1.21,0.55]	
Foa 1991	10	13.4 (14.2)	10	15.4 (9.7)		3.42%	-0.16[-1.04,0.72]	
Foa 1999	44	8 (7.7)	14	22.1 (15)		3.8%	-1.41[-2.07,-0.75]	
Foa 2005	95	7.8 (8.2)	22	21 (10.7)		4.04%	-1.5[-2.01,-1]	
Forbes 2012	30	15.9 (12)	29	20.8 (11.8)		4.03%	-0.41[-0.92,0.11]	
Gersons 2000	22	21 (7.4)	20	28.5 (9.6)		3.84%	-0.86[-1.5,-0.23]	
Kubany 2003	18	3.6 (4.9)	14	30.2 (8.5)		2.8%	-3.87[-5.1,-2.64]	
Kubany 2004	45	4.6 (5.3)	40	27.2 (10.5)		3.9%	-2.74[-3.34,-2.14]	
Lindauer 2005	12	8 (6.7)	12	9.1 (5.7)		3.56%	-0.17[-0.97,0.63]	
McDonagh 2005	17	7.5 (7.9)	20	20.1 (12.1)		3.72%	-1.19[-1.89,-0.48]	
Monson 2006	30	17.4 (1.6)	30	27.1 (1.4)		2.73%	-6.33[-7.61,-5.05]	
Mueser 2008	32	21.9 (11.5)	27	27.7 (14.8)		4.02%	-0.44[-0.96,0.08]	
Neuner 2010	16	2.6 (0.6)	16	2.9 (0.5)		3.72%	-0.53[-1.24,0.18]	
Power 2002	21	8.6 (5.8)	24	12.8 (5.6)		3.89%	-0.72[-1.33,-0.12]	
Resick 2002	77	9.1 (8.1)	37	22.3 (9.1)		4.13%	-1.56[-2,-1.11]	
Vaughan 1994	13	11.2 (5.8)	17	13.8 (4.7)		3.67%	-0.49[-1.22,0.25]	
Zang 2013	11	4.2 (2.4)	11	7.1 (3)		3.38%	-1.05[-1.95,-0.15]	
Total ***	685		528			100%	-1.28[-1.62,-0.94]	

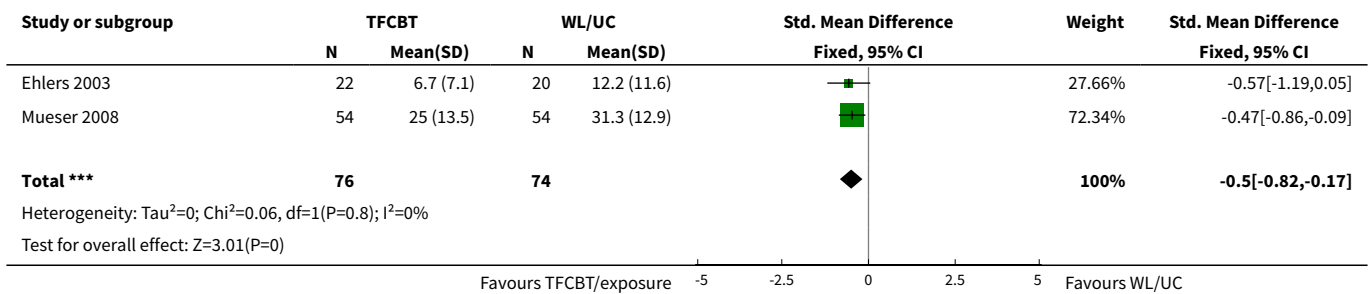
Heterogeneity: Tau²=0.67; Chi²=171.15, df=27(P<0.0001); I²=84.22%
Test for overall effect: Z=7.41(P<0.0001)

Favours TFCBT/exposure Favours WL/UC

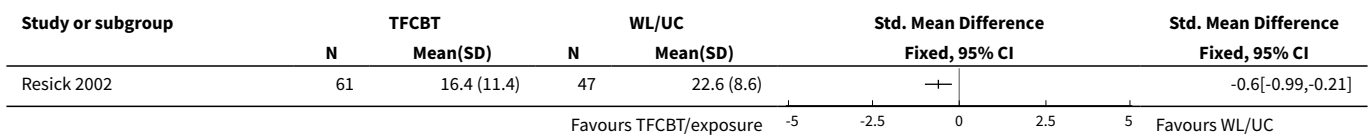
Analysis 1.10. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/usual care, Outcome 10 Depression 1 - 4 month follow-up.



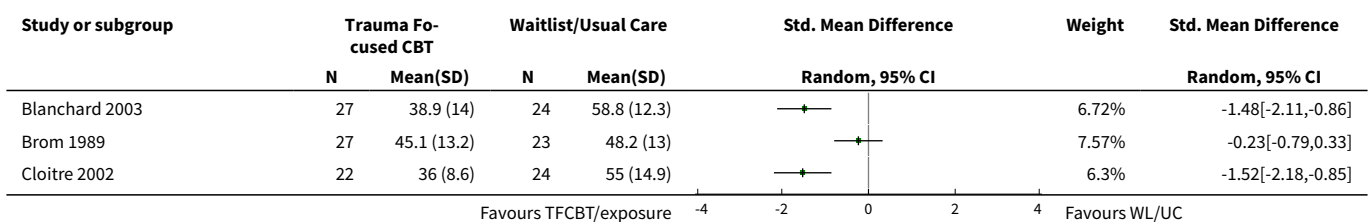
Analysis 1.11. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/usual care, Outcome 11 Depression 5 - 8 month follow-up.

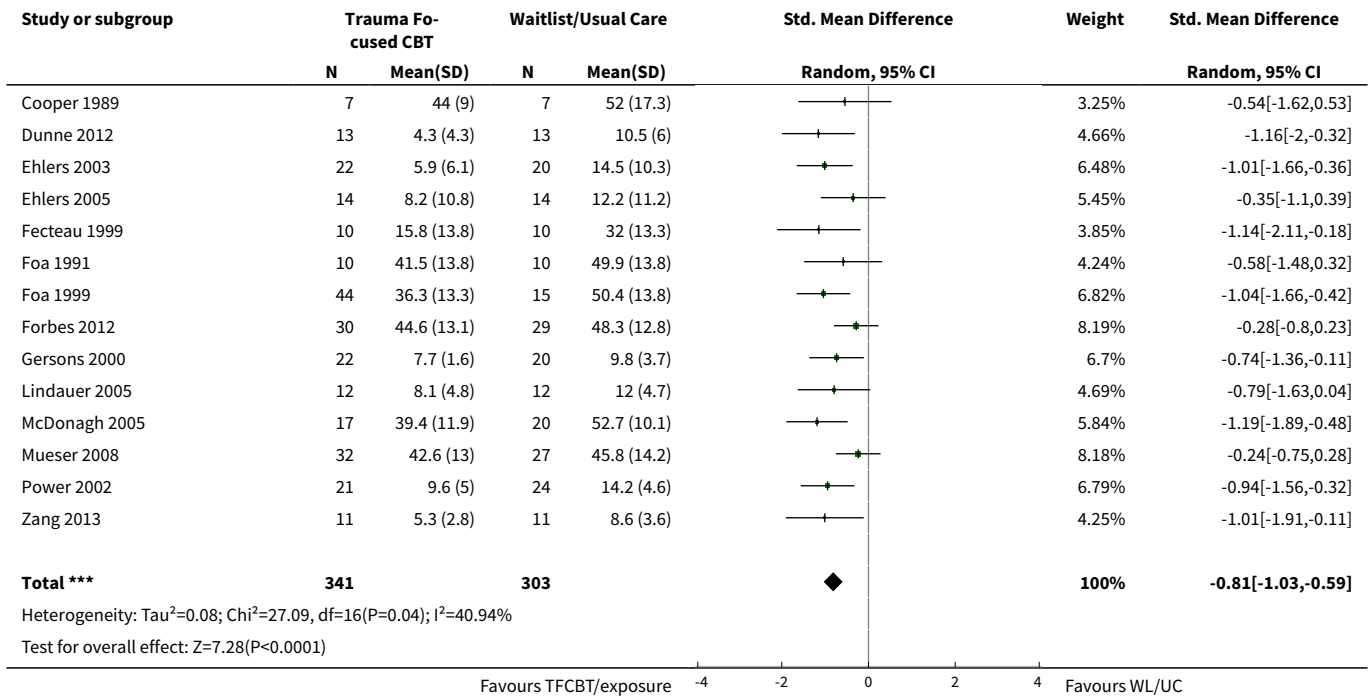


Analysis 1.12. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/usual care, Outcome 12 Depression 9 - 12 month follow-up.

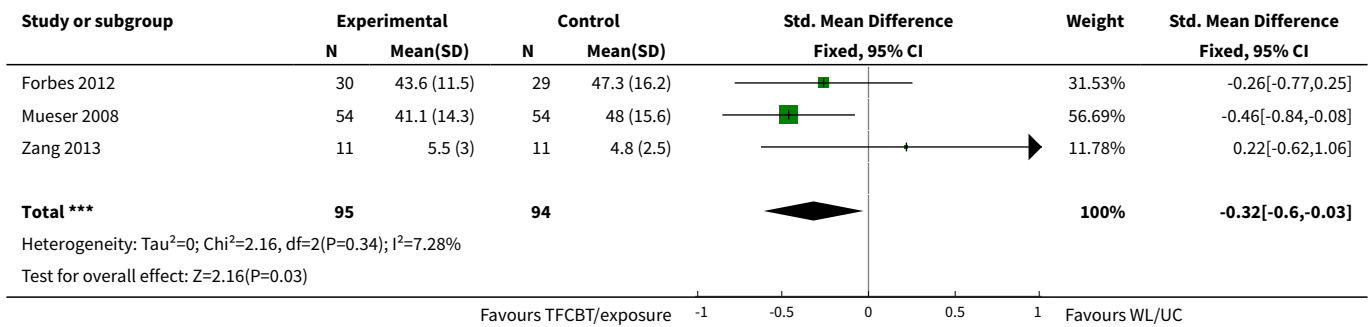


Analysis 1.13. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/usual care, Outcome 13 Anxiety.

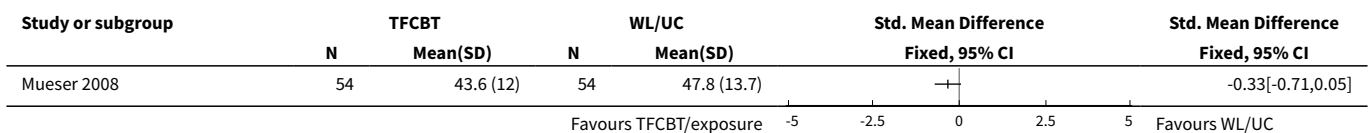




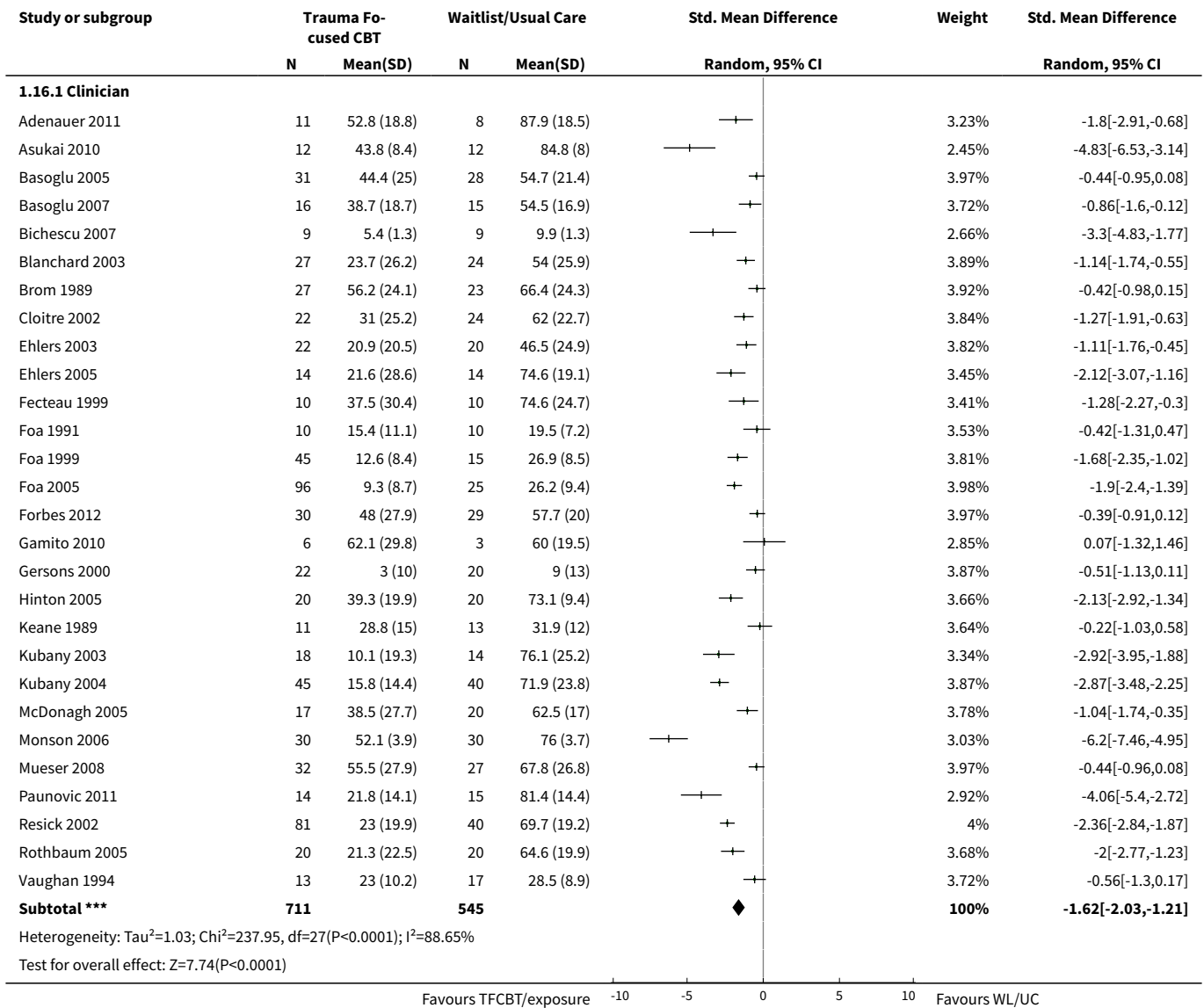
Analysis 1.14. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/usual care, Outcome 14 Anxiety 1 - 4 month follow-up.



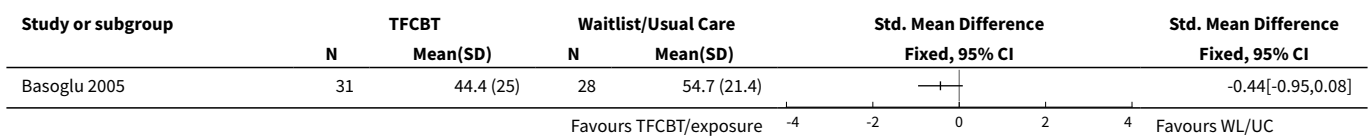
Analysis 1.15. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/usual care, Outcome 15 Anxiety 9 - 12 month follow-up.



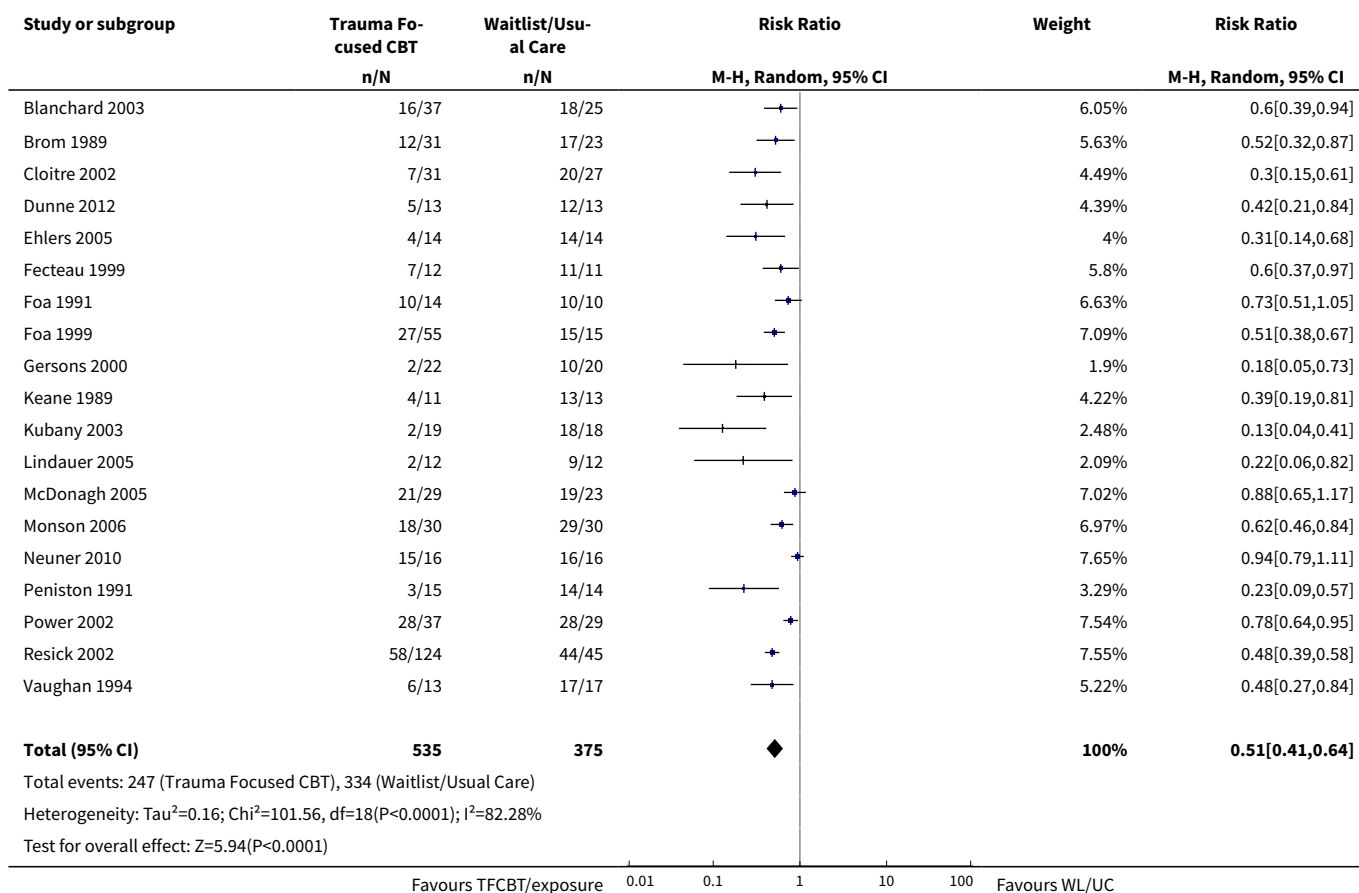
Analysis 1.16. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/usual care, Outcome 16 Exploration of publication bias.



Analysis 1.17. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/usual care, Outcome 17 Sensitivity analysis - clinician-rated PTSD symptoms - studies at low risk of bias only.



Analysis 1.18. Comparison 1 Trauma-focused CBT/Exposure therapy vs waitlist/usual care, Outcome 18 PTSD diagnosis after treatment.

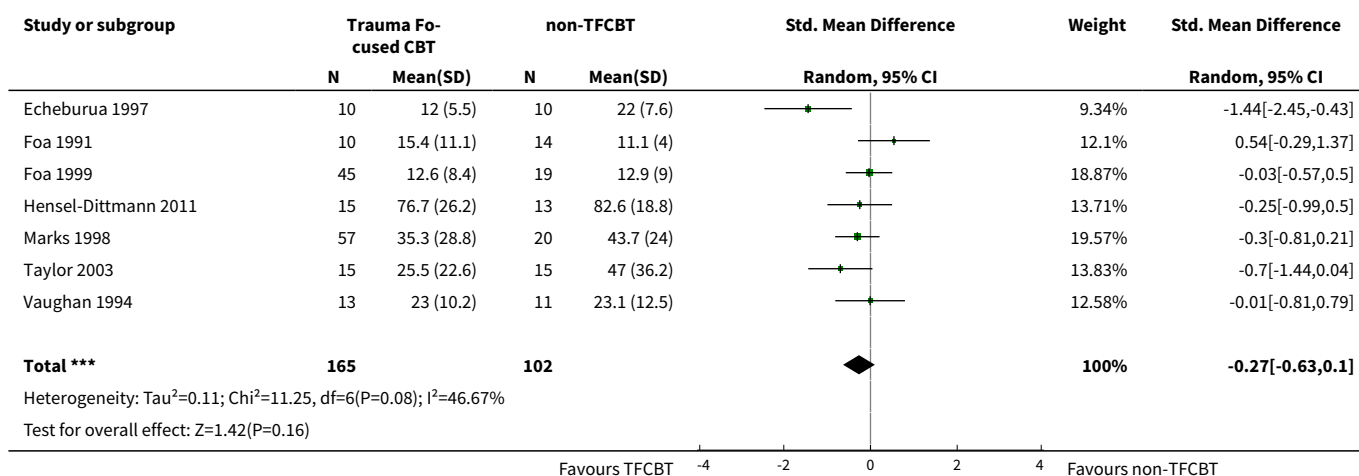


Comparison 2. Trauma-focused CBT/Exposure therapy vs non-TFCBT

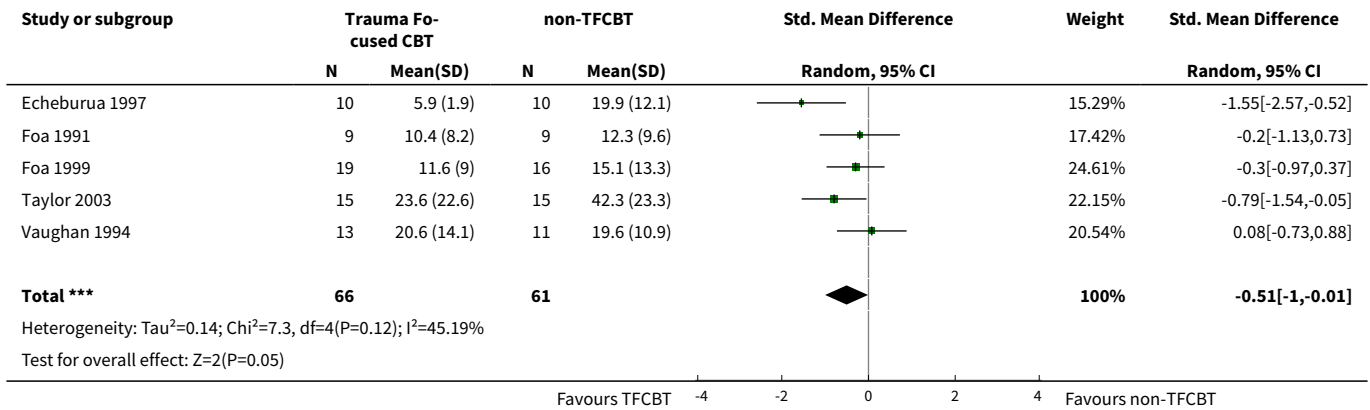
Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Severity of PTSD Symptoms - clinician	7	267	Std. Mean Difference (IV, Random, 95% CI)	-0.27 [-0.63, 0.10]
2 Severity of PTSD symptoms - clinician - follow-up (1 - 4 months)	5	127	Std. Mean Difference (IV, Random, 95% CI)	-0.51 [-1.00, -0.01]
3 Severity of PTSD symptoms - clinician - follow-up (5 - 8 months)	2	48	Std. Mean Difference (IV, Random, 95% CI)	1.00 [-2.17, 0.17]
4 Severity of PTSD symptoms - clinician - follow-up (9 - 12 months)	2	48	Mean Difference (IV, Fixed, 95% CI)	-12.93 [-18.72, -7.14]
5 Leaving the study early for any reason	7	312	Risk Ratio (M-H, Fixed, 95% CI)	1.19 [0.71, 2.00]

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
6 Severity of PTSD symptoms - self report	3	127	Std. Mean Difference (IV, Fixed, 95% CI)	-0.37 [-0.74, 0.01]
7 Severity of PTSD symptoms - self report - follow-up (1-4 months)	2	54	Std. Mean Difference (IV, Fixed, 95% CI)	-0.44 [-0.99, 0.10]
8 Depression	6	189	Std. Mean Difference (IV, Fixed, 95% CI)	-0.27 [-0.56, 0.03]
9 Depression - follow-up (1 - 4 months)	5	147	Std. Mean Difference (IV, Fixed, 95% CI)	-0.28 [-0.62, 0.06]
10 Depression - follow-up (5 - 8 months)	2	48	Std. Mean Difference (IV, Fixed, 95% CI)	-0.71 [-1.30, -0.12]
11 Depression - follow-up (9 - 12 months)	1		Mean Difference (IV, Fixed, 95% CI)	Totals not selected
12 Anxiety	4	127	Std. Mean Difference (IV, Fixed, 95% CI)	-0.12 [-0.49, 0.26]
13 Anxiety - follow-up (1 - 4 months)	4	117	Std. Mean Difference (IV, Random, 95% CI)	-0.24 [-0.79, 0.30]
14 Anxiety - follow-up (5 - 8 months)	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
15 Anxiety - follow-up (9 - 12 months)	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
16 PTSD diagnosis after treatment	6	284	Risk Ratio (M-H, Random, 95% CI)	0.83 [0.60, 1.17]

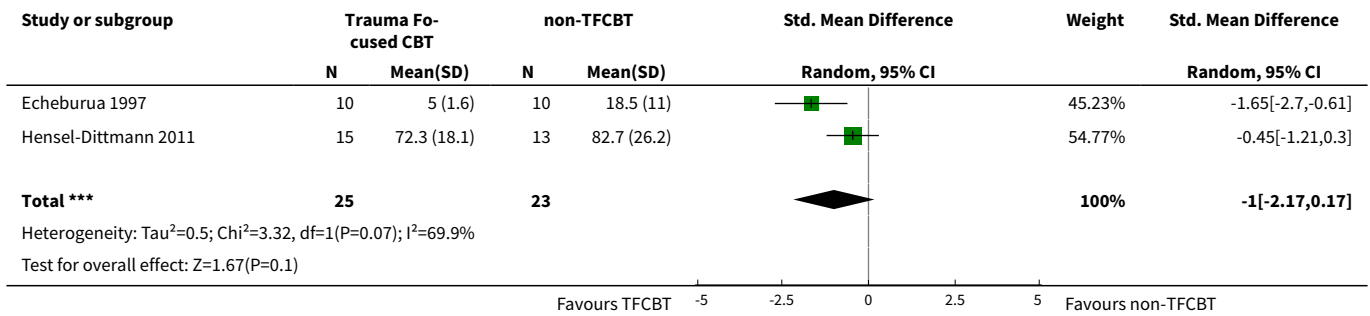
Analysis 2.1. Comparison 2 Trauma-focused CBT/Exposure therapy vs non-TFCBT, Outcome 1 Severity of PTSD Symptoms - clinician.



