



**Cochrane**  
**Library**

Cochrane Database of Systematic Reviews

## Community-based interventions for improving mental health in refugee children and adolescents in high-income countries (Review)

Soltan F, Cristofalo D, Marshall D, Purgato M, Taddese H, Vanderbloemen L, Barbui C, Uphoff E

Soltan F, Cristofalo D, Marshall D, Purgato M, Taddese H, Vanderbloemen L, Barbui C, Uphoff E.  
Community-based interventions for improving mental health in refugee children and adolescents in high-income countries.  
*Cochrane Database of Systematic Reviews* 2022, Issue 5. Art. No.: CD013657.  
DOI: [10.1002/14651858.CD013657.pub2](https://doi.org/10.1002/14651858.CD013657.pub2).

[www.cochranelibrary.com](http://www.cochranelibrary.com)

Community-based interventions for improving mental health in refugee children and adolescents in high-income countries (Review)

Copyright © 2022 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd.

WILEY

## TABLE OF CONTENTS

ABSTRACT .....	1
PLAIN LANGUAGE SUMMARY .....	2
SUMMARY OF FINDINGS .....	3
BACKGROUND .....	5
OBJECTIVES .....	7
METHODS .....	7
RESULTS .....	12
Figure 1. ....	13
DISCUSSION .....	16
AUTHORS' CONCLUSIONS .....	17
ACKNOWLEDGEMENTS .....	18
REFERENCES .....	19
CHARACTERISTICS OF STUDIES .....	26
RISK OF BIAS .....	71
DATA AND ANALYSES .....	73
Analysis 1.1. Comparison 1: Community-based intervention versus control, Outcome 1: Symptoms of post-traumatic stress disorder at 3 months post-treatment .....	73
Analysis 1.2. Comparison 1: Community-based intervention versus control, Outcome 2: Symptoms of depression at 3 months post-treatment .....	74
Analysis 1.3. Comparison 1: Community-based intervention versus control, Outcome 3: Psychological distress post-treatment .....	74
Analysis 1.4. Comparison 1: Community-based intervention versus control, Outcome 4: Child behaviour post-treatment .....	74
Analysis 1.5. Comparison 1: Community-based intervention versus control, Outcome 5: Externalising behaviours (up to 3 months post-treatment) .....	75
Analysis 1.6. Comparison 1: Community-based intervention versus control, Outcome 6: Internalising behaviours (up to 3 months post-treatment) .....	75
APPENDICES .....	75
WHAT'S NEW .....	85
HISTORY .....	85
CONTRIBUTIONS OF AUTHORS .....	85
DECLARATIONS OF INTEREST .....	85
SOURCES OF SUPPORT .....	86
DIFFERENCES BETWEEN PROTOCOL AND REVIEW .....	86
INDEX TERMS .....	86

[Intervention Review]

# Community-based interventions for improving mental health in refugee children and adolescents in high-income countries

Fatima Soltan<sup>1</sup>, Doriana Cristofalo<sup>2</sup>, David Marshall<sup>3,4</sup>, Marianna Purgato<sup>2,5</sup>, Henock Taddese<sup>1</sup>, Laura Vanderbloemen<sup>1,6</sup>, Corrado Barbui<sup>2,5</sup>, Eleonora Uphoff<sup>3,4</sup>

<sup>1</sup>Faculty of Medicine, School of Public Health, Imperial College London, London, UK. <sup>2</sup>Department of Neurosciences, Biomedicine and Movement Sciences, Section of Psychiatry, University of Verona, Verona, Italy. <sup>3</sup>Cochrane Common Mental Disorders, Centre for Reviews and Dissemination, University of York, York, UK. <sup>4</sup>Centre for Reviews and Dissemination, University of York, York, UK. <sup>5</sup>Cochrane Global Mental Health, University of Verona, Verona, Italy. <sup>6</sup>College of Health Sciences, VinUniversity, Hanoi, Vietnam

**Contact:** Eleonora Uphoff, [noortje.uphoff@york.ac.uk](mailto:noortje.uphoff@york.ac.uk).

**Editorial group:** Cochrane Common Mental Disorders Group.

**Publication status and date:** New, published in Issue 5, 2022.

**Citation:** Soltan F, Cristofalo D, Marshall D, Purgato M, Taddese H, Vanderbloemen L, Barbui C, Uphoff E. Community-based interventions for improving mental health in refugee children and adolescents in high-income countries. *Cochrane Database of Systematic Reviews* 2022, Issue 5. Art. No.: CD013657. DOI: [10.1002/14651858.CD013657.pub2](https://doi.org/10.1002/14651858.CD013657.pub2).

Copyright © 2022 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd.

## ABSTRACT

### Background

An unprecedented number of people around the world are experiencing forced displacement due to natural or man-made events. More than 50% of refugees worldwide are children or adolescents. In addition to the challenges of settling in a new country, many have witnessed or experienced traumatic events. Therefore, refugee children and adolescents are at risk of developing mental health problems such as post-traumatic stress disorder, and require appropriate and effective support within communities.