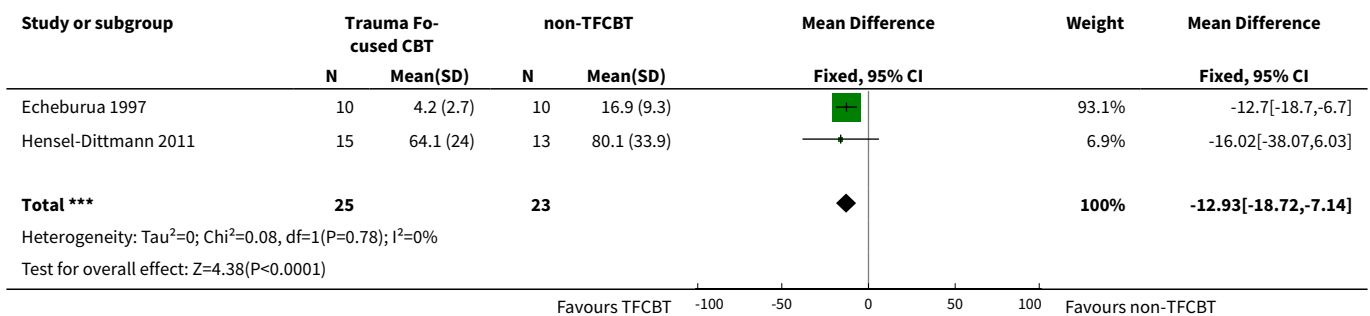
Analysis 2.2. Comparison 2 Trauma-focused CBT/Exposure therapy vs non-TFCBT, Outcome 2 Severity of PTSD symptoms - clinician - follow-up (1 - 4 months).



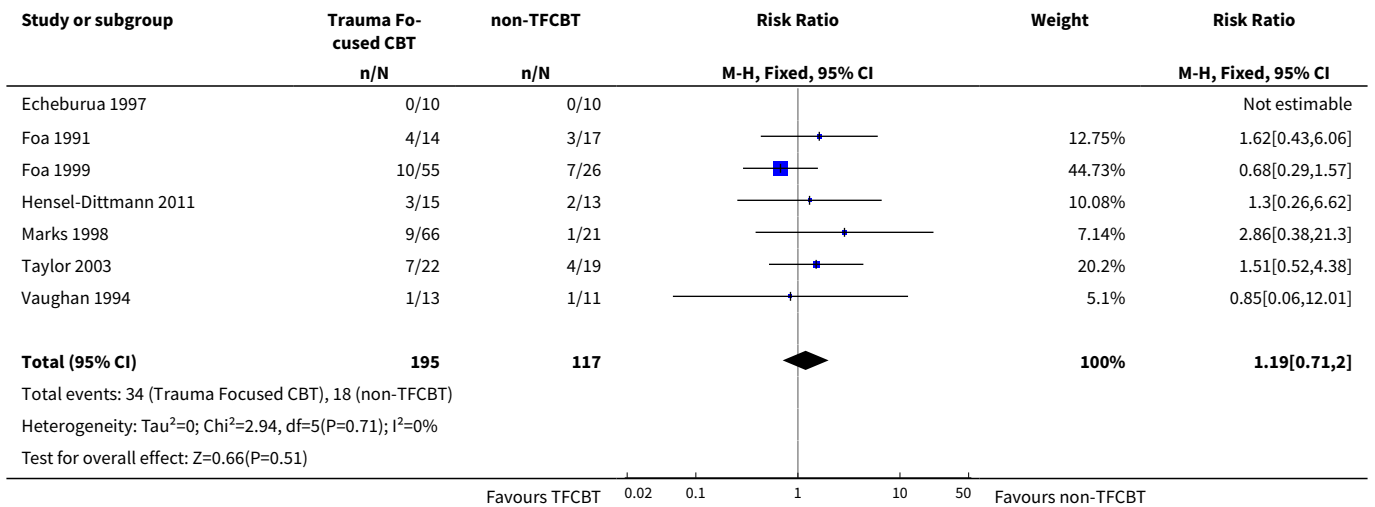
Analysis 2.3. Comparison 2 Trauma-focused CBT/Exposure therapy vs non-TFCBT, Outcome 3 Severity of PTSD symptoms - clinician - follow-up (5 - 8 months).



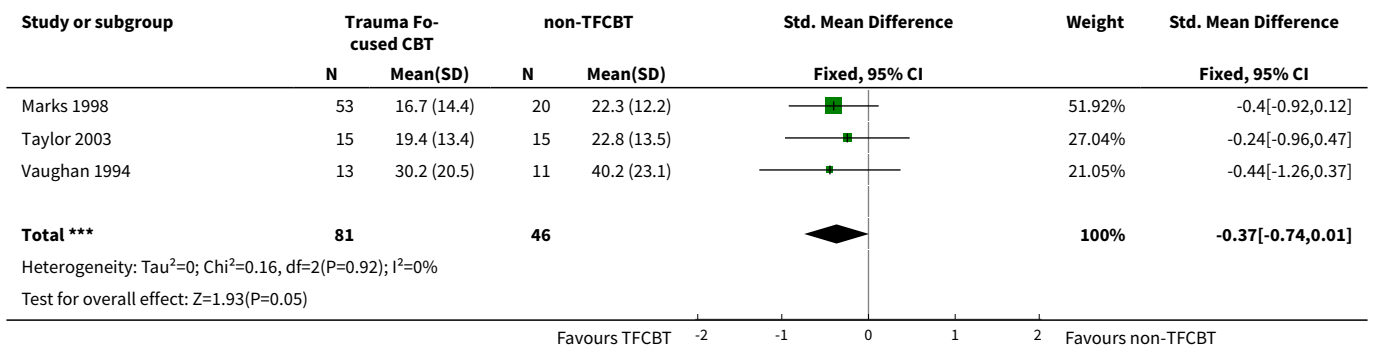
Analysis 2.4. Comparison 2 Trauma-focused CBT/Exposure therapy vs non-TFCBT, Outcome 4 Severity of PTSD symptoms - clinician - follow-up (9 - 12 months).



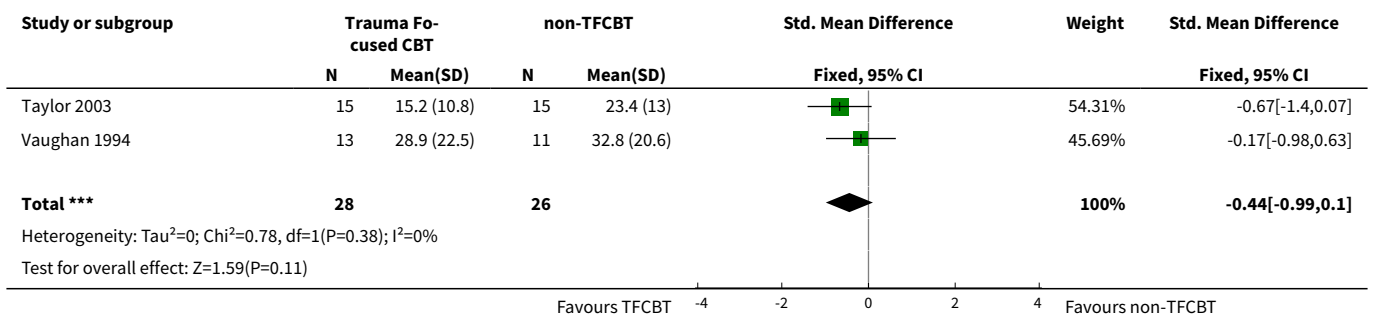
Analysis 2.5. Comparison 2 Trauma-focused CBT/Exposure therapy vs non-TFCBT, Outcome 5 Leaving the study early for any reason.



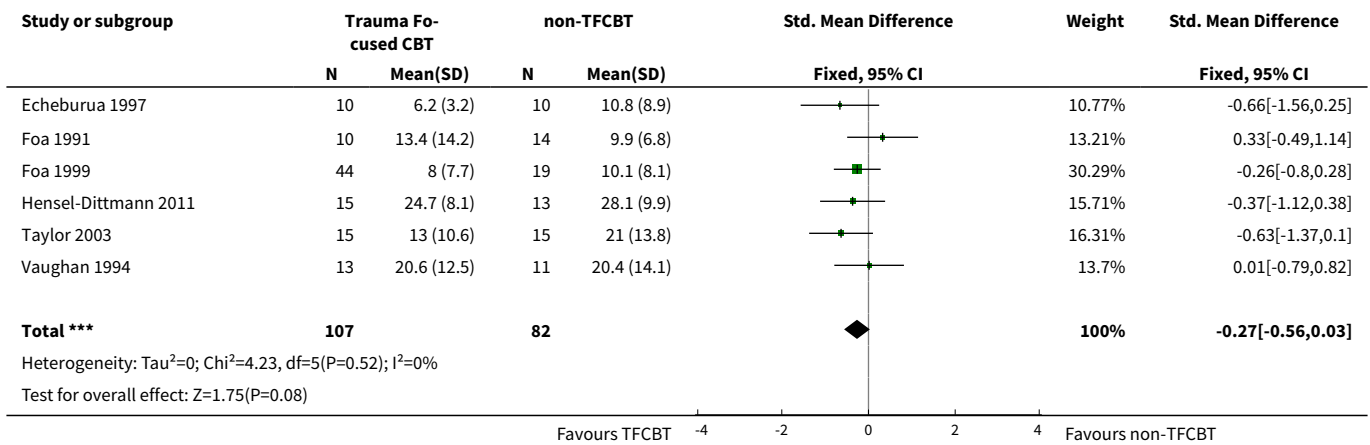
Analysis 2.6. Comparison 2 Trauma-focused CBT/Exposure therapy vs non-TFCBT, Outcome 6 Severity of PTSD symptoms - self report.



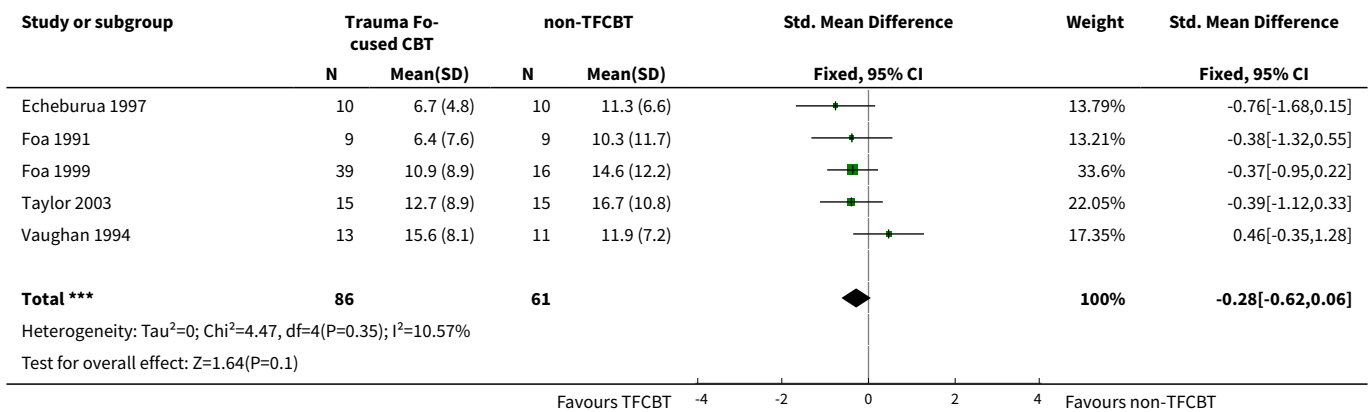
Analysis 2.7. Comparison 2 Trauma-focused CBT/Exposure therapy vs non-TFCBT, Outcome 7 Severity of PTSD symptoms - self report - follow-up (1-4 months).



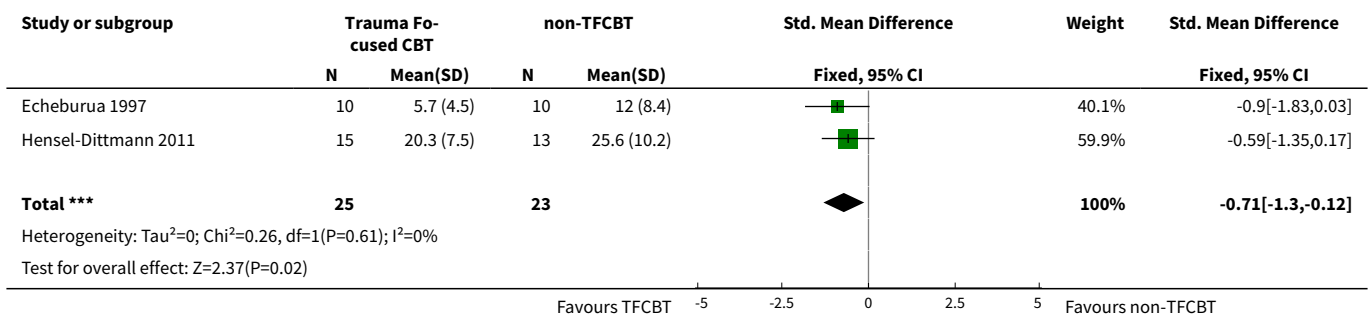
Analysis 2.8. Comparison 2 Trauma-focused CBT/Exposure therapy vs non-TFCBT, Outcome 8 Depression.



Analysis 2.9. Comparison 2 Trauma-focused CBT/Exposure therapy vs non-TFCBT, Outcome 9 Depression - follow-up (1 - 4 months).



Analysis 2.10. Comparison 2 Trauma-focused CBT/Exposure therapy vs non-TFCBT, Outcome 10 Depression - follow-up (5 - 8 months).



Analysis 2.11. Comparison 2 Trauma-focused CBT/Exposure therapy vs non-TFCBT, Outcome 11 Depression - follow-up (9 - 12 months).

Study or subgroup	Trauma Focused CBT		non-TFCBT		Mean Difference	
	N	Mean(SD)	N	Mean(SD)	Fixed, 95% CI	Mean Difference Fixed, 95% CI
Echeburua 1997	10	4.4 (3.3)	10	12.4 (9.4)	-	-8[-14.14,-1.86]

Analysis 2.12. Comparison 2 Trauma-focused CBT/Exposure therapy vs non-TFCBT, Outcome 12 Anxiety.

Study or subgroup	Trauma Fo-cused CBT		non-TFCBT		Std. Mean Difference Fixed, 95% CI	Weight	Std. Mean Difference Fixed, 95% CI
	N	Mean(SD)	N	Mean(SD)			
Echeburua 1997	10	17.6 (9.5)	10	26.5 (15.3)	-0.67	17.01%	-0.67[-1.58,0.24]
Foa 1991	10	41.5 (13.8)	14	37.2 (7.6)	0.4	20.76%	0.4[-0.42,1.22]
Foa 1999	44	36.3 (13.3)	15	39.1 (11.6)	-0.21	40.54%	-0.21[-0.8,0.37]
Vaughan 1994	13	52.4 (15.9)	11	52.4 (18.3)	0	21.69%	0[-0.8,0.8]
Total ***	77		50		-0.12	100%	-0.12[-0.49,0.26]

Heterogeneity: Tau²=0; Chi²=3.12, df=3(P=0.37); I²=3.95%
Test for overall effect: Z=0.62(P=0.54)

Analysis 2.13. Comparison 2 Trauma-focused CBT/Exposure therapy vs non-TFCBT, Outcome 13 Anxiety - follow-up (1 - 4 months).

Study or subgroup	Trauma Fo-cused CBT		non-TFCBT		Std. Mean Difference Random, 95% CI	Weight	Std. Mean Difference Random, 95% CI
	N	Mean(SD)	N	Mean(SD)			
Echeburua 1997	10	18.9 (10.7)	10	25 (17.2)	-0.41	22.41%	-0.41[-1.3,0.48]
Foa 1991	9	32.4 (7)	9	50 (19.4)	-1.15	18.91%	-1.15[-2.17,-0.14]
Foa 1999	39	40.5 (13.5)	16	41.3 (14)	-0.06	33.8%	-0.06[-0.64,0.52]
Vaughan 1994	13	50.3 (16.1)	11	45.4 (9.9)	0.35	24.88%	0.35[-0.46,1.16]
Total ***	71		46		-0.24	100%	-0.24[-0.79,0.3]

Heterogeneity: Tau²=0.14; Chi²=5.56, df=3(P=0.13); I²=46.06%
Test for overall effect: Z=0.87(P=0.38)

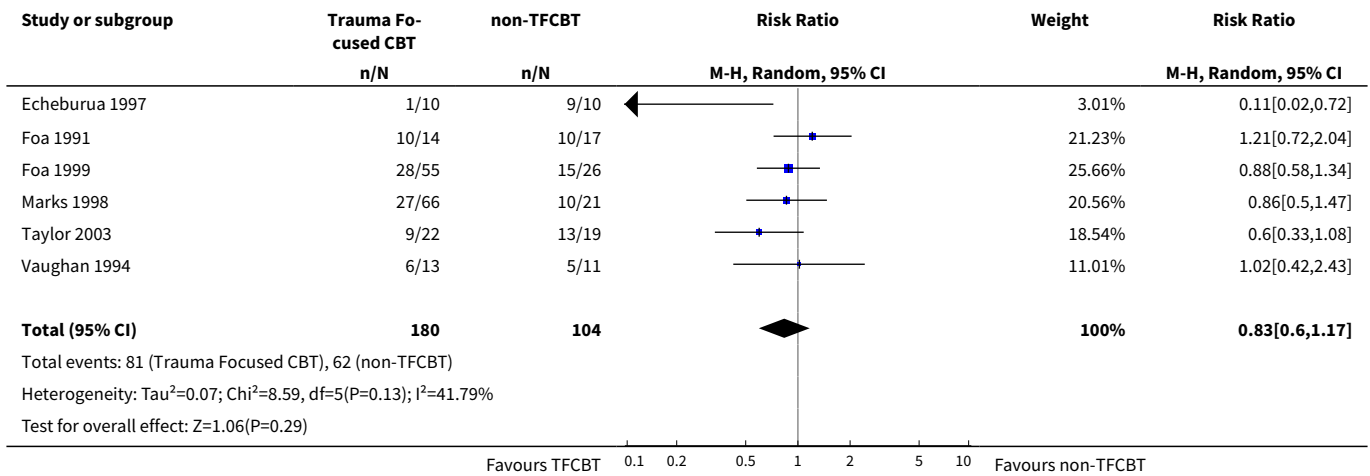
Analysis 2.14. Comparison 2 Trauma-focused CBT/Exposure therapy vs non-TFCBT, Outcome 14 Anxiety - follow-up (5 - 8 months).

Study or subgroup	Trauma Focused CBT		non-TFCBT		Std. Mean Difference	
	N	Mean(SD)	N	Mean(SD)	Fixed, 95% CI	Std. Mean Difference Fixed, 95% CI
Echeburua 1997	10	14.9 (8.7)	10	23.6 (16.9)	-0.62	-0.62[-1.52,0.28]

Analysis 2.15. Comparison 2 Trauma-focused CBT/Exposure therapy vs non-TFCBT, Outcome 15 Anxiety - follow-up (9 - 12 months).

Study or subgroup	Trauma Focused CBT		non-TFCBT		Std. Mean Difference	
	N	Mean(SD)	N	Mean(SD)	Fixed, 95% CI	Std. Mean Difference Fixed, 95% CI
Echeburua 1997	10	13.8 (4.7)	10	24 (14.9)		-0.88[-1.81,0.04]

Analysis 2.16. Comparison 2 Trauma-focused CBT/Exposure therapy vs non-TFCBT, Outcome 16 PTSD diagnosis after treatment.

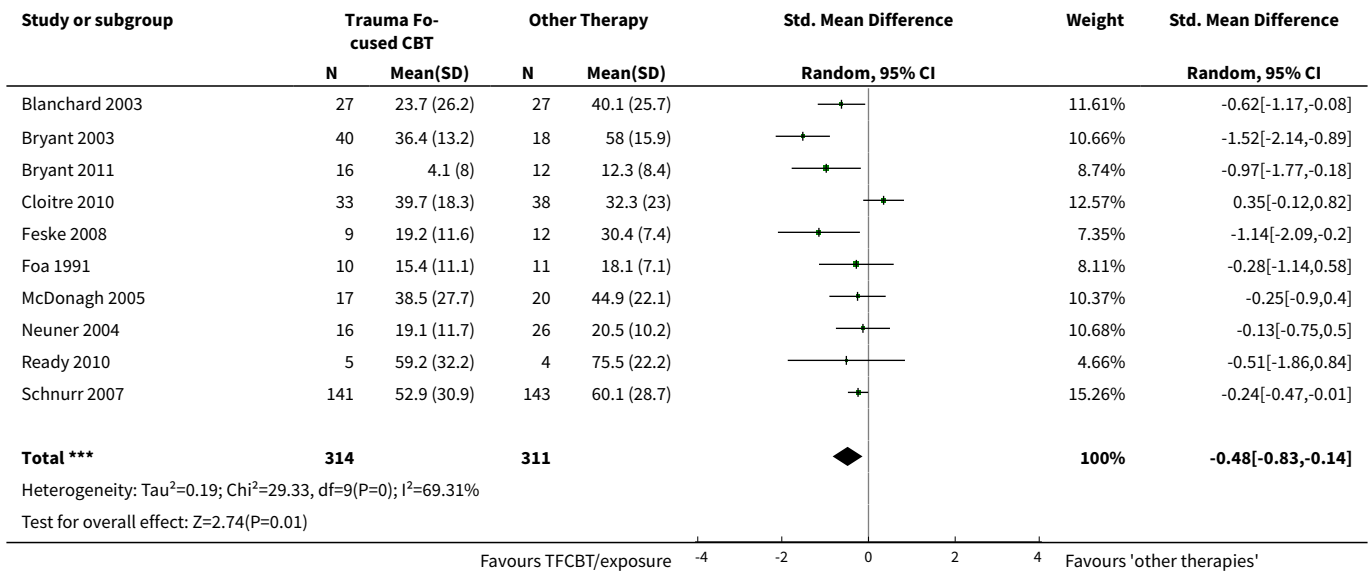


Comparison 3. Trauma-focused CBT/Exposure Therapy vs other therapies

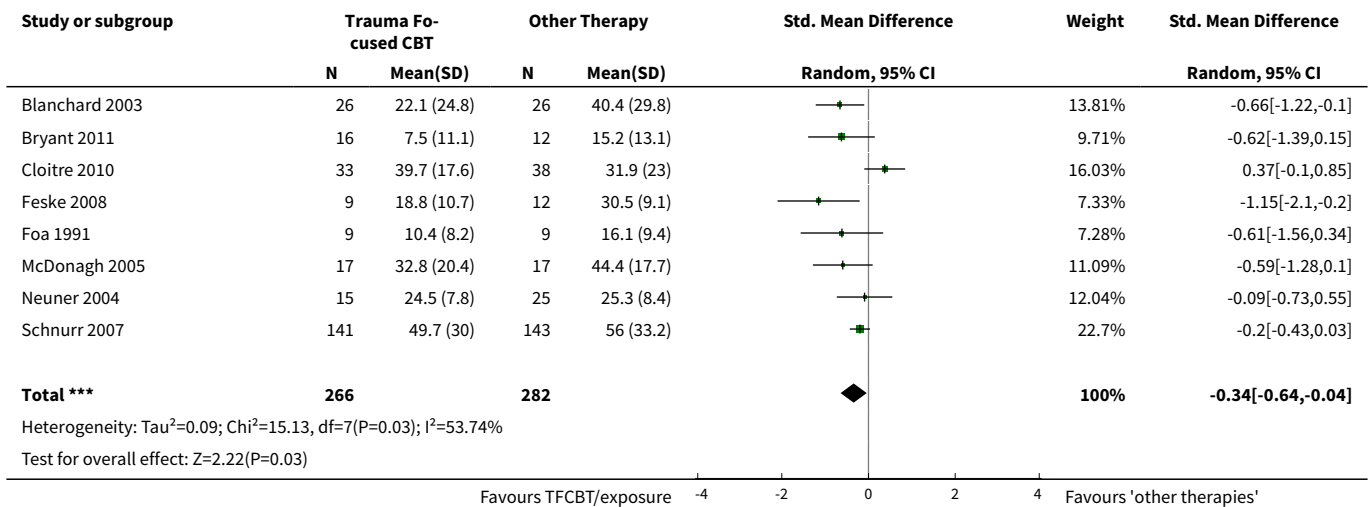
Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Severity of PTSD symptoms - clinician	10	625	Std. Mean Difference (IV, Random, 95% CI)	-0.48 [-0.83, -0.14]
2 Severity of PTSD symptoms - clinician - 1 - 4 month follow-up	8	548	Std. Mean Difference (IV, Random, 95% CI)	-0.34 [-0.64, -0.04]
3 Severity of PTSD symptoms - clinician - 5 - 8 month follow-up	4	434	Std. Mean Difference (IV, Random, 95% CI)	-0.58 [-1.20, 0.04]
4 Severity of PTSD symptoms - clinician - 9 - 12 month follow-up	2	90	Std. Mean Difference (IV, Random, 95% CI)	-0.76 [-1.35, -0.17]
5 Leaving the study early for any reason	11	762	Risk Ratio (M-H, Fixed, 95% CI)	1.39 [1.01, 1.92]
6 Severity of PTSD symptoms - self report	6	574	Std. Mean Difference (IV, Random, 95% CI)	-0.60 [-1.15, -0.06]

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
7 Severity of PTSD symptoms - self-report - follow-up (1 - 4 months)	5	526	Std. Mean Difference (IV, Fixed, 95% CI)	-0.29 [-0.47, -0.12]
8 Severity of PTSD symptoms - self-report - follow-up (5 - 8 months)	3	338	Std. Mean Difference (IV, Random, 95% CI)	-0.90 [-2.05, 0.25]
9 Severity of PTSD symptoms - self-report - follow-up (9 - 12 months)	2	90	Mean Difference (IV, Fixed, 95% CI)	-2.66 [-5.71, 0.38]
10 Depression - self report	9	570	Std. Mean Difference (IV, Random, 95% CI)	-0.37 [-0.63, -0.11]
11 Depression - self-report - follow-up (1-4 months)	7	510	Std. Mean Difference (IV, Random, 95% CI)	-0.29 [-0.62, 0.03]
12 Depression - follow-up (5-8 months)	5	443	Std. Mean Difference (IV, Random, 95% CI)	-0.43 [-0.87, 0.01]
13 Depression 9-12 month follow up	1		Mean Difference (IV, Fixed, 95% CI)	Totals not selected
14 Anxiety - self report	7	539	Std. Mean Difference (IV, Random, 95% CI)	-0.45 [-0.77, -0.12]
15 Anxiety - self-report - follow-up (1 - 4 months)	5	454	Std. Mean Difference (IV, Random, 95% CI)	-0.33 [-0.68, 0.02]
16 Anxiety - follow-up (5 - 8 months)	2	329	Std. Mean Difference (IV, Random, 95% CI)	-0.56 [-1.69, 0.58]
17 PTSD diagnosis after treatment	7	358	Risk Ratio (M-H, Random, 95% CI)	0.75 [0.59, 0.96]
18 Severity of PTSD symptoms - clinician - 13-24 month follow-up	1		Mean Difference (IV, Fixed, 95% CI)	Totals not selected
19 Sensitivity analysis - PTSD symptoms - studies at low risk of bias only	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
20 Sensitivity analysis - drop-out - studies at low risk of bias only	1		Risk Ratio (M-H, Fixed, 95% CI)	Totals not selected
21 Subgroup analysis: severity of PTSD symptoms - women-only studies	3	129	Std. Mean Difference (IV, Random, 95% CI)	0.03 [-0.42, 0.47]
22 Subgroup analysis: severity of PTSD symptoms - clinician - excluding Vietnam veterans	9	599	Std. Mean Difference (IV, Random, 95% CI)	-0.46 [-0.80, -0.11]

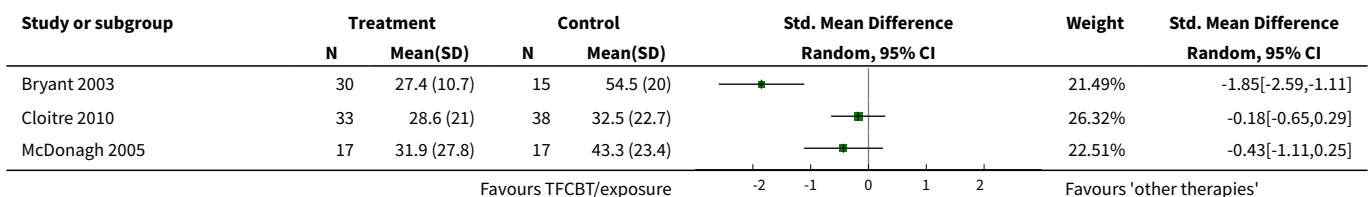
Analysis 3.1. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 1 Severity of PTSD symptoms - clinician.

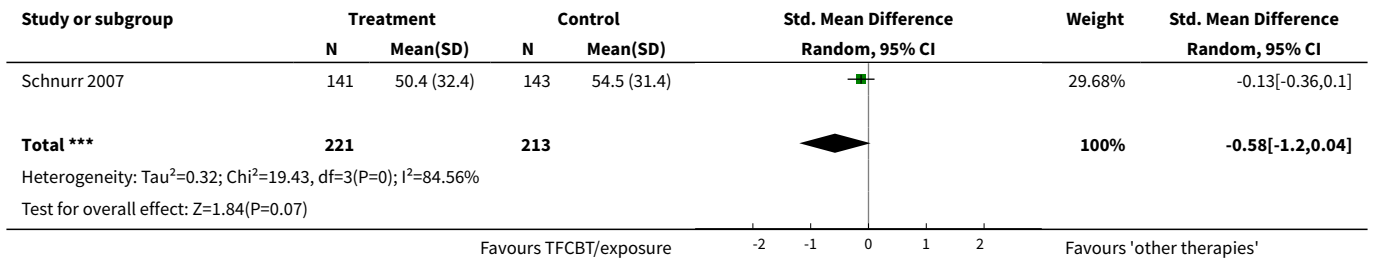


Analysis 3.2. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 2 Severity of PTSD symptoms - clinician - 1 - 4 month follow-up.

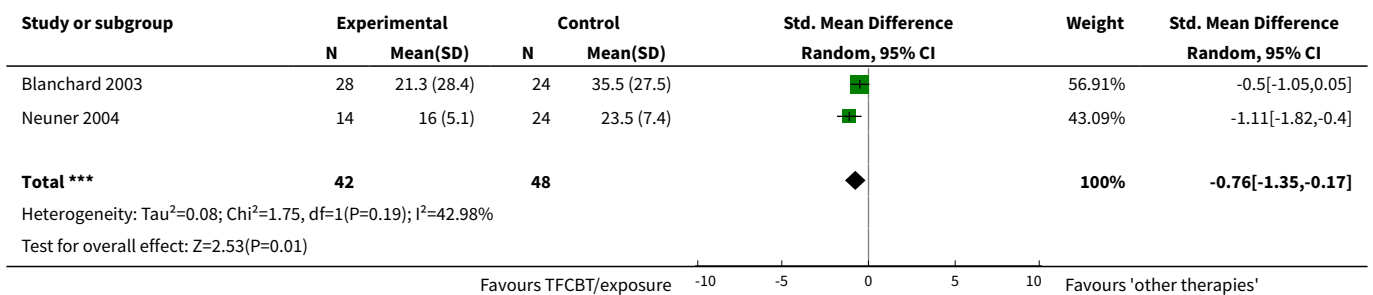


Analysis 3.3. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 3 Severity of PTSD symptoms - clinician - 5 - 8 month follow-up.

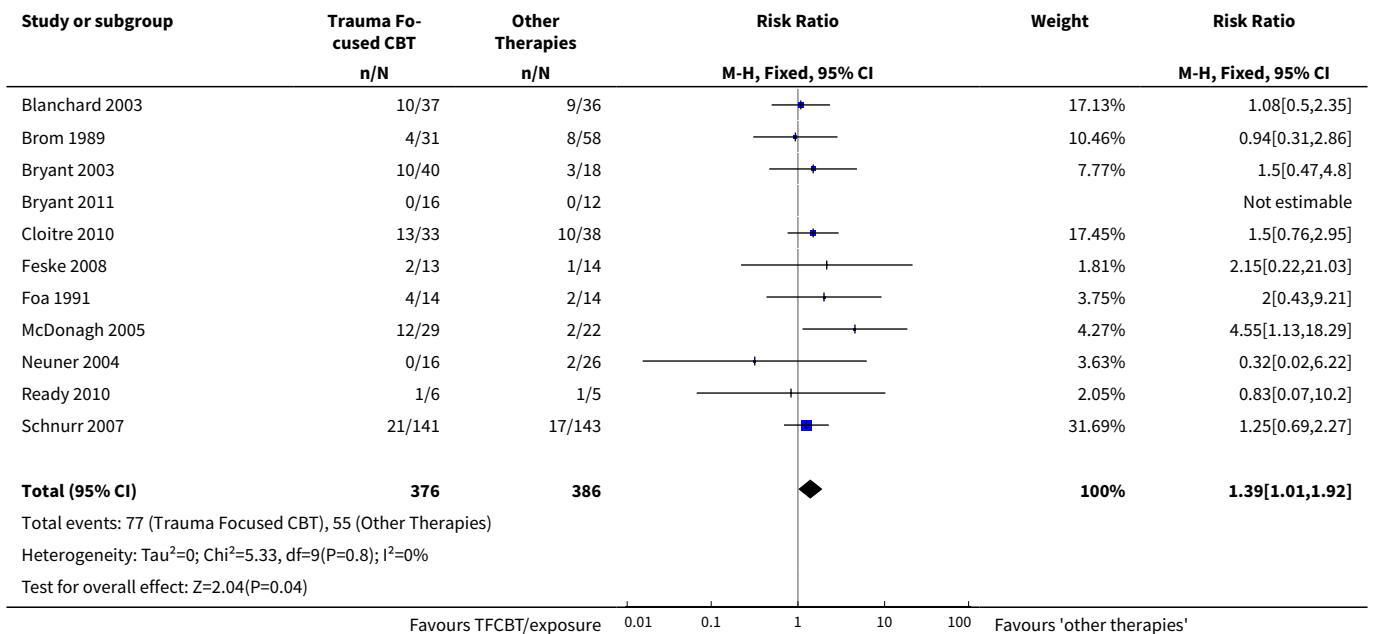




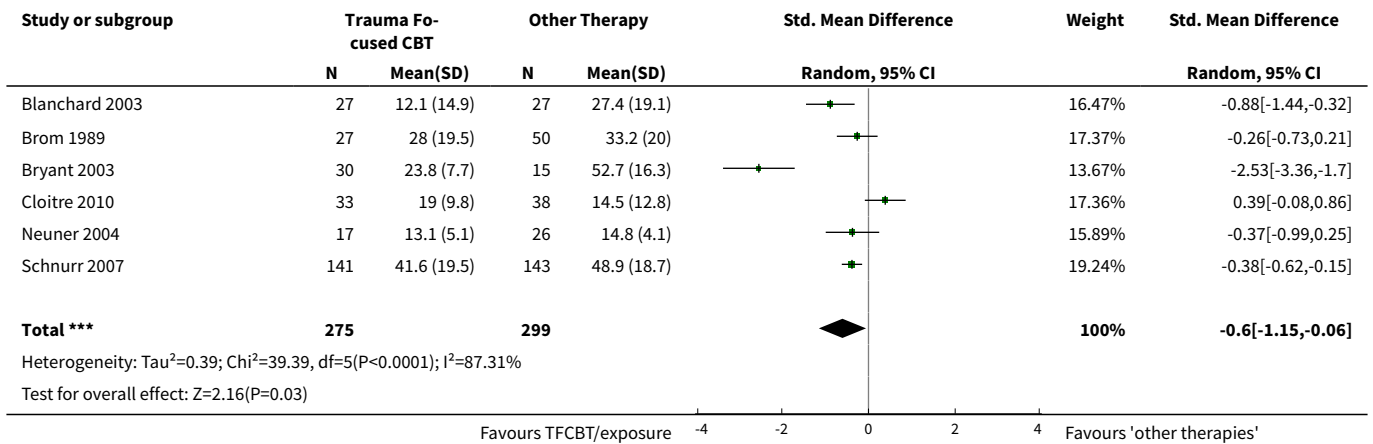
Analysis 3.4. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 4 Severity of PTSD symptoms - clinician - 9 - 12 month follow-up.



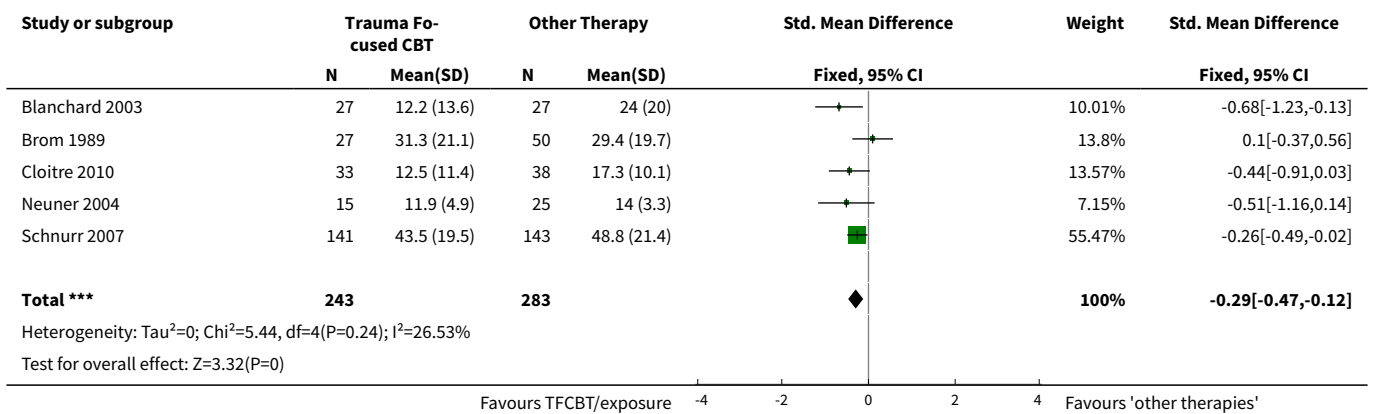
Analysis 3.5. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 5 Leaving the study early for any reason.



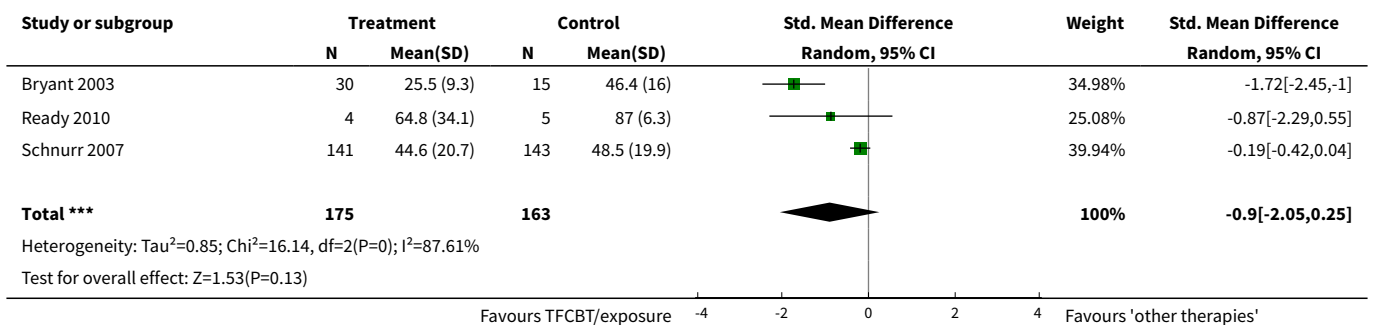
Analysis 3.6. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 6 Severity of PTSD symptoms - self report.



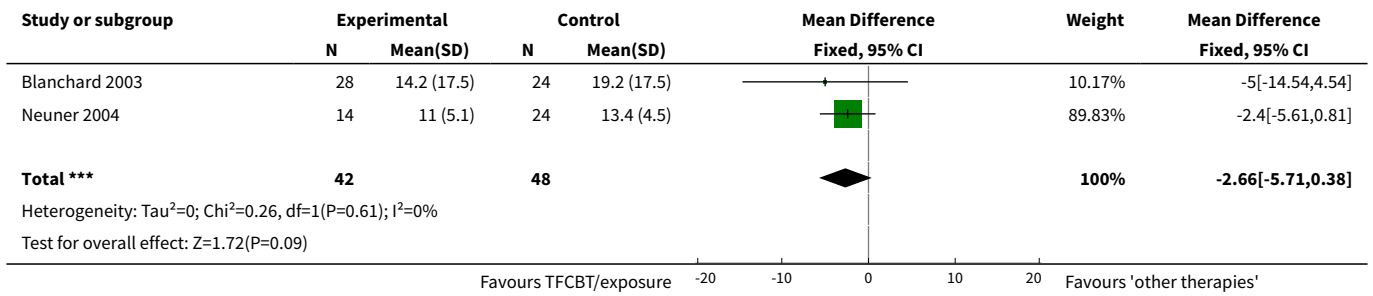
Analysis 3.7. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 7 Severity of PTSD symptoms - self report - follow-up (1 - 4 months).



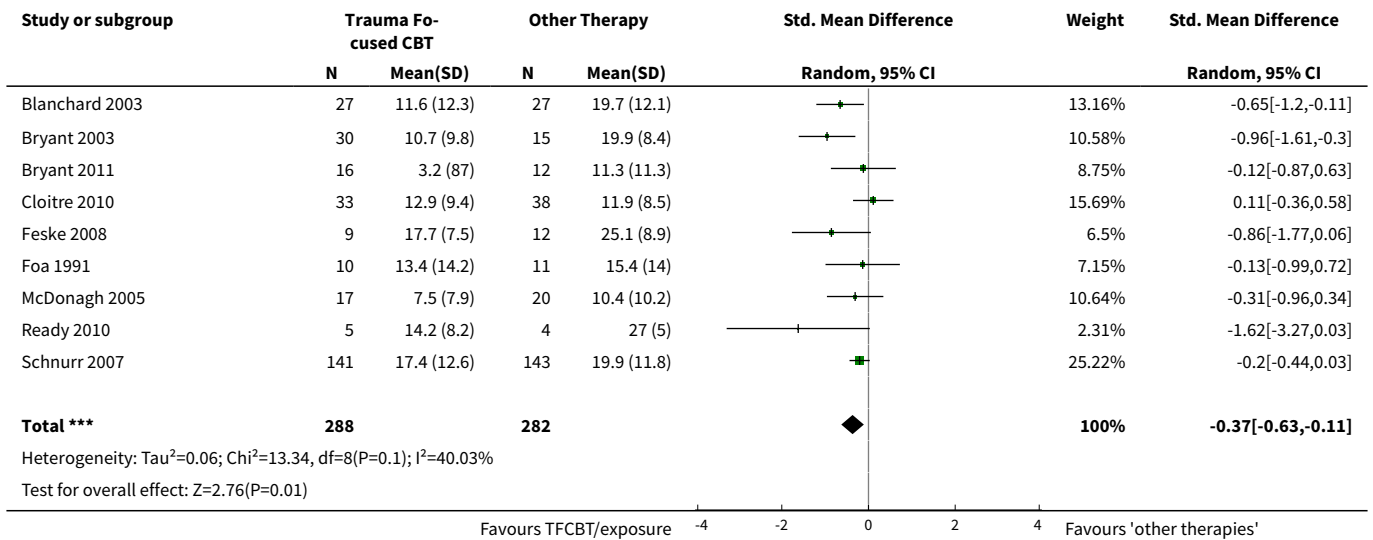
Analysis 3.8. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 8 Severity of PTSD symptoms - self-report - follow-up (5 - 8 months).



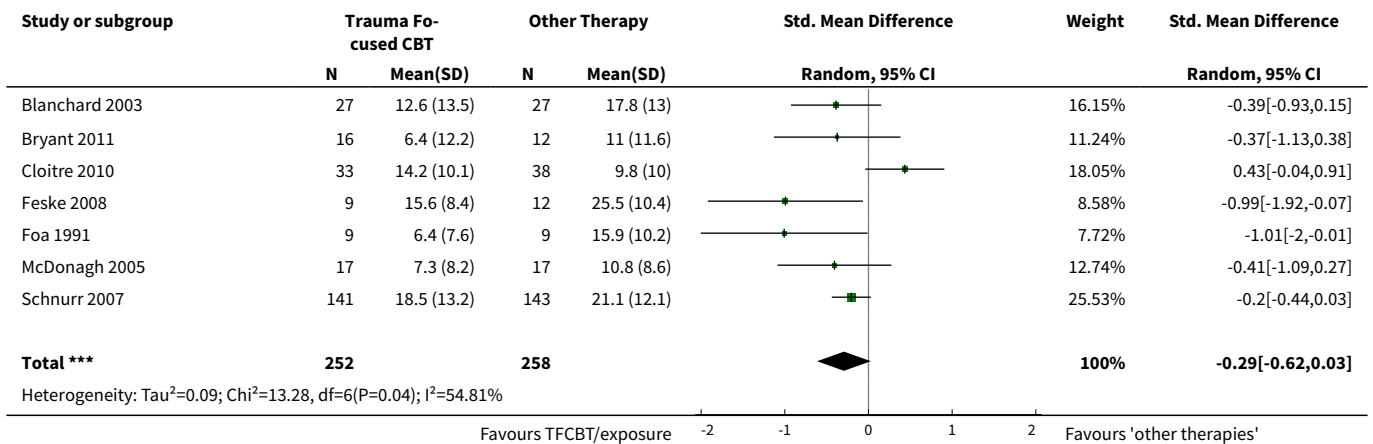
Analysis 3.9. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 9 Severity of PTSD symptoms - self-report - follow-up (9 - 12 months).

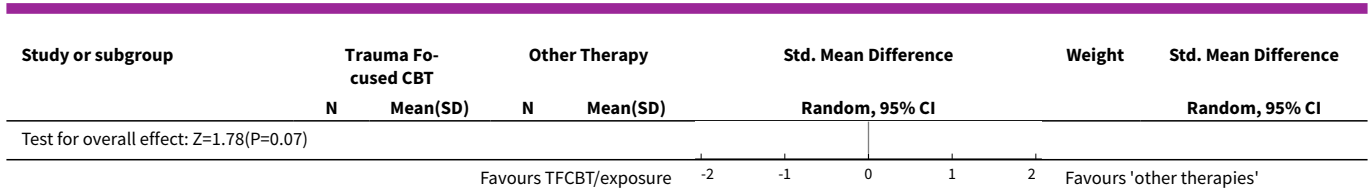


Analysis 3.10. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 10 Depression - self report.

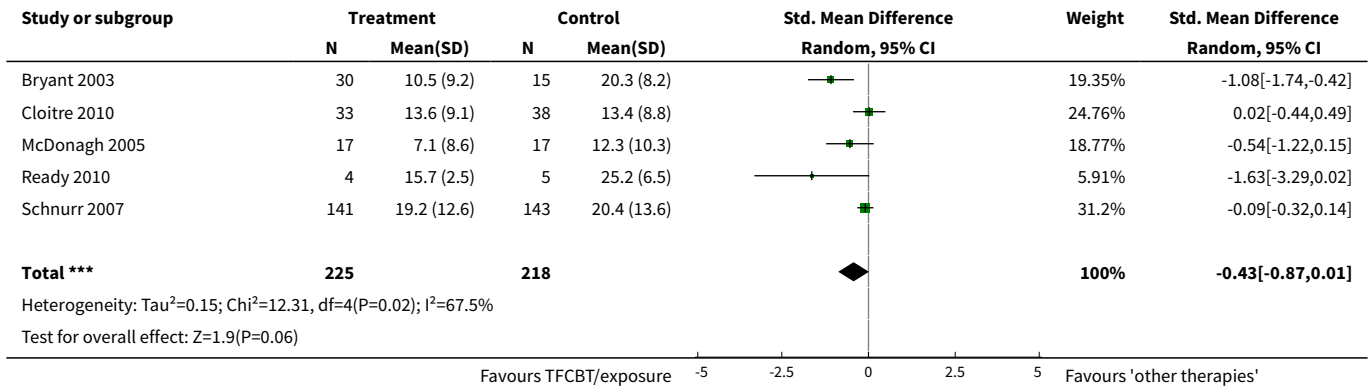


Analysis 3.11. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 11 Depression - self-report - follow-up (1-4 months).

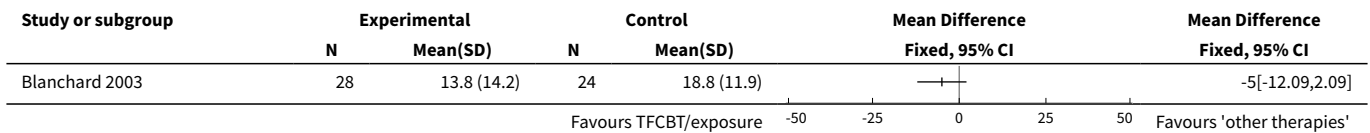




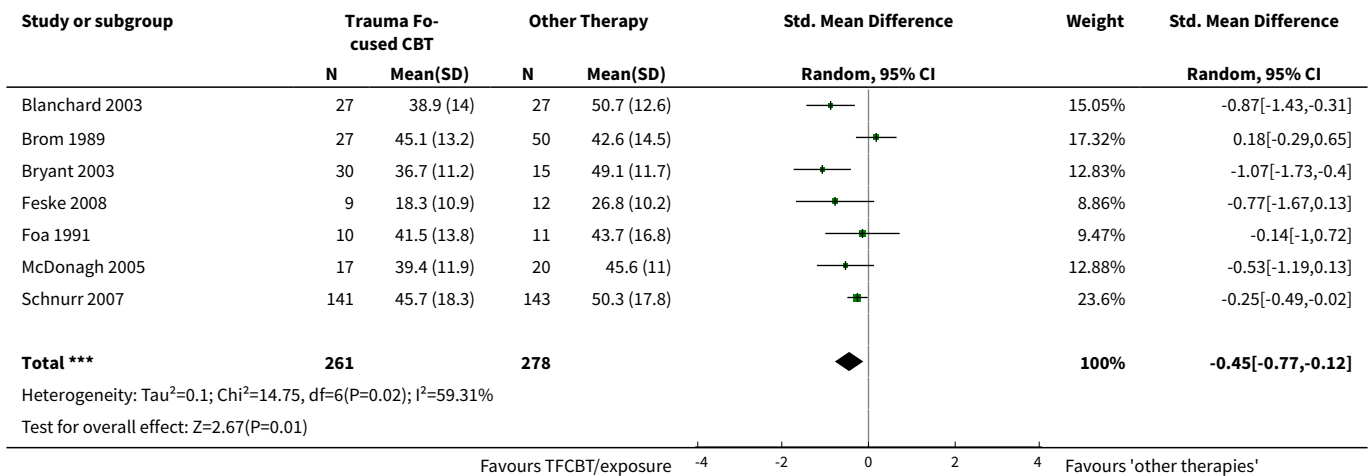
Analysis 3.12. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 12 Depression - follow-up (5-8 months).



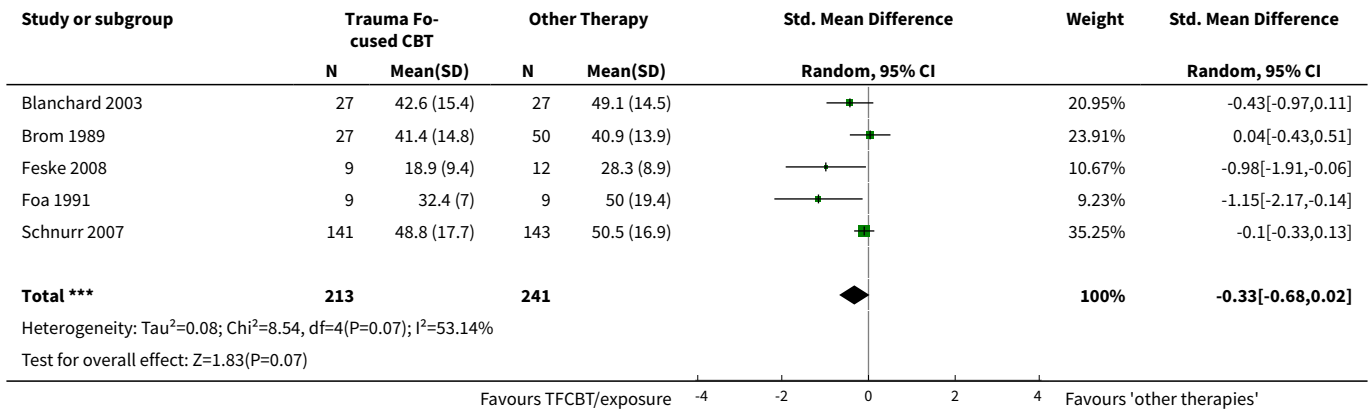
Analysis 3.13. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 13 Depression 9-12 month follow up.



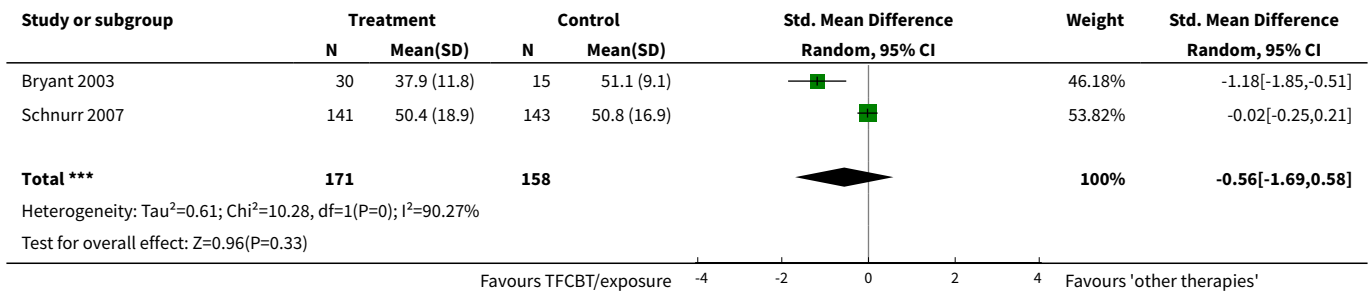
Analysis 3.14. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 14 Anxiety - self report.



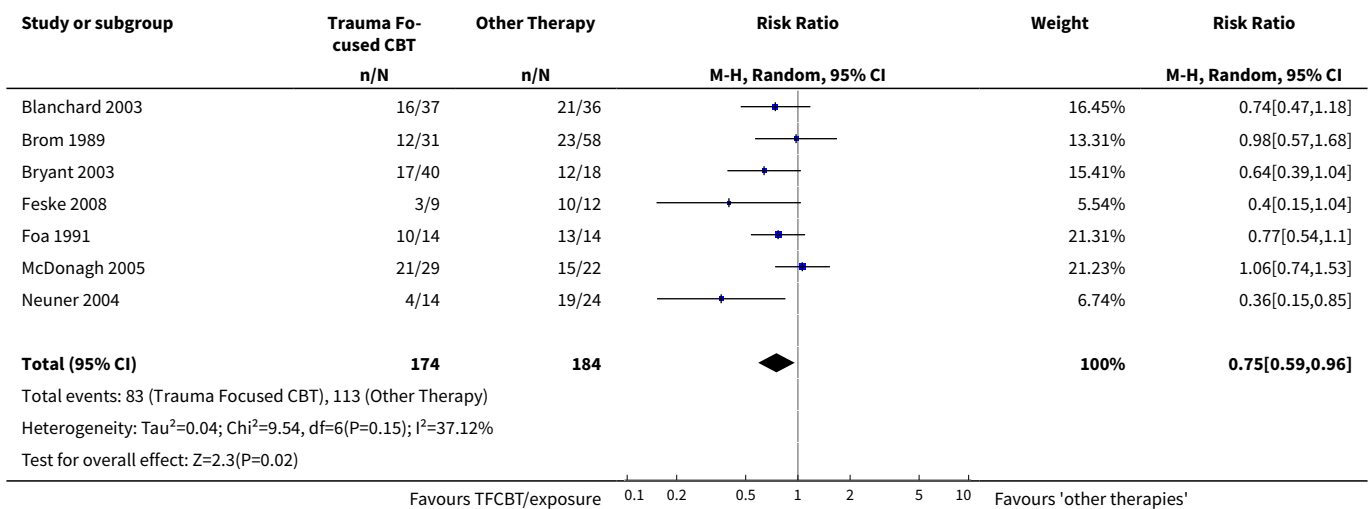
Analysis 3.15. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 15 Anxiety - self-report - follow-up (1 - 4 months).



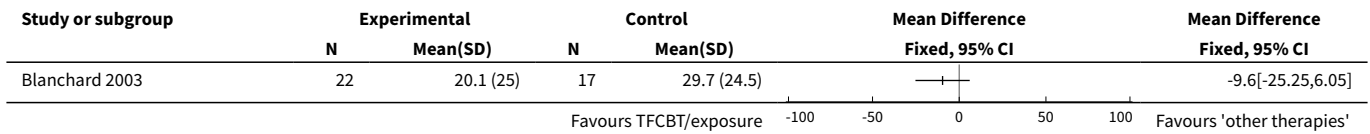
Analysis 3.16. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 16 Anxiety - follow-up (5 - 8 months).



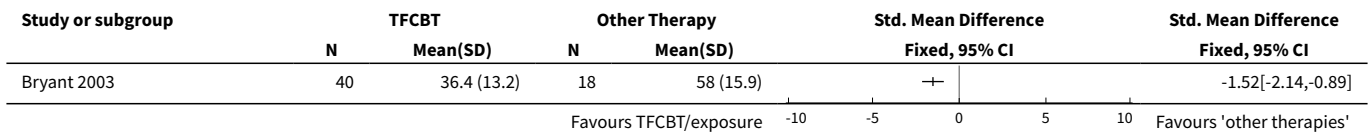
Analysis 3.17. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 17 PTSD diagnosis after treatment.



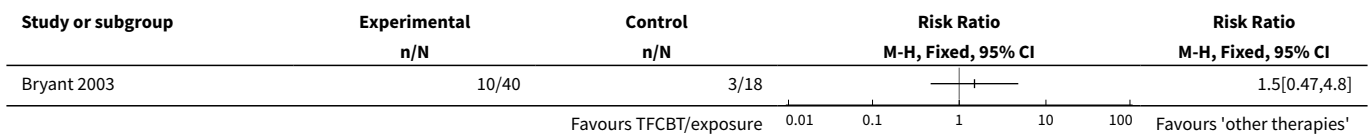
Analysis 3.18. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 18 Severity of PTSD symptoms - clinician - 13-24 month follow-up.



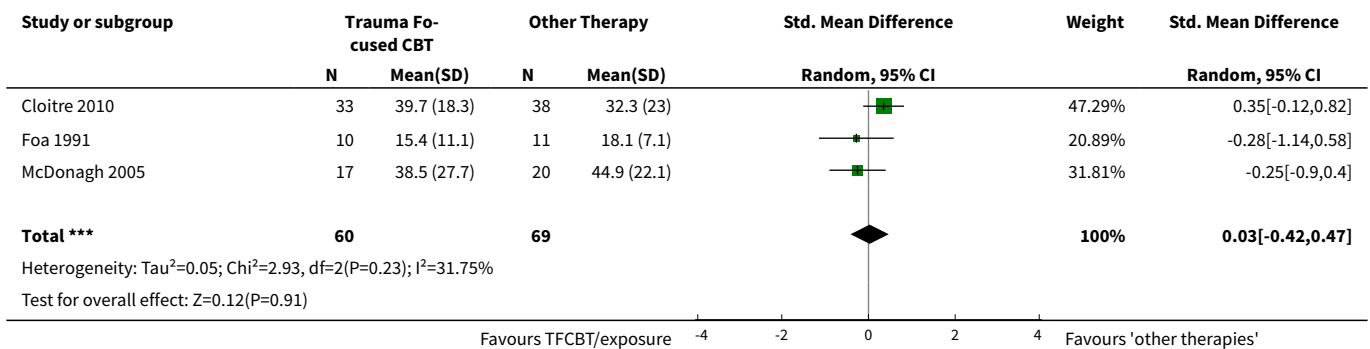
Analysis 3.19. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 19 Sensitivity analysis - PTSD symptoms - studies at low risk of bias only.



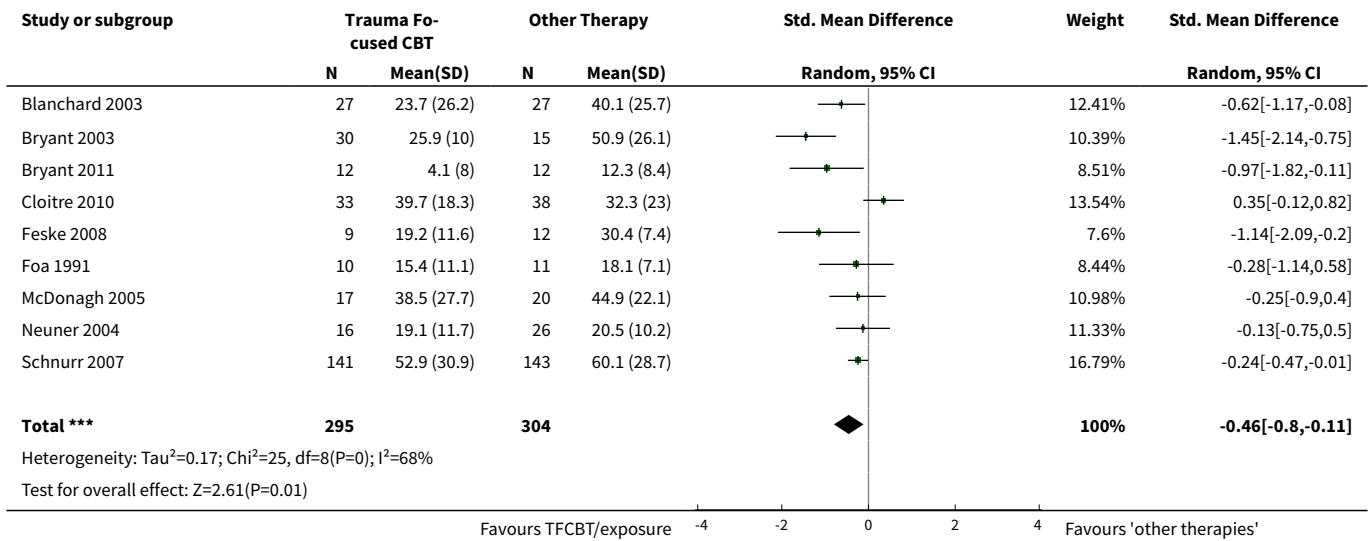
Analysis 3.20. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 20 Sensitivity analysis - drop-out - studies at low risk of bias only.



Analysis 3.21. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 21 Subgroup analysis: severity of PTSD symptoms - women-only studies.



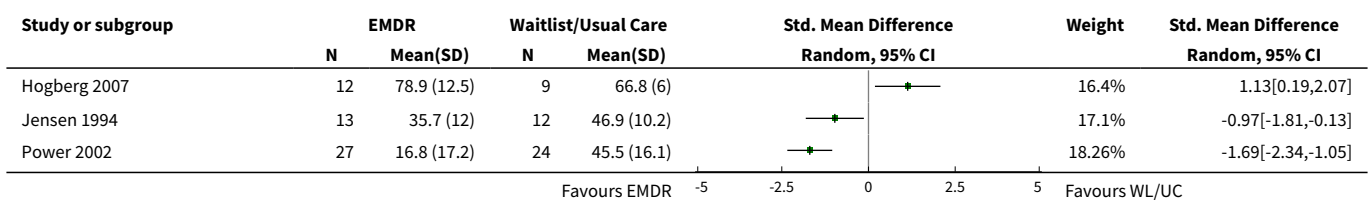
Analysis 3.22. Comparison 3 Trauma-focused CBT/Exposure Therapy vs other therapies, Outcome 22 Subgroup analysis: severity of PTSD symptoms - clinician - excluding Vietnam veterans.

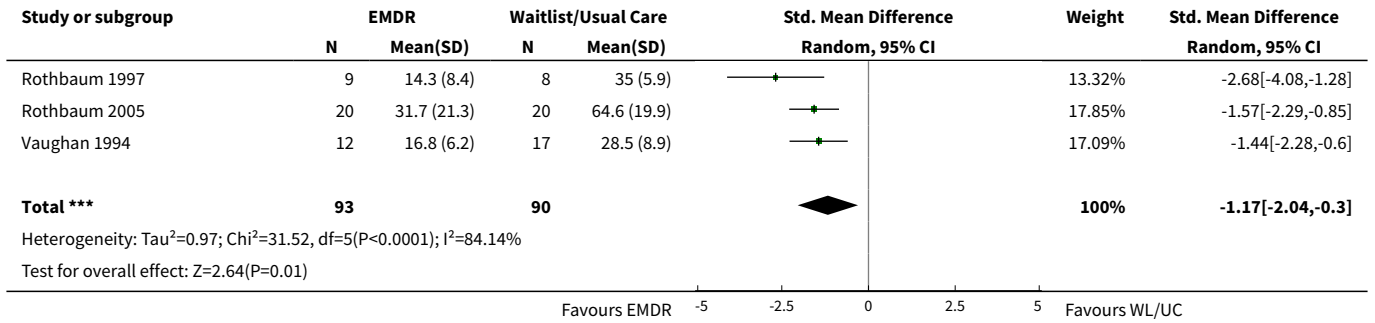


Comparison 4. EMDR vs waitlist/usual care

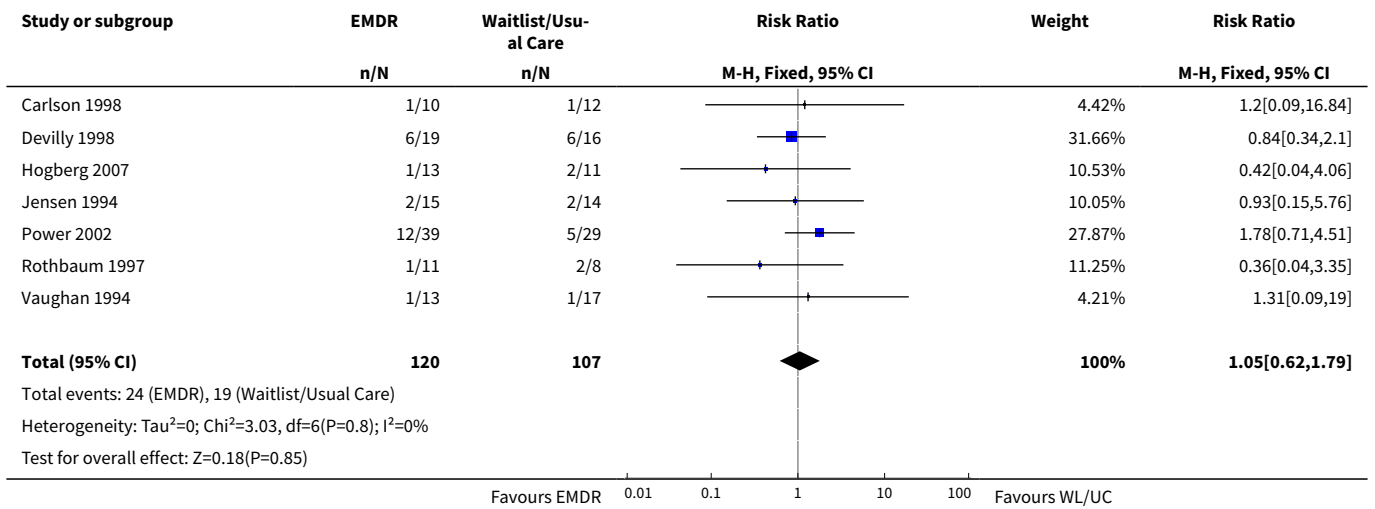
Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Severity of PTSD symptoms - Clinician	6	183	Std. Mean Difference (IV, Random, 95% CI)	-1.17 [-2.04, -0.30]
2 Leaving study early due to any reason	7	227	Risk Ratio (M-H, Fixed, 95% CI)	1.05 [0.62, 1.79]
3 Severity of PTSD symptoms - self report	6	159	Std. Mean Difference (IV, Random, 95% CI)	-0.80 [-1.68, 0.07]
4 Depression	7	226	Std. Mean Difference (IV, Random, 95% CI)	-1.15 [-1.52, -0.78]
5 Anxiety	6	160	Std. Mean Difference (IV, Fixed, 95% CI)	-1.02 [-1.36, -0.69]
6 PTSD diagnosis after treatment	6	209	Risk Ratio (M-H, Fixed, 95% CI)	0.51 [0.42, 0.62]

Analysis 4.1. Comparison 4 EMDR vs waitlist/usual care, Outcome 1 Severity of PTSD symptoms - Clinician.

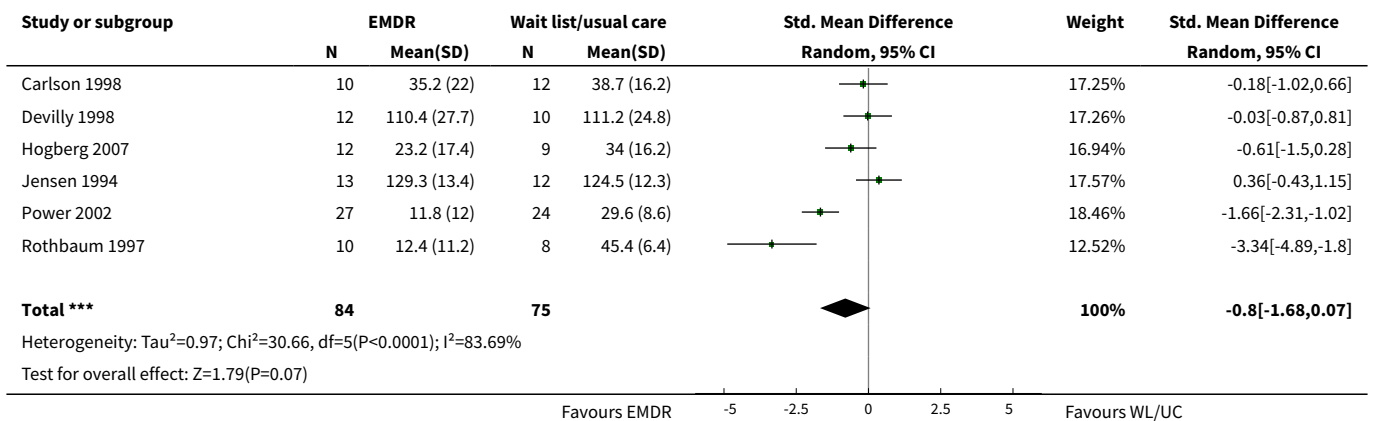




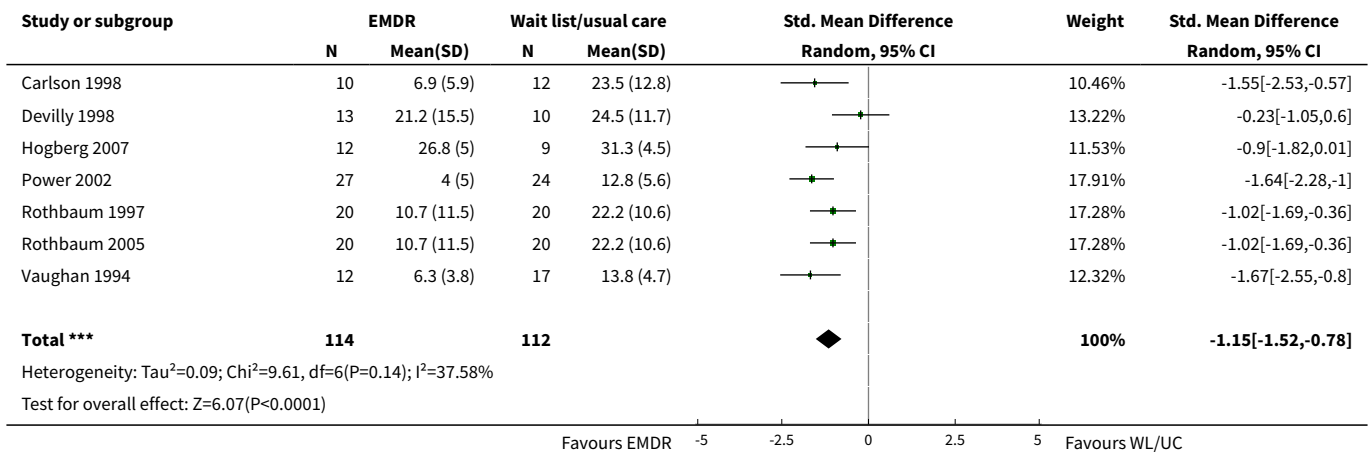
Analysis 4.2. Comparison 4 EMDR vs waitlist/usual care, Outcome 2 Leaving study early due to any reason.



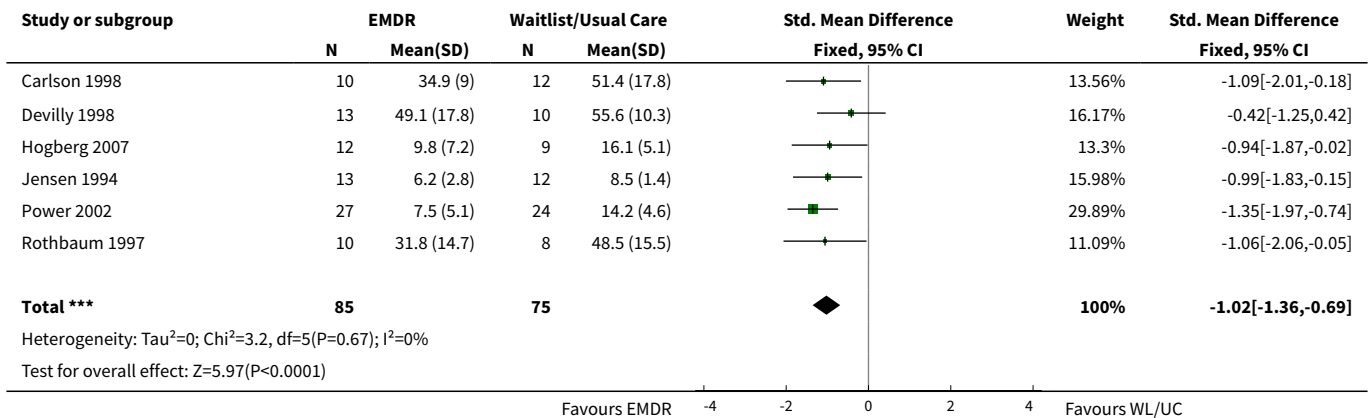
Analysis 4.3. Comparison 4 EMDR vs waitlist/usual care, Outcome 3 Severity of PTSD symptoms - self report.



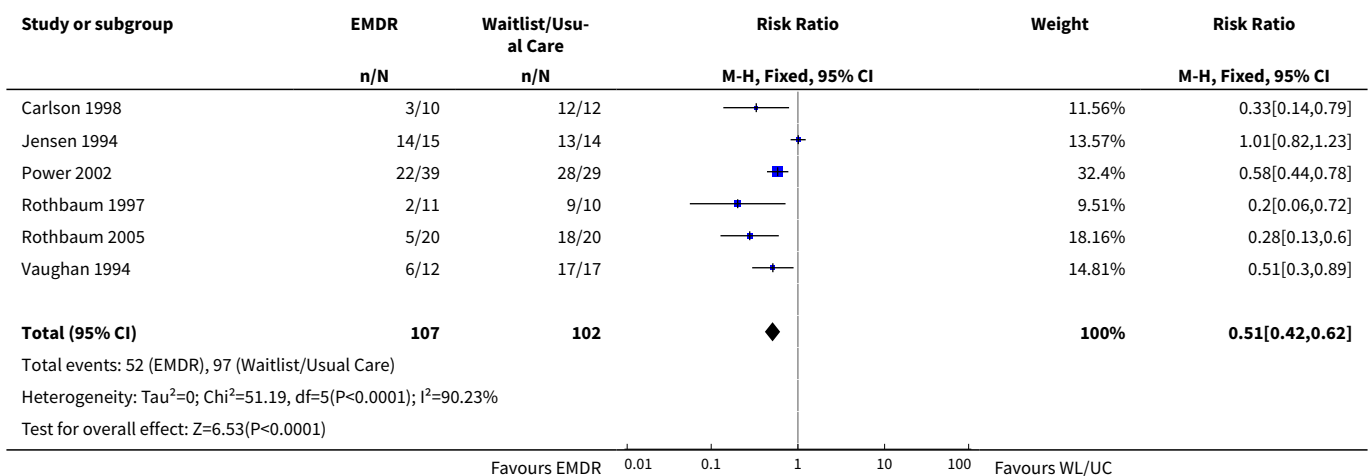
Analysis 4.4. Comparison 4 EMDR vs waitlist/usual care, Outcome 4 Depression.



Analysis 4.5. Comparison 4 EMDR vs waitlist/usual care, Outcome 5 Anxiety.



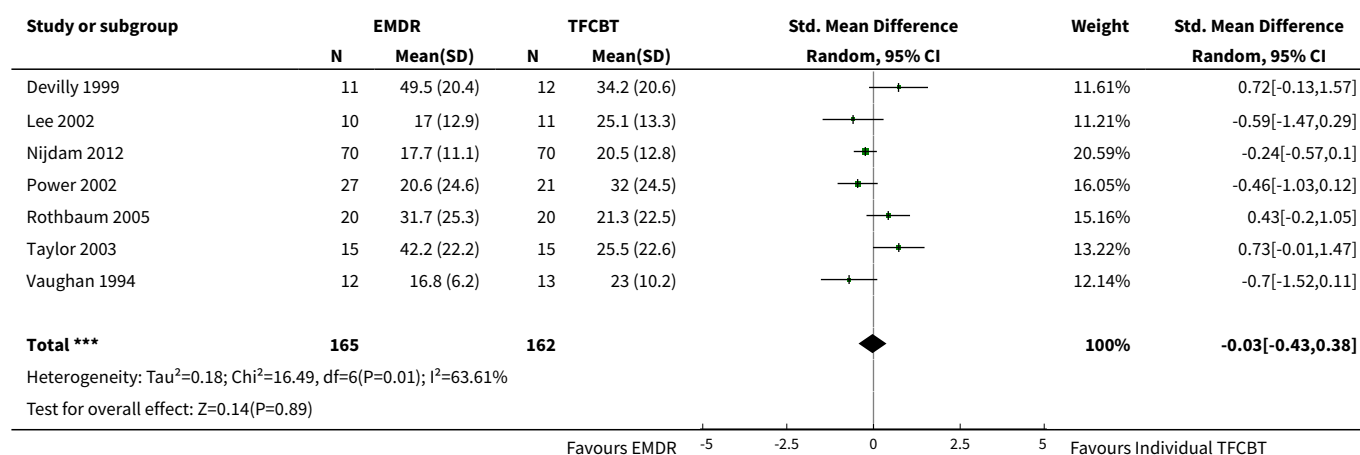
Analysis 4.6. Comparison 4 EMDR vs waitlist/usual care, Outcome 6 PTSD diagnosis after treatment.



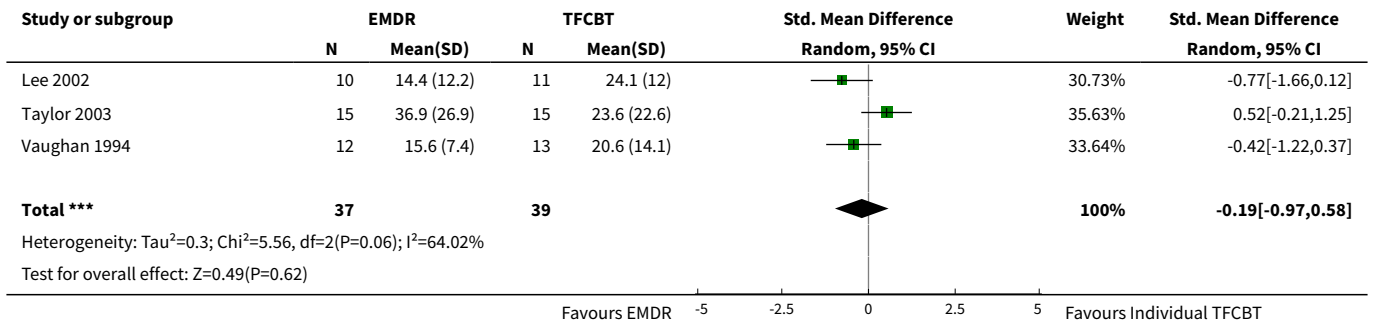
Comparison 5. EMDR vs Trauma-focused CBT

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Severity of PTSD symptoms - clinician	7	327	Std. Mean Difference (IV, Random, 95% CI)	-0.03 [-0.43, 0.38]
2 Severity of PTSD symptoms - clinician - follow-up (1 - 4 months)	3	76	Std. Mean Difference (IV, Random, 95% CI)	-0.19 [-0.97, 0.58]
3 Leaving study early for any reason	8	408	Risk Ratio (M-H, Fixed, 95% CI)	1.00 [0.74, 1.35]
4 Severity of PTSD symptoms - self report	7	306	Std. Mean Difference (IV, Random, 95% CI)	-0.30 [-0.60, 0.01]
5 Severity of PTSD symptoms - self-report - follow-up (1 - 4 months)	5	111	Std. Mean Difference (IV, Random, 95% CI)	-0.04 [-0.61, 0.52]
6 Depression	8	346	Std. Mean Difference (IV, Random, 95% CI)	-0.31 [-0.75, 0.13]
7 Depression - follow-up (1 - 4 months)	5	111	Std. Mean Difference (IV, Random, 95% CI)	-0.13 [-0.64, 0.38]
8 Anxiety	4	236	Std. Mean Difference (IV, Fixed, 95% CI)	-0.28 [-0.53, -0.02]
9 Anxiety - follow-up (1 - 4 months)	2	48	Std. Mean Difference (IV, Fixed, 95% CI)	0.24 [-0.33, 0.81]
10 PTSD diagnosis after treatment	8	350	Risk Ratio (M-H, Fixed, 95% CI)	0.95 [0.74, 1.22]

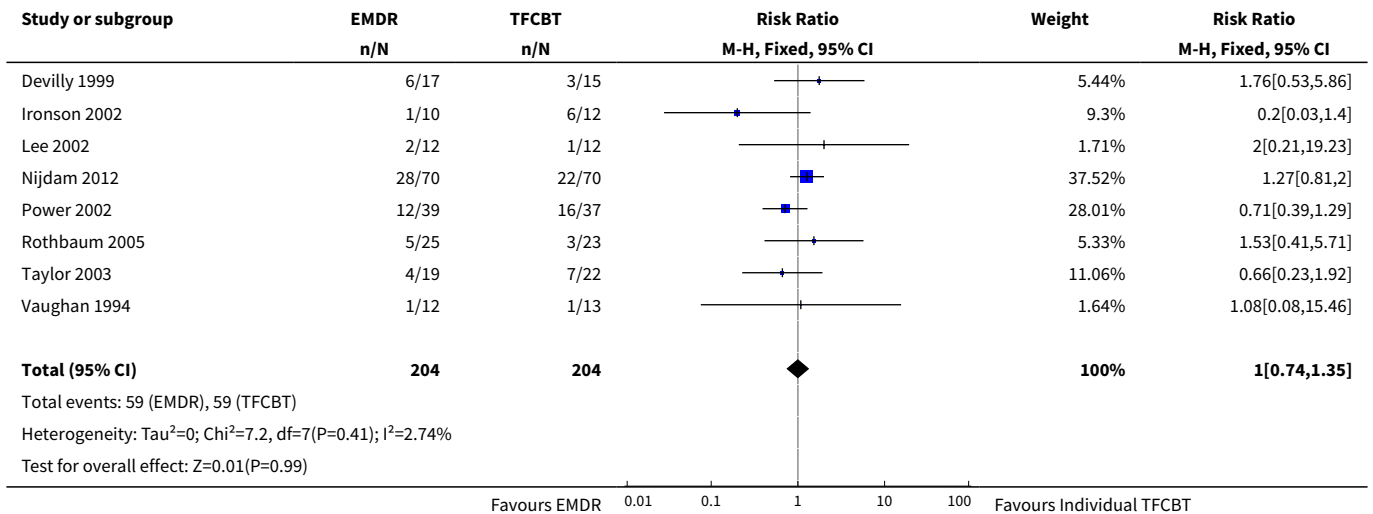
Analysis 5.1. Comparison 5 EMDR vs Trauma-focused CBT, Outcome 1 Severity of PTSD symptoms - clinician.



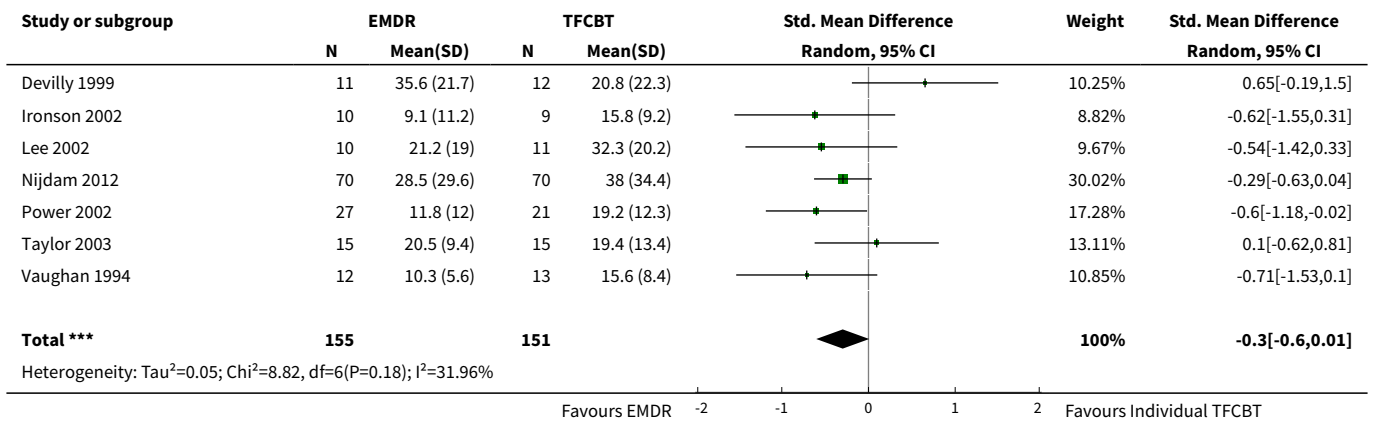
Analysis 5.2. Comparison 5 EMDR vs Trauma-focused CBT, Outcome 2 Severity of PTSD symptoms - clinician - follow-up (1 - 4 months).

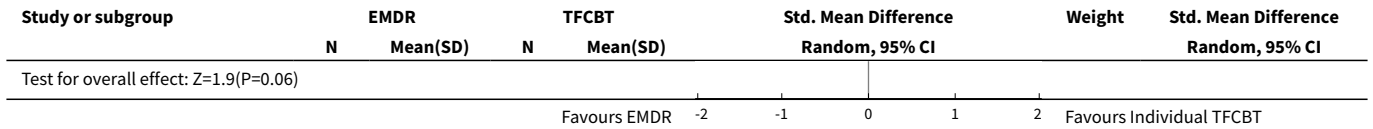


Analysis 5.3. Comparison 5 EMDR vs Trauma-focused CBT, Outcome 3 Leaving study early for any reason.

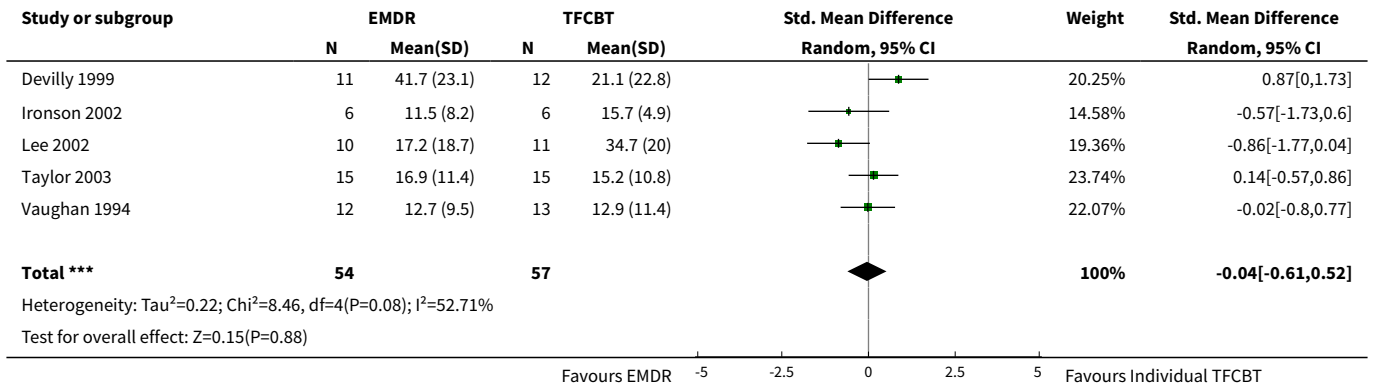


Analysis 5.4. Comparison 5 EMDR vs Trauma-focused CBT, Outcome 4 Severity of PTSD symptoms - self report.

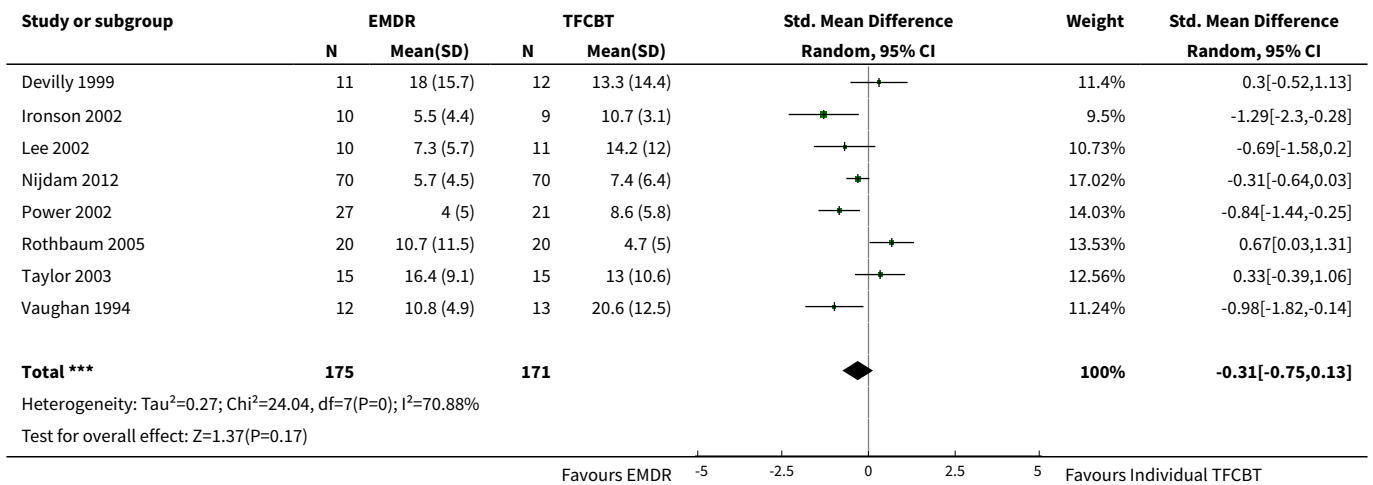




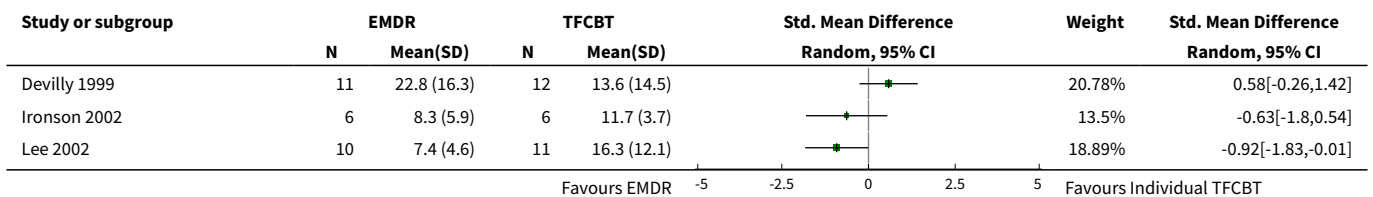
Analysis 5.5. Comparison 5 EMDR vs Trauma-focused CBT, Outcome 5 Severity of PTSD symptoms - self-report - follow-up (1 - 4 months).

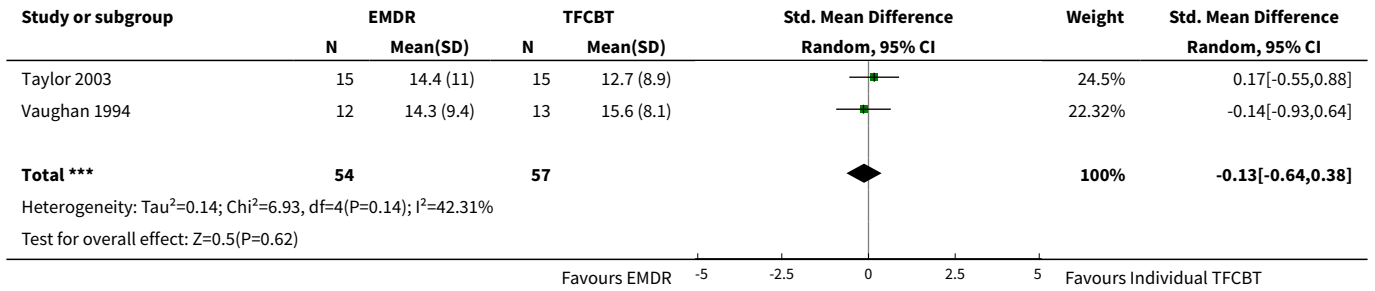


Analysis 5.6. Comparison 5 EMDR vs Trauma-focused CBT, Outcome 6 Depression.

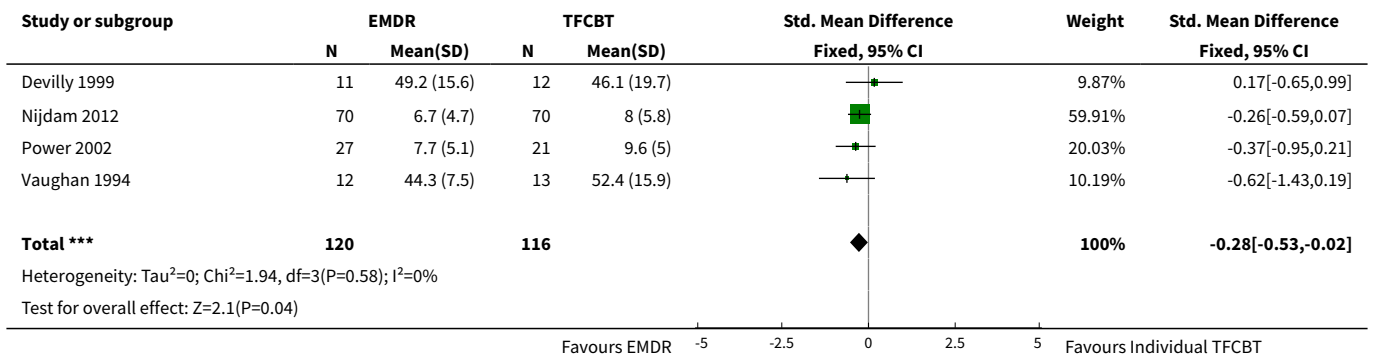


Analysis 5.7. Comparison 5 EMDR vs Trauma-focused CBT, Outcome 7 Depression - follow-up (1 - 4 months).

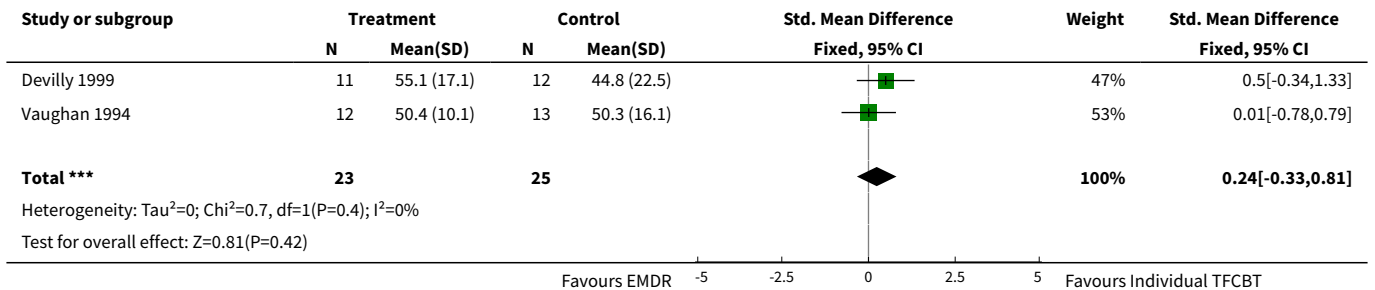




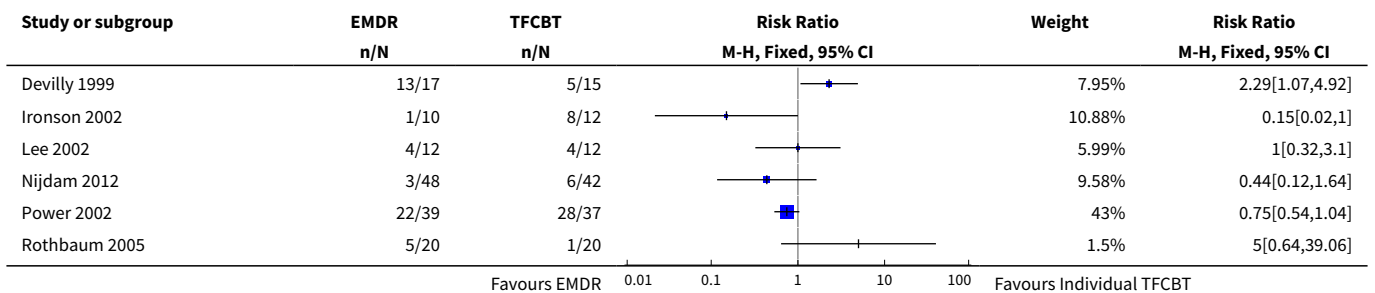
Analysis 5.8. Comparison 5 EMDR vs Trauma-focused CBT, Outcome 8 Anxiety.

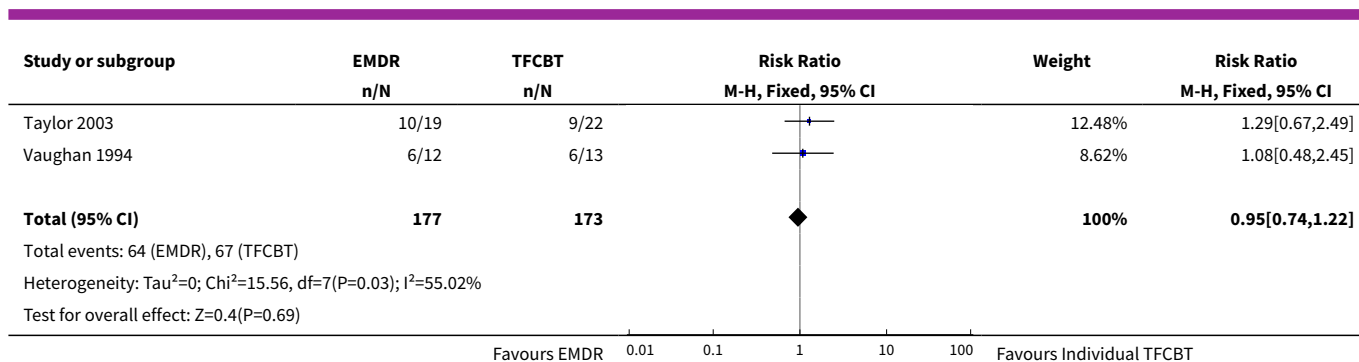


Analysis 5.9. Comparison 5 EMDR vs Trauma-focused CBT, Outcome 9 Anxiety - follow-up (1 - 4 months).



Analysis 5.10. Comparison 5 EMDR vs Trauma-focused CBT, Outcome 10 PTSD diagnosis after treatment.

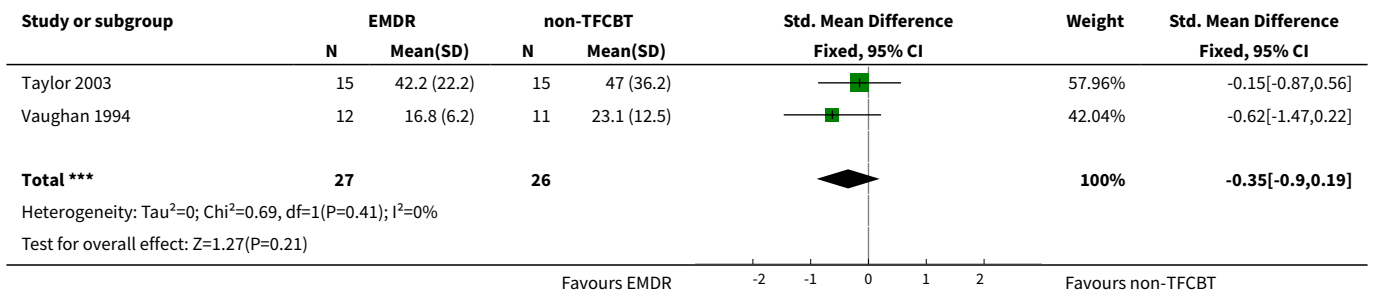




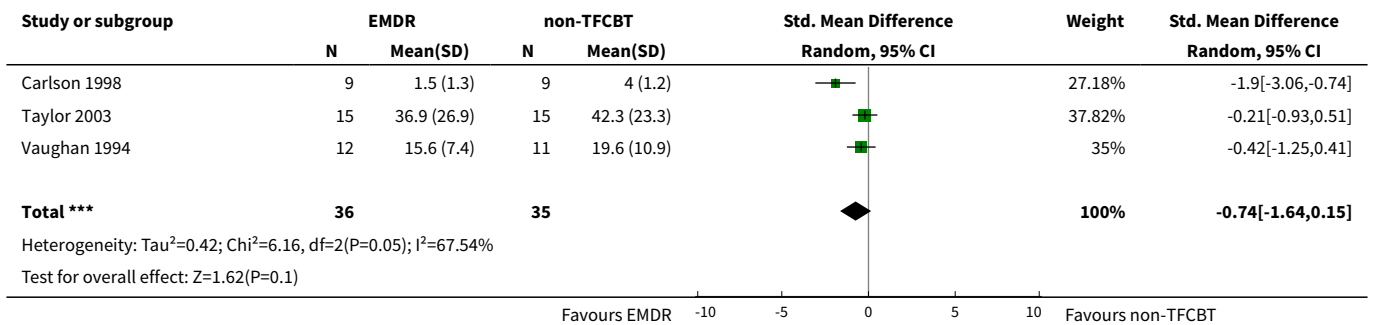
Comparison 6. EMDR vs non-TFCBT

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Severity of PTSD symptoms - clinician	2	53	Std. Mean Difference (IV, Fixed, 95% CI)	-0.35 [-0.90, 0.19]
2 Severity of PTSD symptoms - clinician - follow-up (1-4 months)	3	71	Std. Mean Difference (IV, Random, 95% CI)	-0.74 [-1.64, 0.15]
3 Leaving the study early for any reason	3	84	Risk Ratio (M-H, Fixed, 95% CI)	1.03 [0.37, 2.88]
4 Severity of PTSD symptoms - self report	3	75	Std. Mean Difference (IV, Fixed, 95% CI)	-0.40 [-0.86, 0.06]
5 Severity of PTSD symptoms - self-report - follow-up (1 - 4 months)	3	75	Std. Mean Difference (IV, Fixed, 95% CI)	-0.52 [-0.98, -0.05]
6 Depression	3	75	Std. Mean Difference (IV, Fixed, 95% CI)	-0.67 [-1.14, -0.20]
7 Depression - follow-up (1 - 4 months)	3	75	Std. Mean Difference (IV, Random, 95% CI)	-0.25 [-0.86, 0.36]
8 Anxiety	2	45	Std. Mean Difference (IV, Fixed, 95% CI)	-0.75 [-1.36, -0.13]
9 Anxiety - follow-up (1 - 4 months)	2	45	Std. Mean Difference (IV, Random, 95% CI)	-0.42 [-2.21, 1.37]
10 PTSD diagnosis after treatment	3	84	Risk Ratio (M-H, Random, 95% CI)	0.71 [0.41, 1.22]

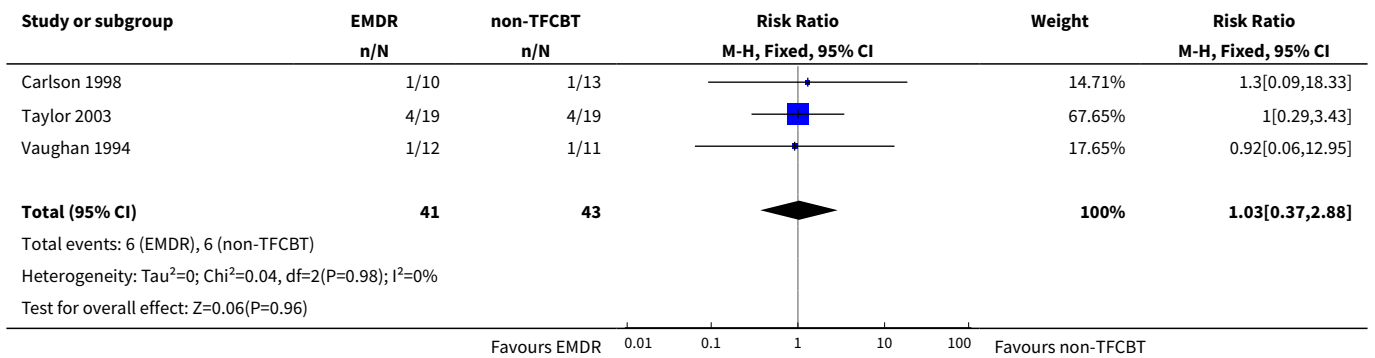
Analysis 6.1. Comparison 6 EMDR vs non-TFCBT, Outcome 1 Severity of PTSD symptoms - clinician.



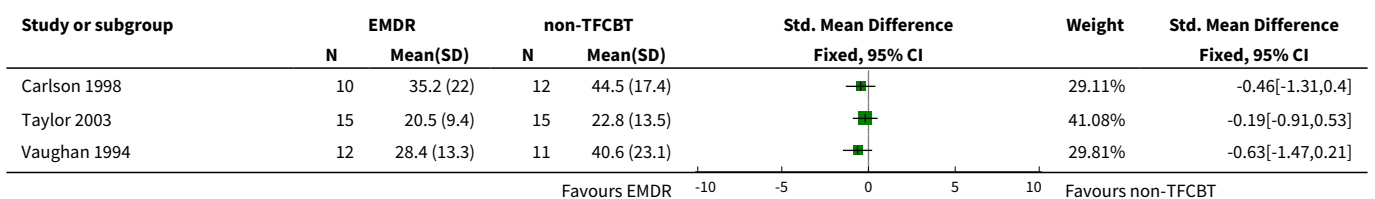
Analysis 6.2. Comparison 6 EMDR vs non-TFCBT, Outcome 2 Severity of PTSD symptoms - clinician - follow-up (1-4 months).

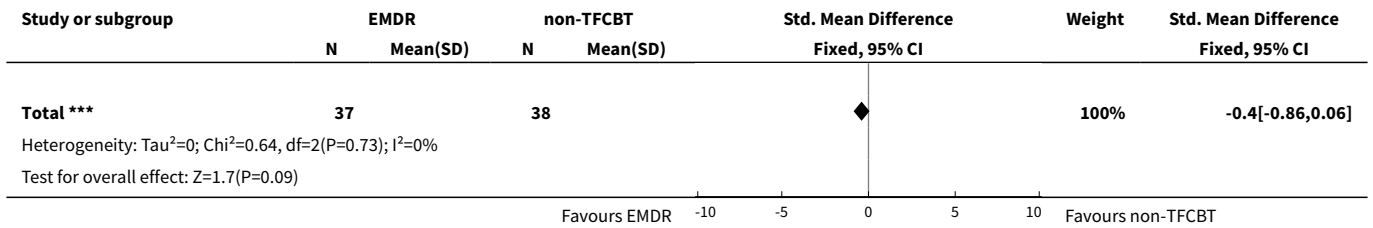


Analysis 6.3. Comparison 6 EMDR vs non-TFCBT, Outcome 3 Leaving the study early for any reason.

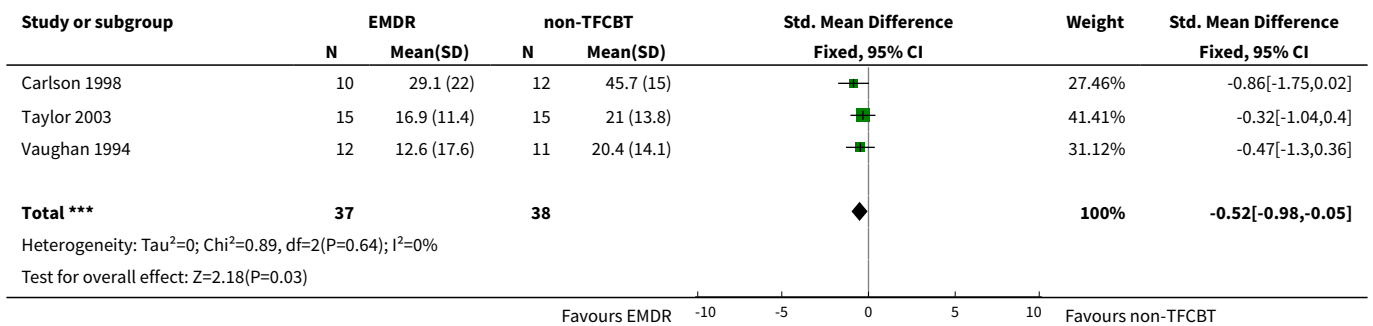


Analysis 6.4. Comparison 6 EMDR vs non-TFCBT, Outcome 4 Severity of PTSD symptoms - self report.

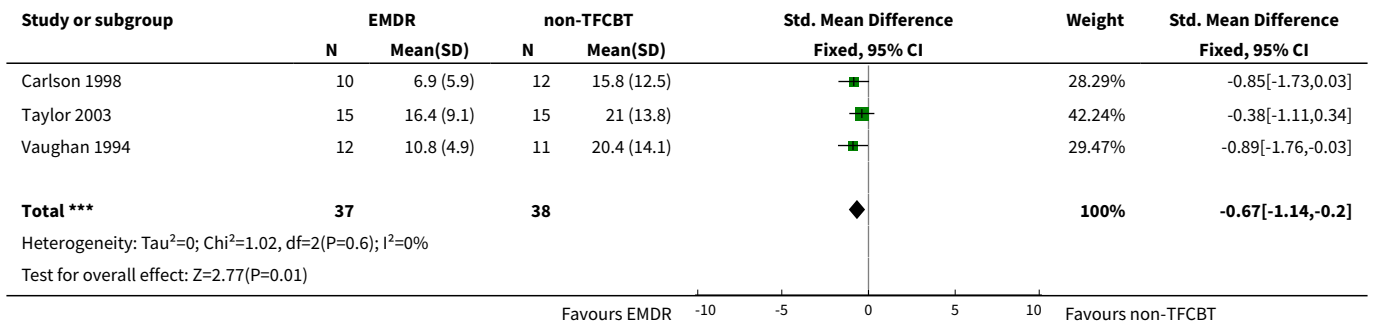




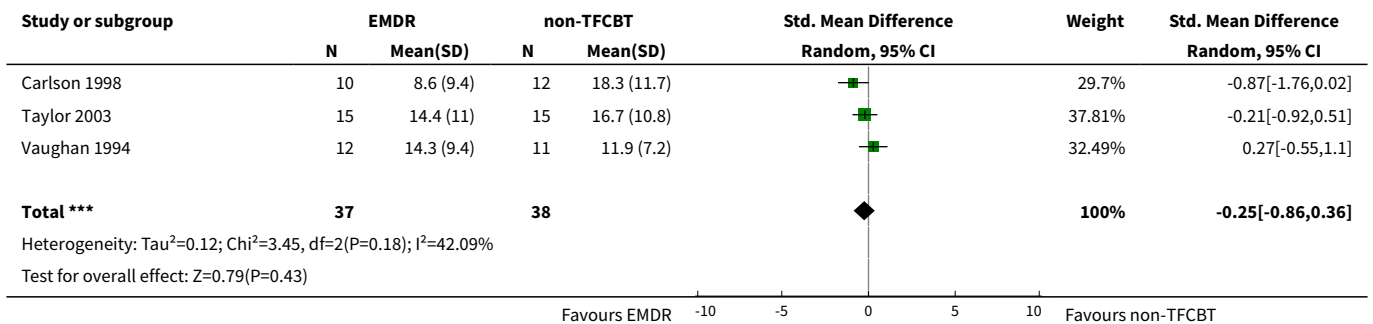
**Analysis 6.5. Comparison 6 EMDR vs non-TFCBT, Outcome 5
Severity of PTSD symptoms - self-report - follow-up (1 - 4 months).**



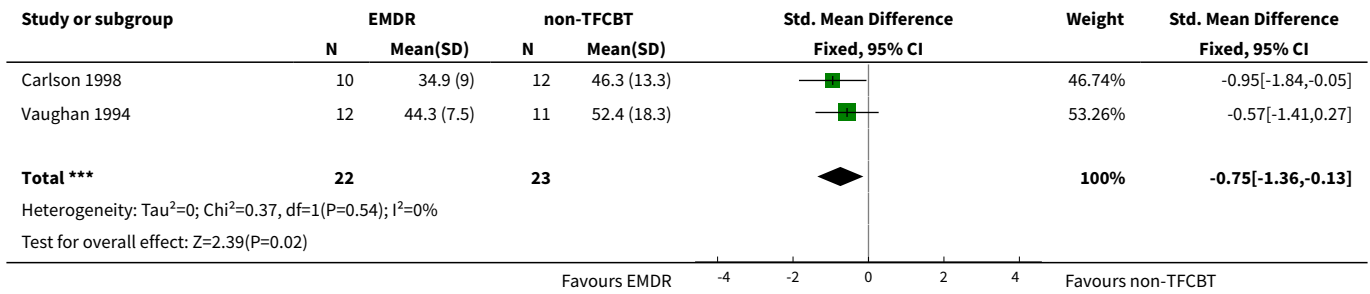
Analysis 6.6. Comparison 6 EMDR vs non-TFCBT, Outcome 6 Depression.



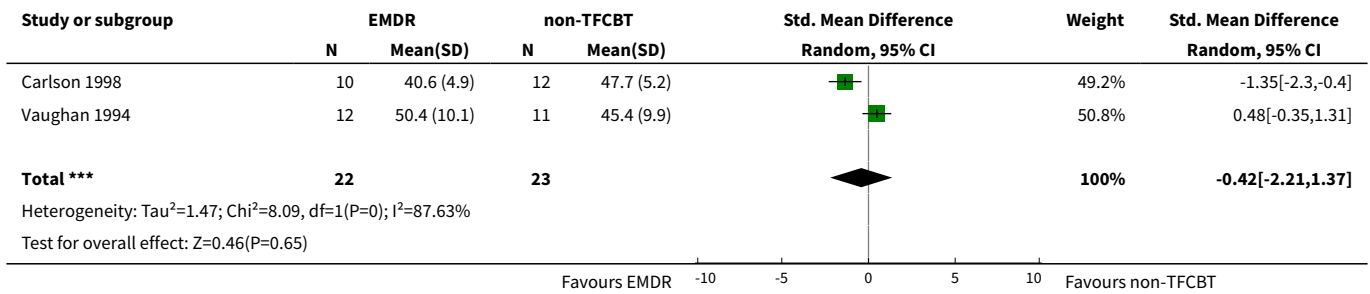
Analysis 6.7. Comparison 6 EMDR vs non-TFCBT, Outcome 7 Depression - follow-up (1 - 4 months).



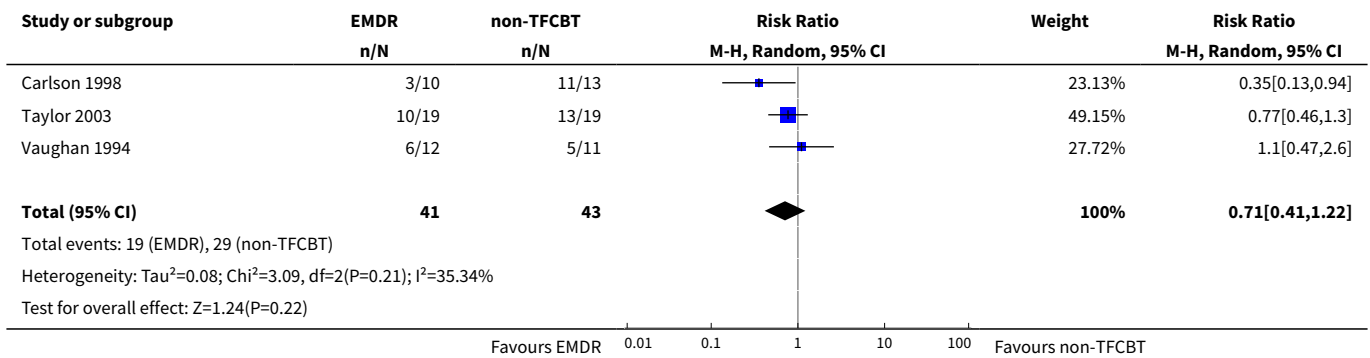
Analysis 6.8. Comparison 6 EMDR vs non-TFCBT, Outcome 8 Anxiety.



Analysis 6.9. Comparison 6 EMDR vs non-TFCBT, Outcome 9 Anxiety - follow-up (1 - 4 months).



Analysis 6.10. Comparison 6 EMDR vs non-TFCBT, Outcome 10 PTSD diagnosis after treatment.

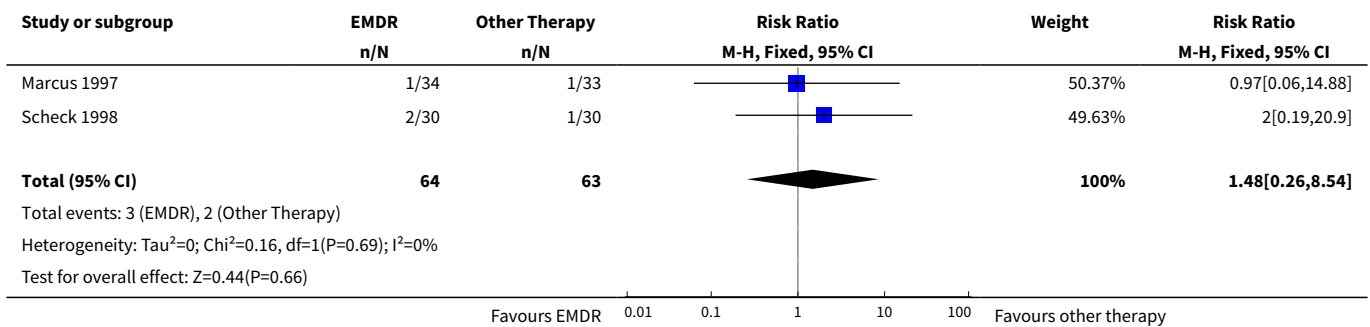


Comparison 7. EMDR vs other therapies

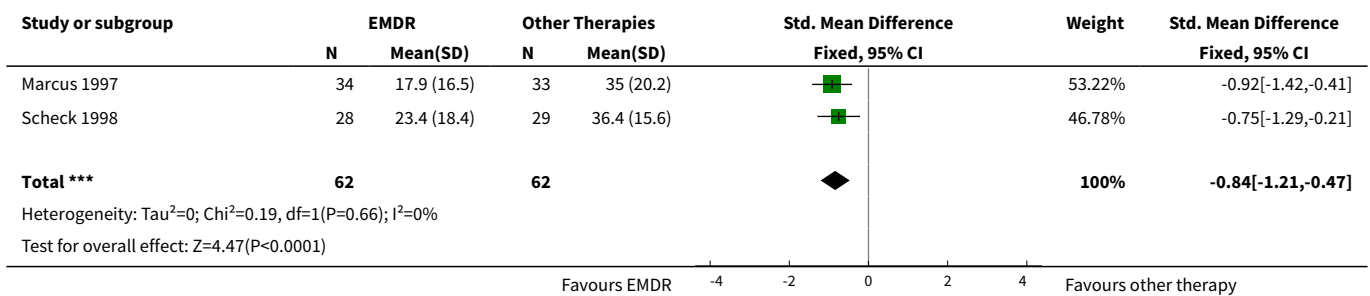
Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Leaving study early for any reason	2	127	Risk Ratio (M-H, Fixed, 95% CI)	1.48 [0.26, 8.54]

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
2 Severity of PTSD symptoms - self report	2	124	Std. Mean Difference (IV, Fixed, 95% CI)	-0.84 [-1.21, -0.47]
3 Depression	2	127	Std. Mean Difference (IV, Fixed, 95% CI)	-0.67 [-1.03, -0.32]
4 Anxiety	2	126	Std. Mean Difference (IV, Fixed, 95% CI)	-0.72 [-1.08, -0.36]
5 PTSD diagnosis after treatment	1		Risk Ratio (M-H, Fixed, 95% CI)	Totals not selected

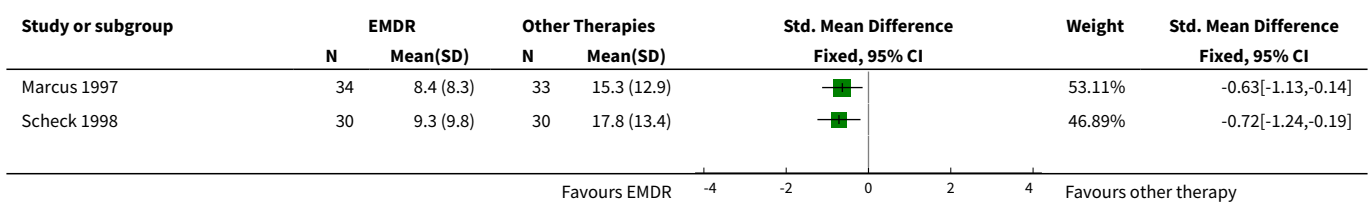
Analysis 7.1. Comparison 7 EMDR vs other therapies, Outcome 1 Leaving study early for any reason.

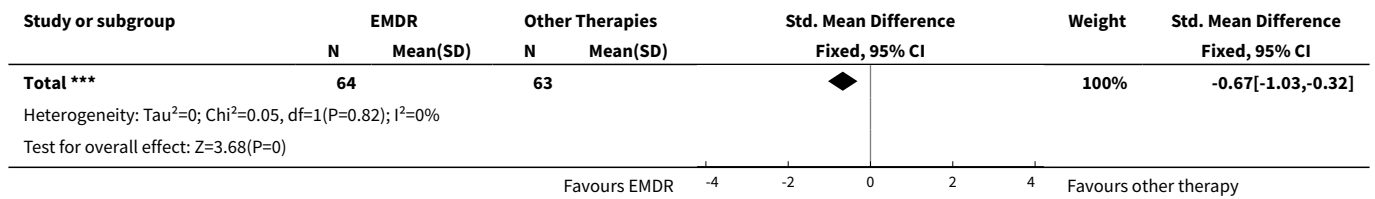


Analysis 7.2. Comparison 7 EMDR vs other therapies, Outcome 2 Severity of PTSD symptoms - self report.

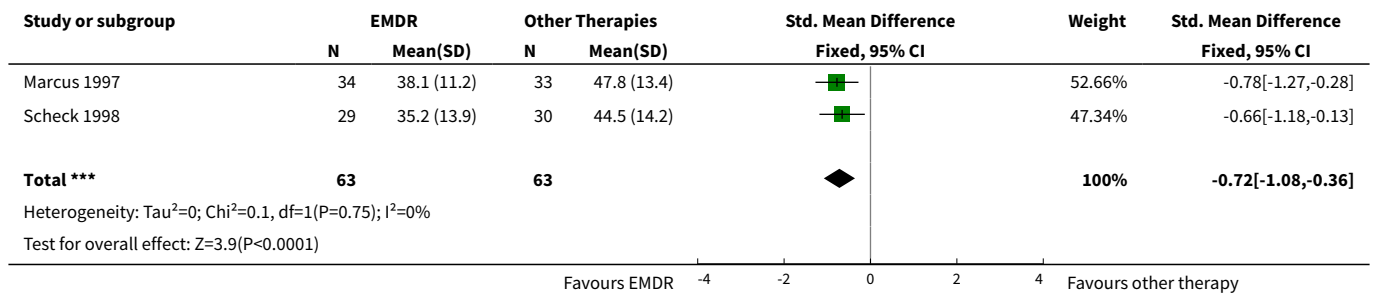


Analysis 7.3. Comparison 7 EMDR vs other therapies, Outcome 3 Depression.

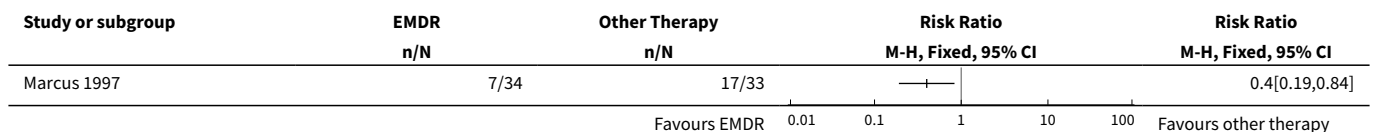




Analysis 7.4. Comparison 7 EMDR vs other therapies, Outcome 4 Anxiety.



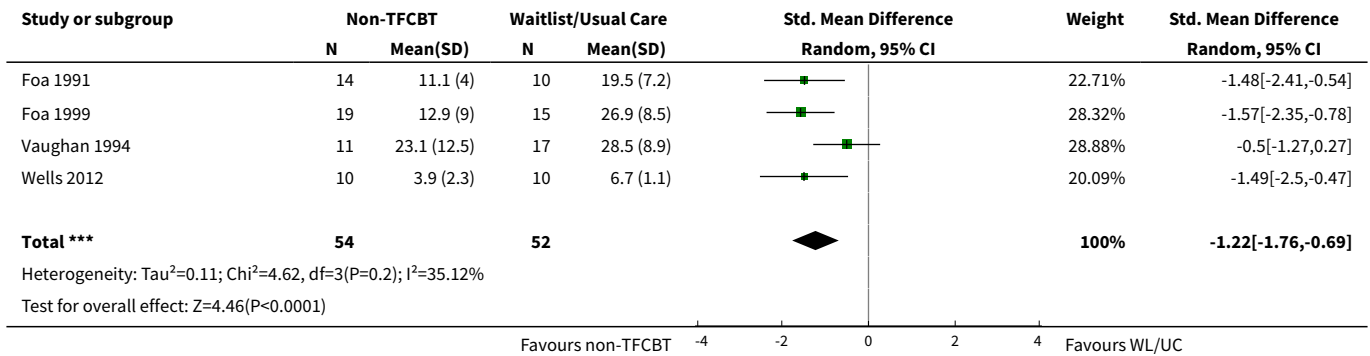
Analysis 7.5. Comparison 7 EMDR vs other therapies, Outcome 5 PTSD diagnosis after treatment.



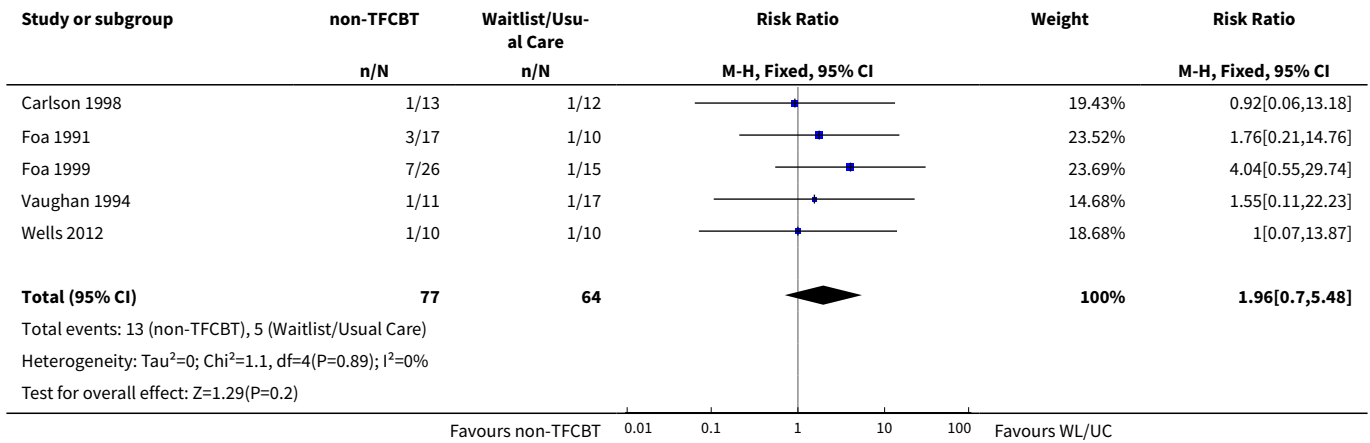
Comparison 8. Non-TFCBT vs waitlist/usual care

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Severity of PTSD symptoms - Clinician	4	106	Std. Mean Difference (IV, Random, 95% CI)	-1.22 [-1.76, -0.69]
2 Leaving the study early for any reason	5	141	Risk Ratio (M-H, Fixed, 95% CI)	1.96 [0.70, 5.48]
3 Severity of PTSD symptoms - Self-report	2	44	Std. Mean Difference (IV, Random, 95% CI)	-0.86 [-3.27, 1.55]
4 Depression	5	129	Std. Mean Difference (IV, Random, 95% CI)	-0.93 [-1.43, -0.42]
5 Anxiety	4	102	Std. Mean Difference (IV, Fixed, 95% CI)	-0.83 [-1.24, -0.42]
6 PTSD diagnosis after treatment	4	121	Risk Ratio (M-H, Random, 95% CI)	0.65 [0.50, 0.86]

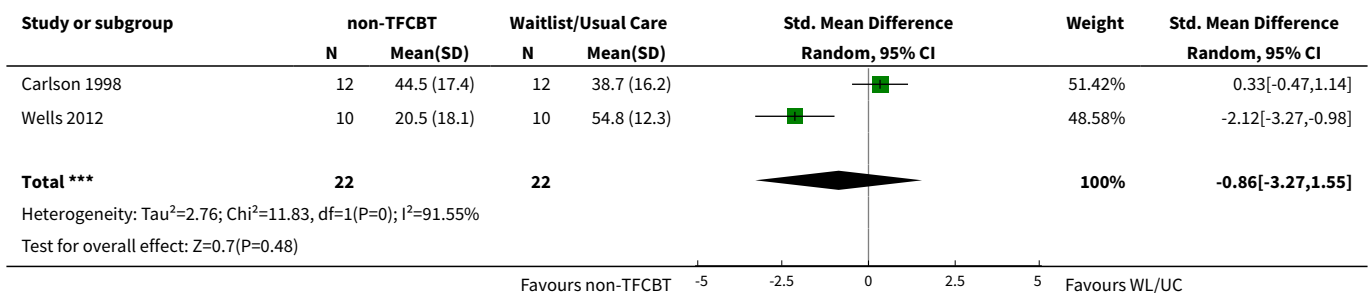
Analysis 8.1. Comparison 8 Non-TFCBT vs waitlist/usual care, Outcome 1 Severity of PTSD symptoms - Clinician.



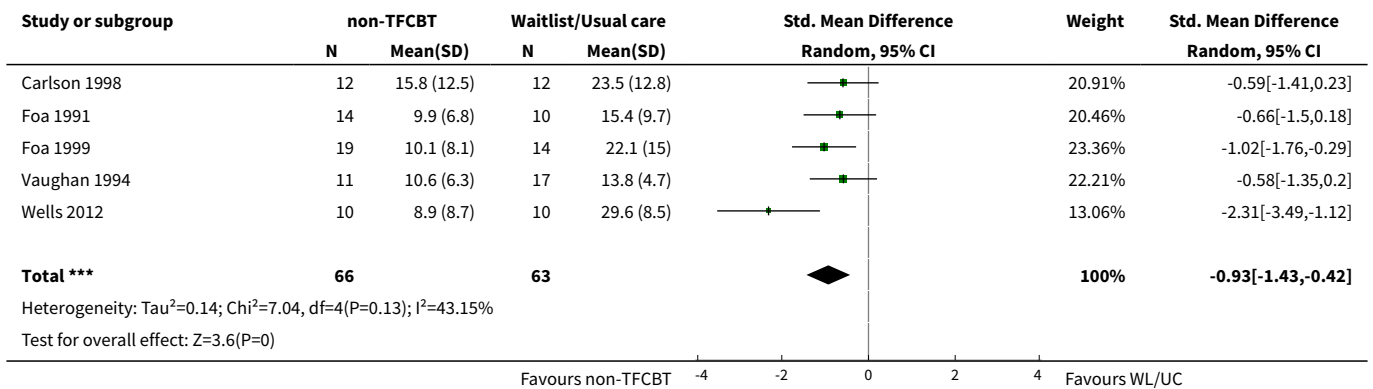
Analysis 8.2. Comparison 8 Non-TFCBT vs waitlist/usual care, Outcome 2 Leaving the study early for any reason.



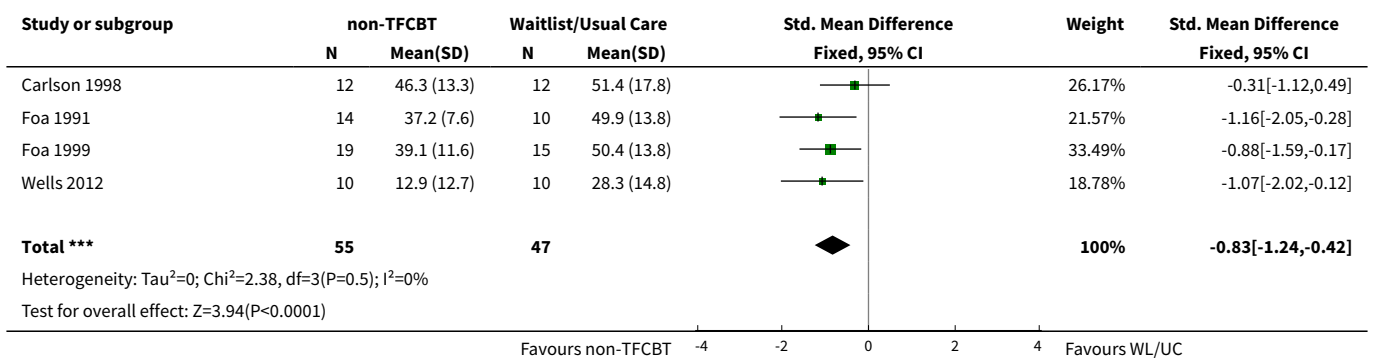
Analysis 8.3. Comparison 8 Non-TFCBT vs waitlist/usual care, Outcome 3 Severity of PTSD symptoms - Self-report.



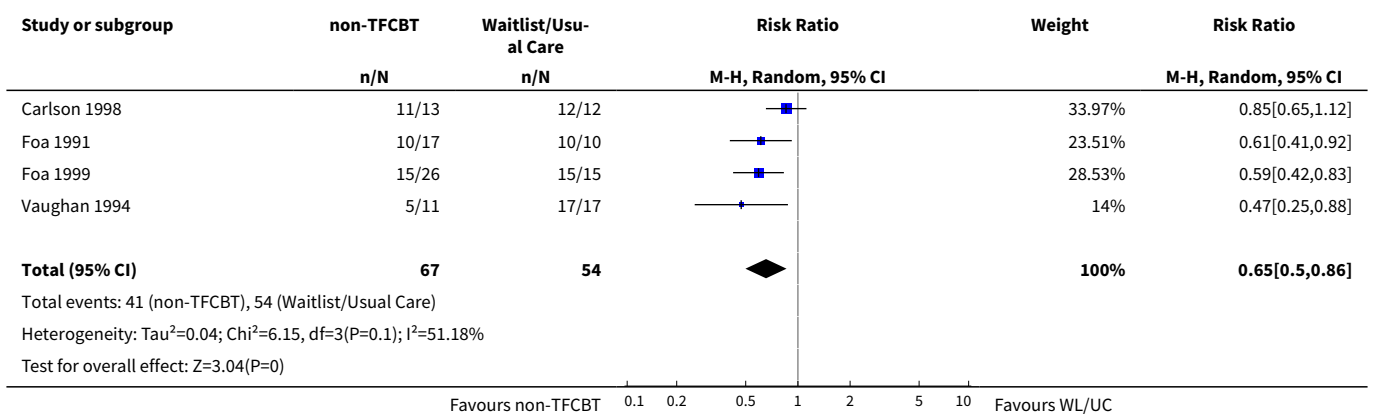
Analysis 8.4. Comparison 8 Non-TFCBT vs waitlist/usual care, Outcome 4 Depression.



Analysis 8.5. Comparison 8 Non-TFCBT vs waitlist/usual care, Outcome 5 Anxiety.



Analysis 8.6. Comparison 8 Non-TFCBT vs waitlist/usual care, Outcome 6 PTSD diagnosis after treatment.



Comparison 9. Non-TFCBT vs other therapies

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Severity of PTSD symptoms - Clinician	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
2 Severity of PTSD symptoms - clinician - follow-up (3 months)	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
3 Leaving the study early for any reason	1		Risk Ratio (M-H, Fixed, 95% CI)	Totals not selected
4 Depression - self report	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
5 Depression - self report - follow-up (3 months)	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
6 Anxiety - self report	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
7 Anxiety - self report - follow-up (3 months)	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
8 PTSD diagnosis after treatment	1		Risk Ratio (M-H, Fixed, 95% CI)	Totals not selected

Analysis 9.1. Comparison 9 Non-TFCBT vs other therapies, Outcome 1 Severity of PTSD symptoms - Clinician.

Study or subgroup	non-TFCBT		Other Therapy		Std. Mean Difference	
	N	Mean(SD)	N	Mean(SD)	Fixed, 95% CI	Std. Mean Difference Fixed, 95% CI
Foa 1991	14	11.1 (4)	11	18.1 (7.1)		-1.22[-2.09,-0.35]

Analysis 9.2. Comparison 9 Non-TFCBT vs other therapies, Outcome 2 Severity of PTSD symptoms - clinician - follow-up (3 months).

Study or subgroup	non-TFCBT		Other Therapies		Std. Mean Difference	
	N	Mean(SD)	N	Mean(SD)	Fixed, 95% CI	Std. Mean Difference Fixed, 95% CI
Foa 1991	9	12.3 (9.6)	9	16.1 (9.4)		-0.38[-1.31,0.55]

Analysis 9.3. Comparison 9 Non-TFCBT vs other therapies, Outcome 3 Leaving the study early for any reason.

Study or subgroup	non-TFCBT	Other Therapies	Risk Ratio	
	n/N	n/N	M-H, Fixed, 95% CI	Risk Ratio M-H, Fixed, 95% CI
Foa 1991	3/17	3/14		0.82[0.2,3.46]

Analysis 9.4. Comparison 9 Non-TFCBT vs other therapies, Outcome 4 Depression - self report.

Study or subgroup	non-TFCBT		Other Therapy		Std. Mean Difference		Std. Mean Difference	
	N	Mean(SD)	N	Mean(SD)	Fixed, 95% CI		Fixed, 95% CI	
Foa 1991	14	9.9 (6.8)	11	15.4 (14)			-0.51[-1.31,0.3]	

Analysis 9.5. Comparison 9 Non-TFCBT vs other therapies, Outcome 5 Depression - self report - follow-up (3 months).

Study or subgroup	non-TFCBT		Other Therapies		Std. Mean Difference		Std. Mean Difference	
	N	Mean(SD)	N	Mean(SD)	Fixed, 95% CI		Fixed, 95% CI	
Foa 1991	9	10.3 (11.7)	9	15.9 (10.2)			-0.48[-1.42,0.46]	

Analysis 9.6. Comparison 9 Non-TFCBT vs other therapies, Outcome 6 Anxiety - self report.

Study or subgroup	non-TFCBT		Other Therapy		Std. Mean Difference		Std. Mean Difference	
	N	Mean(SD)	N	Mean(SD)	Fixed, 95% CI		Fixed, 95% CI	
Foa 1991	14	37.2 (7.6)	11	43.7 (16.8)			-0.51[-1.32,0.29]	

Analysis 9.7. Comparison 9 Non-TFCBT vs other therapies, Outcome 7 Anxiety - self report - follow-up (3 months).

Study or subgroup	non-TFCBT		Other Therapies		Std. Mean Difference		Std. Mean Difference	
	N	Mean(SD)	N	Mean(SD)	Fixed, 95% CI		Fixed, 95% CI	
Foa 1991	9	37.6 (15.4)	9	50 (19.4)			-0.68[-1.64,0.28]	

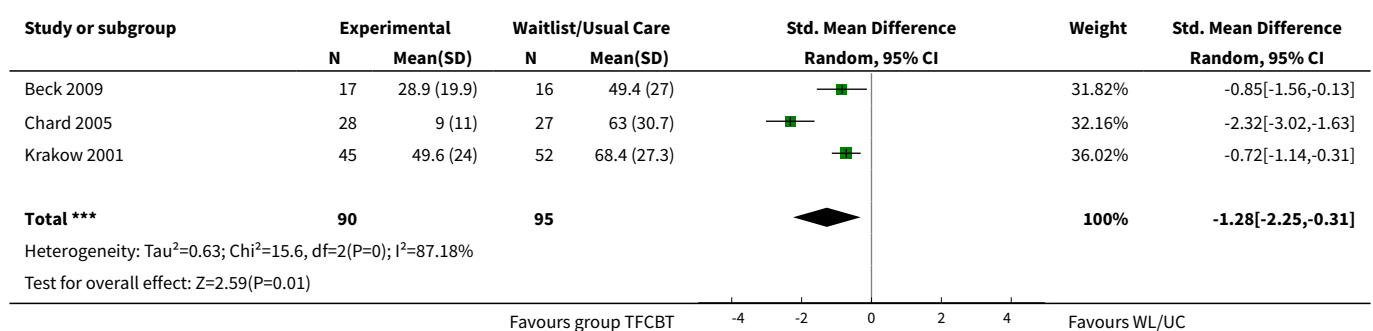
Analysis 9.8. Comparison 9 Non-TFCBT vs other therapies, Outcome 8 PTSD diagnosis after treatment.

Study or subgroup	non-TFCBT		Other Therapy		Risk Ratio		Risk Ratio	
	n/N		n/N		M-H, Fixed, 95% CI		M-H, Fixed, 95% CI	
Foa 1991	7/17		10/14				0.58[0.3,1.11]	

Comparison 10. Group TFCBT vs waitlist/usual care/minimal contact

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Clinician-rated	3	185	Std. Mean Difference (IV, Random, 95% CI)	-1.28 [-2.25, -0.31]
2 Severity of PTSD 5 - 8 month follow-up	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
3 Leaving the study early for any reason	7	573	Risk Ratio (M-H, Fixed, 95% CI)	1.21 [0.94, 1.55]
4 Severity of PTSD symptoms - self report	6	274	Std. Mean Difference (IV, Random, 95% CI)	-1.20 [-1.70, -0.69]
5 Severity of PTSD - self report - 1 - 4 months	2	73	Std. Mean Difference (IV, Random, 95% CI)	-1.14 [-1.78, -0.50]
6 Depression	3	137	Std. Mean Difference (IV, Random, 95% CI)	-1.15 [-1.98, -0.32]
7 Depression 1 - 4 month follow-up	1		Mean Difference (IV, Fixed, 95% CI)	Totals not selected
8 Anxiety	3	106	Std. Mean Difference (IV, Fixed, 95% CI)	-0.66 [-1.06, -0.27]
9 Anxiety 1 - 4 month follow-up	2	73	Mean Difference (IV, Fixed, 95% CI)	-0.43 [-0.72, -0.14]
10 PTSD diagnosis after treatment	1		Risk Ratio (M-H, Fixed, 95% CI)	Totals not selected

Analysis 10.1. Comparison 10 Group TFCBT vs waitlist/usual care/minimal contact, Outcome 1 Clinician-rated.



Analysis 10.2. Comparison 10 Group TFCBT vs waitlist/usual care/ minimal contact, Outcome 2 Severity of PTSD 5 - 8 month follow-up.

Study or subgroup	Experimental		Waitlist/Usual Care		Std. Mean Difference		Std. Mean Difference	
	N	Mean(SD)	N	Mean(SD)	Fixed, 95% CI			Fixed, 95% CI
Krakow 2001	45	49.6 (24)	52	68.4 (27.3)			-0.72[-1.14,-0.31]	
					Favours group TFCBT		Favours WL/UC	

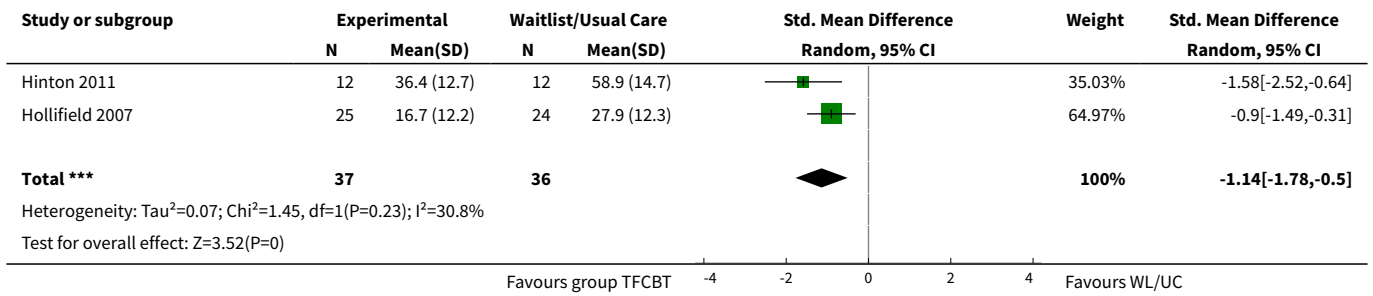
Analysis 10.3. Comparison 10 Group TFCBT vs waitlist/usual care/ minimal contact, Outcome 3 Leaving the study early for any reason.

Study or subgroup	Group Therapy	Waitlist/Usual Care	Risk Ratio	Weight	Risk Ratio	
	n/N	n/N	M-H, Fixed, 95% CI		M-H, Fixed, 95% CI	
Beck 2009	9/26	2/18		3.17%	3.12[0.76,12.75]	
Chard 2005	8/36	7/35		9.53%	1.11[0.45,2.74]	
Hinton 2011	0/12	0/12			Not estimable	
Hollifield 2007	4/25	3/24		4.11%	1.28[0.32,5.13]	
Krakow 2000	44/87	34/82		47%	1.22[0.88,1.7]	
Krakow 2001	22/88	20/80		28.13%	1[0.59,1.69]	
Zlotnick 1997	7/24	6/24		8.06%	1.17[0.46,2.96]	
Total (95% CI)	298	275		100%	1.21[0.94,1.55]	
Total events: 94 (Group Therapy), 72 (Waitlist/Usual Care)						
Heterogeneity: Tau ² =0; Chi ² =2.28, df=5(P=0.81); I ² =0%						
Test for overall effect: Z=1.46(P=0.14)						
			Favours group TFCBT		Favours WL/UC	

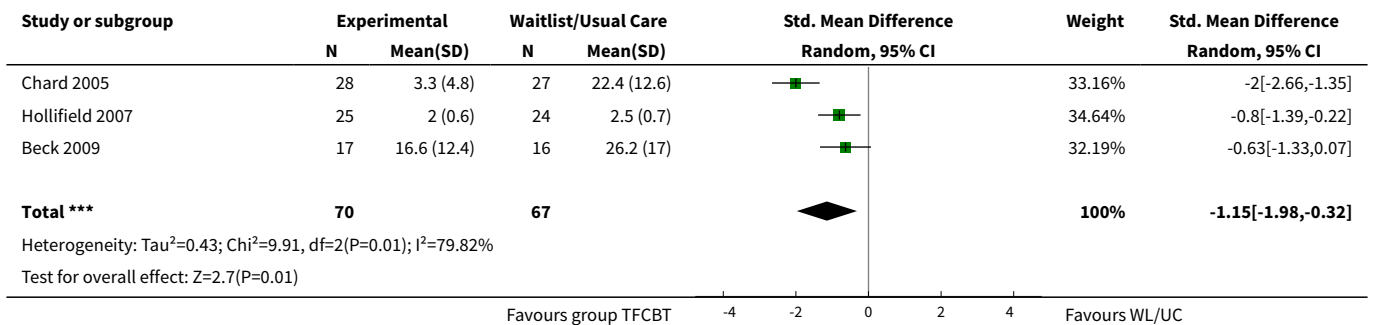
Analysis 10.4. Comparison 10 Group TFCBT vs waitlist/usual care/ minimal contact, Outcome 4 Severity of PTSD symptoms - self report.

Study or subgroup	Group Therapy		Waitlist/Usual Care		Std. Mean Difference		Weight	Std. Mean Difference	
	N	Mean(SD)	N	Mean(SD)	Random, 95% CI				Random, 95% CI
Beck 2009	17	1 (0.9)	16	1.9 (1)			16.01%	-0.99[-1.71,-0.26]	
Chard 2005	28	7.5 (9.5)	27	57.7 (27.5)			16.32%	-2.42[-3.13,-1.72]	
Hinton 2011	12	39.1 (15.1)	12	61.6 (13.2)			13.24%	-1.53[-2.46,-0.6]	
Hollifield 2007	25	20 (10.6)	24	27.9 (12.3)			18.26%	-0.68[-1.26,-0.1]	
Krakow 2000	39	15 (10.3)	41	25.7 (12.6)			19.96%	-0.92[-1.38,-0.46]	
Zlotnick 1997	16	45.8 (34.1)	17	73.1 (29.9)			16.2%	-0.83[-1.55,-0.12]	
Total ***	137		137				100%	-1.2[-1.7,-0.69]	
Heterogeneity: Tau ² =0.28; Chi ² =17.53, df=5(P=0); I ² =71.48%									
Test for overall effect: Z=4.64(P<0.0001)									
					Favours group TFCBT		Favours WL/UC		

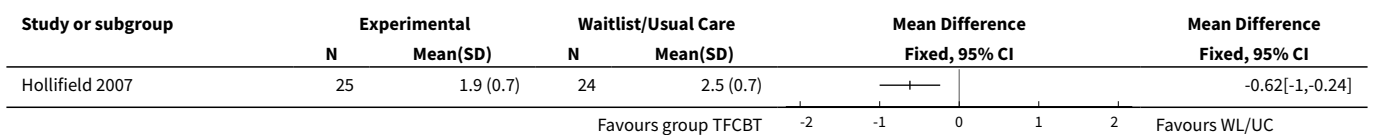
Analysis 10.5. Comparison 10 Group TFCBT vs waitlist/usual care/ minimal contact, Outcome 5 Severity of PTSD - self report - 1 - 4 months.



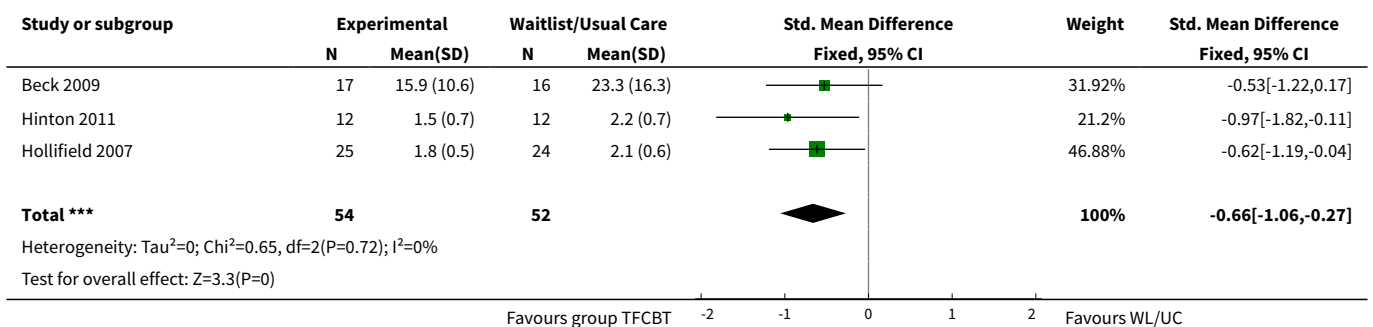
Analysis 10.6. Comparison 10 Group TFCBT vs waitlist/usual care/minimal contact, Outcome 6 Depression.



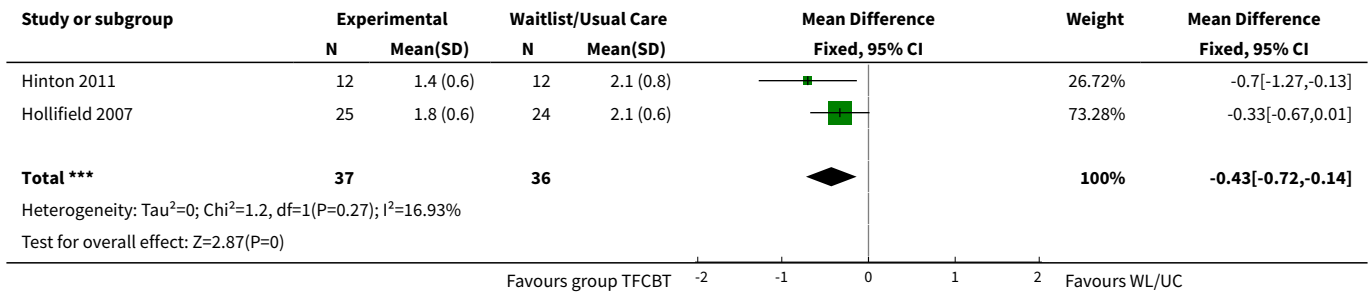
Analysis 10.7. Comparison 10 Group TFCBT vs waitlist/usual care/ minimal contact, Outcome 7 Depression 1 - 4 month follow-up.



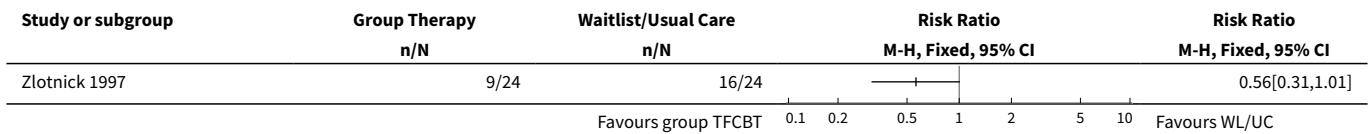
Analysis 10.8. Comparison 10 Group TFCBT vs waitlist/usual care/minimal contact, Outcome 8 Anxiety.



Analysis 10.9. Comparison 10 Group TFCBT vs waitlist/usual care/ minimal contact, Outcome 9 Anxiety 1 - 4 month follow-up.



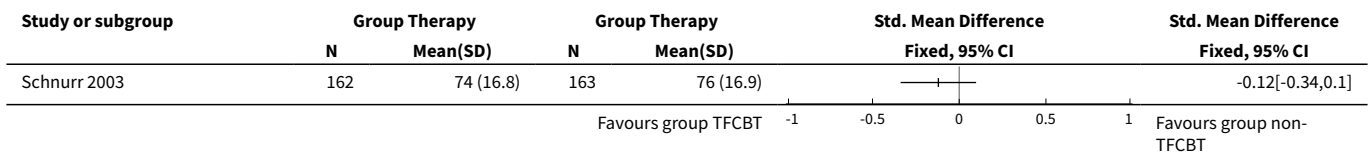
Analysis 10.10. Comparison 10 Group TFCBT vs waitlist/usual care/ minimal contact, Outcome 10 PTSD diagnosis after treatment.



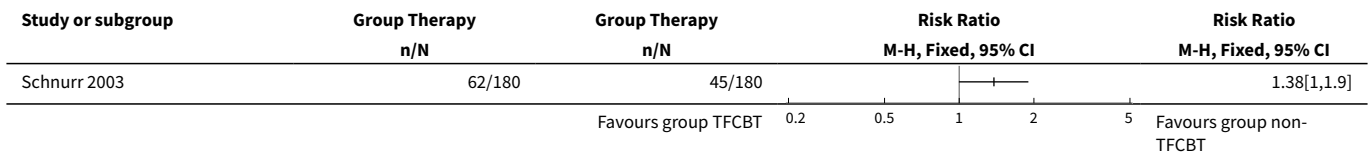
Comparison 11. Group CBT (trauma-focused) vs Group CBT (non-trauma-focused)

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Severity of PTSD symptoms	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
2 Leaving the study early for any reason	1		Risk Ratio (M-H, Fixed, 95% CI)	Totals not selected
3 PTSD diagnosis after treatment	1		Risk Ratio (M-H, Fixed, 95% CI)	Totals not selected

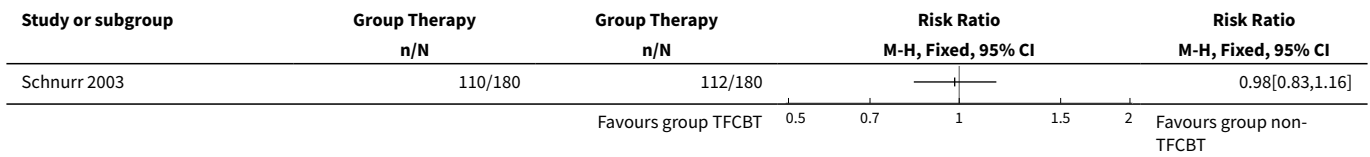
Analysis 11.1. Comparison 11 Group CBT (trauma-focused) vs Group CBT (non-trauma-focused), Outcome 1 Severity of PTSD symptoms.



Analysis 11.2. Comparison 11 Group CBT (trauma-focused) vs Group CBT (non-trauma-focused), Outcome 2 Leaving the study early for any reason.



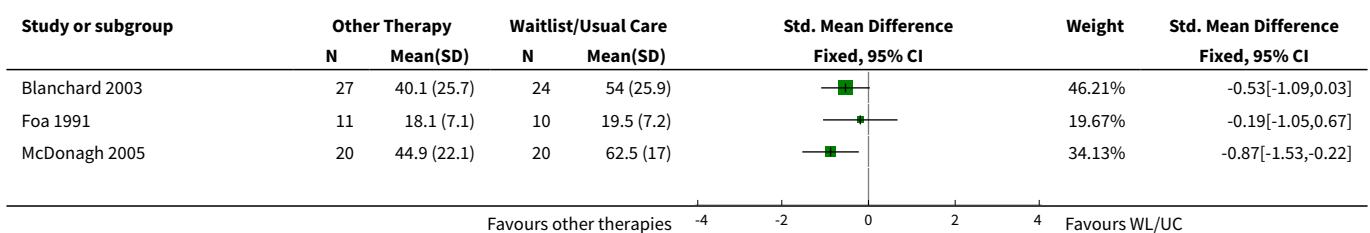
Analysis 11.3. Comparison 11 Group CBT (trauma-focused) vs Group CBT (non-trauma-focused), Outcome 3 PTSD diagnosis after treatment.

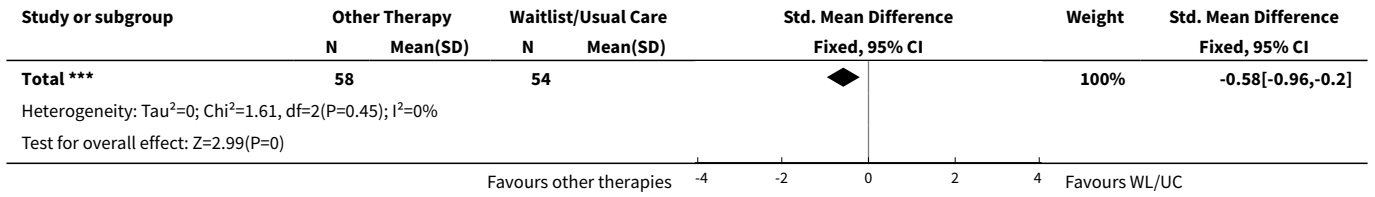


Comparison 12. Other therapies vs waitlist/usual care

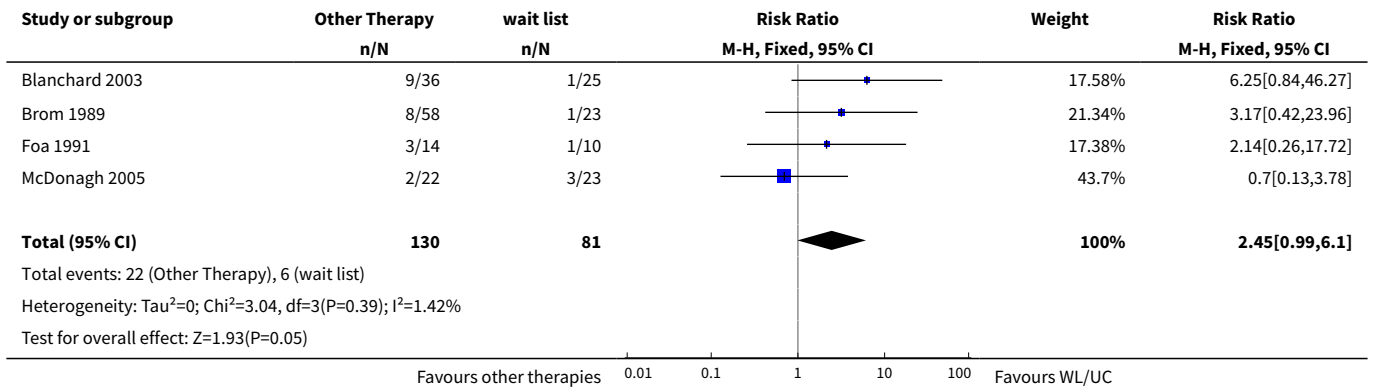
Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Severity of PTSD symptoms - clinician	3	112	Std. Mean Difference (IV, Fixed, 95% CI)	-0.58 [-0.96, -0.20]
2 Leaving the study early due to any reason	4	211	Risk Ratio (M-H, Fixed, 95% CI)	2.45 [0.99, 6.10]
3 Severity of PTSD symptoms - self report	2	132	Std. Mean Difference (IV, Fixed, 95% CI)	-0.61 [-0.98, -0.24]
4 Depression	3	112	Std. Mean Difference (IV, Fixed, 95% CI)	-0.45 [-0.83, -0.07]
5 Anxiety - Self report	4	193	Std. Mean Difference (IV, Fixed, 95% CI)	-0.52 [-0.82, -0.22]
6 PTSD diagnosis after treatment	4	210	Risk Ratio (M-H, Random, 95% CI)	0.80 [0.61, 1.05]

Analysis 12.1. Comparison 12 Other therapies vs waitlist/usual care, Outcome 1 Severity of PTSD symptoms - clinician.

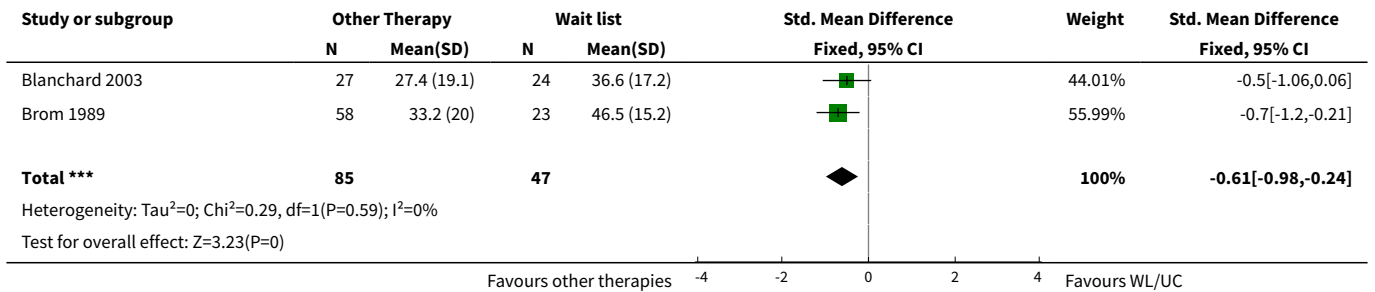




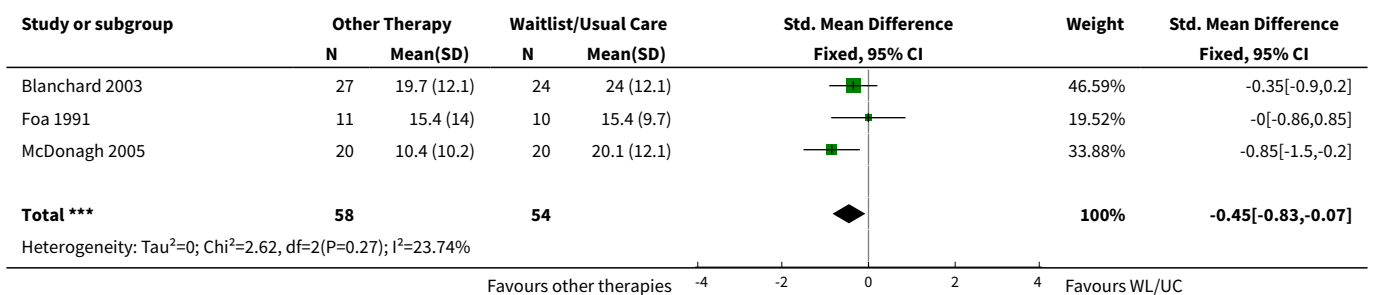
Analysis 12.2. Comparison 12 Other therapies vs waitlist/ usual care, Outcome 2 Leaving the study early due to any reason.

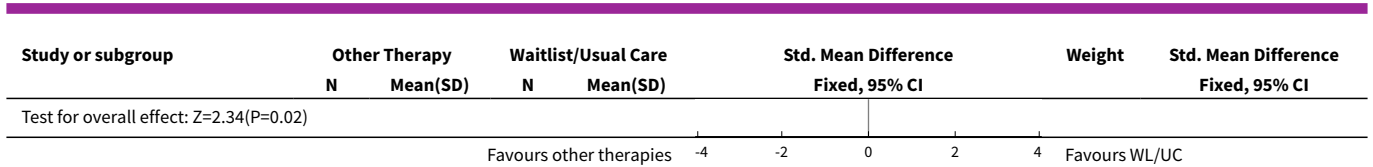


Analysis 12.3. Comparison 12 Other therapies vs waitlist/ usual care, Outcome 3 Severity of PTSD symptoms - self report.

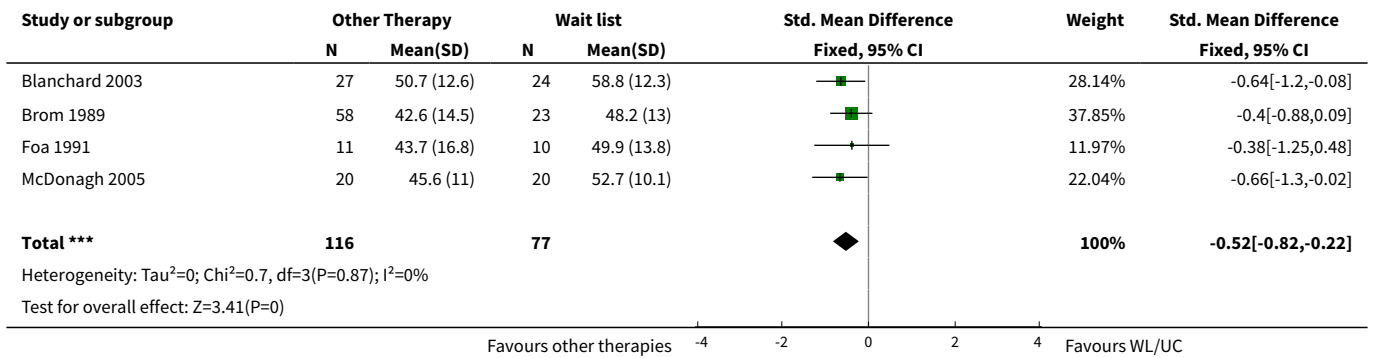


Analysis 12.4. Comparison 12 Other therapies vs waitlist/usual care, Outcome 4 Depression.

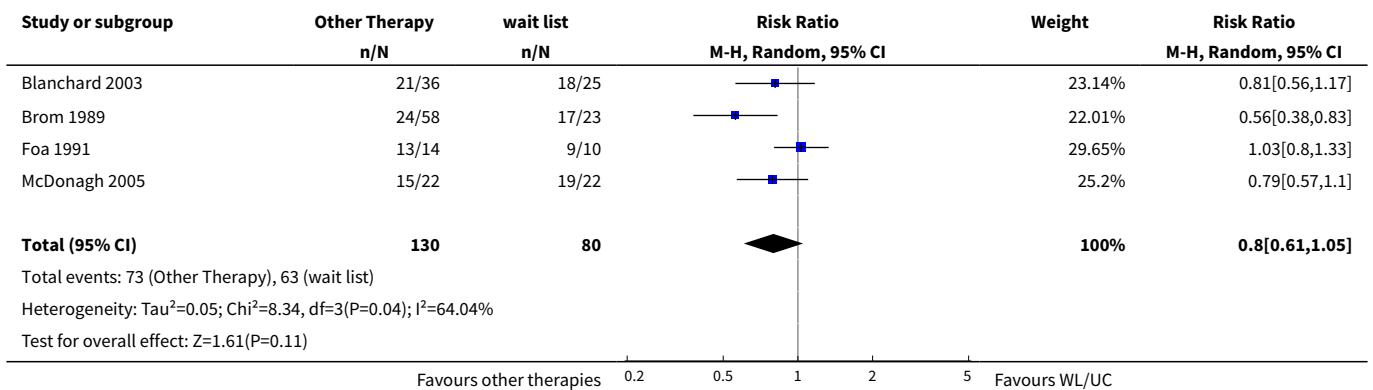




Analysis 12.5. Comparison 12 Other therapies vs waitlist/usual care, Outcome 5 Anxiety - Self report.



Analysis 12.6. Comparison 12 Other therapies vs waitlist/usual care, Outcome 6 PTSD diagnosis after treatment.



Comparison 13. Group non-TFCBT vs waitlist/usual care

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Leaving the study early for any reason	1		Risk Ratio (M-H, Fixed, 95% CI)	Totals not selected
2 Severity of PTSD symptoms - self report	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
3 Severity of PTSD symptoms - self report 1 - 4 months	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
4 Depression	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
5 Depression - 1 - 4 months	1		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected

Analysis 13.1. Comparison 13 Group non-TFCBT vs waitlist/usual care, Outcome 1 Leaving the study early for any reason.

Study or subgroup	Group Therapy		Group Therapy		Risk Ratio		Risk Ratio	
	n/N		n/N		M-H, Fixed, 95% CI		M-H, Fixed, 95% CI	
Kearney 2013	2/25		1/22				1.76[0.17,18.11]	

Analysis 13.2. Comparison 13 Group non-TFCBT vs waitlist/usual care, Outcome 2 Severity of PTSD symptoms - self report.

Study or subgroup	Group Therapy		Group Therapy		Std. Mean Difference		Std. Mean Difference	
	N	Mean(SD)	N	Mean(SD)	Fixed, 95% CI		Fixed, 95% CI	
Kearney 2013	25	52.5 (13)	22	58.5 (11)			-0.49[-1.07,0.09]	

Analysis 13.3. Comparison 13 Group non-TFCBT vs waitlist/usual care, Outcome 3 Severity of PTSD symptoms - self report 1 - 4 months.

Study or subgroup	Group Therapy		Group Therapy		Std. Mean Difference		Std. Mean Difference	
	N	Mean(SD)	N	Mean(SD)	Fixed, 95% CI		Fixed, 95% CI	
Kearney 2013	25	54.4 (15)	22	60.2 (13)			-0.4[-0.98,0.18]	

Analysis 13.4. Comparison 13 Group non-TFCBT vs waitlist/usual care, Outcome 4 Depression.

Study or subgroup	Group non-TFCBT		Waillist/UC		Std. Mean Difference		Std. Mean Difference	
	N	Mean(SD)	N	Mean(SD)	Fixed, 95% CI		Fixed, 95% CI	
Kearney 2013	25	12 (6)	22	12.4 (6)			-0.06[-0.64,0.51]	

Analysis 13.5. Comparison 13 Group non-TFCBT vs waitlist/usual care, Outcome 5 Depression - 1 - 4 months.

Study or subgroup	Group non-TFCBT		Waitlist/UC		Std. Mean Difference	
	N	Mean(SD)	N	Mean(SD)	Fixed, 95% CI	Std. Mean Difference Fixed, 95% CI
Kearney 2013	25	15.5 (5)	22	15.6 (5)		-0.03[-0.6,0.54]

WHAT'S NEW

Date	Event	Description
26 August 2015	Amended	Corrected typographical error in results section.

HISTORY

Protocol first published: Issue 4, 2001
Review first published: Issue 2, 2005

Date	Event	Description
13 December 2013	New citation required but conclusions have not changed	Major update
13 December 2013	New search has been performed	Updated to include studies completed by 12th April 2013.
5 November 2008	New citation required and conclusions have changed	Substantive amendment

CONTRIBUTIONS OF AUTHORS

JIB has been involved in the identification of studies, quality appraisal, data entry, analysis and writing of the review.
NPR has been involved in quality appraisal.
MA has been involved in the identification of studies, quality appraisal and writing of the review.
RC has been involved in the identification of studies, quality appraisal and data entry.
CL has been involved in the identification of studies, quality appraisal, data entry, analysis and writing of the review.

DECLARATIONS OF INTEREST

None known.

INDEX TERMS

Medical Subject Headings (MeSH)

Behavior Therapy [methods]; Chronic Disease; Cognitive Behavioral Therapy [methods]; Psychotherapy [*methods]; Psychotherapy, Group; Randomized Controlled Trials as Topic; Stress Disorders, Post-Traumatic [psychology] [*therapy]

MeSH check words

Adult; Humans