### Objectives

To assess the effectiveness and acceptability of community-based interventions (RCTs only) in comparison with controls (no treatment, waiting list, alternative treatment) for preventing and treating mental health problems (major depression, anxiety, post-traumatic stress disorder, psychological distress) and improving mental health in refugee children and adolescents in high-income countries.

### Search methods

Databases searches included the Cochrane Common Mental Disorders Controlled Trials Register (all available years), CENTRAL/CDSR (2021, Issue 2), Ovid MEDLINE, Embase, six other databases, and two trials registries to 21 February 2021. We checked reference lists of included study reports.

### Selection criteria

Studies of any design were eligible as long as they included child or adolescent refugees and evaluated a community-based mental health intervention in a high-income country. At a second stage, we selected randomised controlled trials.

### Data collection and analysis

For randomised controlled trials, we extracted data relating to the study and participant characteristics, and outcome data relating to the results of the trial. For studies using other evaluation methods, we extracted data relating to the study and participant characteristics. We derived evidence on the efficacy and availability of interventions from the randomised controlled trials only. Data were synthesised narratively.

## Main results

We screened 5005 records and sought full-text manuscripts of 62 relevant records. Three randomised controlled trials were included in this review. Key concerns in the risk of bias assessments included a lack of clarity about the randomisation process, potential for bias in outcome measurement, and risk of bias in the selection of results.

## Primary outcomes

There was no evidence of an effect of community-based interventions when compared with a waiting list for symptoms of post-traumatic stress (mean difference (MD)  $-1.46$ , 95% confidence interval (CI)  $-6.78$  to  $3.86$ ; 1 study; low-certainty evidence), symptoms of depression (MD  $0.26$ , 95% CI  $-2.15$  to  $2.67$ ; 1 study; low-certainty evidence), and psychological distress (MD  $-10.5$ , 95% CI  $-47.94$  to  $26.94$ ; 1 study; very low-certainty evidence).

There were no data on adverse events.

## Secondary outcomes

Three trials reported on short-term changes in child behaviour, using different measures, and found no evidence of an effect of the intervention versus a waiting list (low to very low certainty).

None of the trials reported on quality of life or well-being, participation and functioning, or participant satisfaction.

## Authors' conclusions

There is insufficient evidence to determine the efficacy and acceptability of community-based mental health interventions for refugee children and adolescents.

## PLAIN LANGUAGE SUMMARY

### Mental health support in the community for refugee children and adolescents in high-income countries

Refugee children and adolescents who have settled in high-income countries are at risk of mental health problems due to the many challenges they face before, during, and after migration.

### Key message

The evidence to date is not of sufficient quantity or quality to recommend what interventions should be implemented in practice. It is necessary for existing mental health support programmes and interventions for child refugees and asylum seekers to be evaluated so that they can add to the evidence on what works to support mental health in this population.

### What did we want to find out?

We aimed to assess the evidence for mental health promotion, prevention, and treatment taking place in the community for refugee children and adolescents living in high-income countries. Some programmes or interventions may focus on mental health promotion (to improve mental health) through community-building and social support, while others may focus on the treatment of mental health problems with individualised specialist care.

### What did we do?

We searched for studies in online databases and registries on 23 February 2021.

Studies of any design were eligible as long as they included child or adolescent refugees aged 18 years or younger and evaluated a community-based mental health intervention in a high-income country.

### What did we find?

We included 38 studies with a wide range of study designs, participant characteristics, and interventions. Three studies used a randomised controlled trial design where the treatments people received were decided at random; these usually give the most reliable evidence about treatment effects. We used these studies to assess the effectiveness of interventions and the acceptability as indicated by the occurrence of adverse events.

### What were the limitations of the evidence?

There were important limitations relating to the quality of the included trials. There was no evidence on the acceptability of interventions. Data on effectiveness, relating to symptoms of mental health problems, psychological distress, and behaviour, showed no evidence of a difference in effectiveness between the intervention group and the waiting list control group (where the intervention was not delivered until after participants in the intervention group had completed the treatment) for any of the three studies.

## SUMMARY OF FINDINGS

### Summary of findings 1. Summary of findings table - Teaching Recovery Techniques compared to waiting list for health problem or population

#### Teaching Recovery Techniques compared to waiting list for health problem or population

**Patient or population:** health problem or population

**Setting:** high-income countries

**Intervention:** Teaching Recovery Techniques

**Comparison:** waiting list

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	Nº of participants (studies)	Certainty of the evidence (GRADE)	Comments
	Risk with waiting list	Risk with Teaching Recovery Techniques				
Symptoms of post-traumatic stress at 3 months post-treatment assessed with: Children's Revised Impact of Event Scale (CRIES-13) Scale from: 0 to 65	The mean symptoms of post-traumatic stress at 3 months post-treatment was <b>14</b>	MD <b>1.46 lower</b> (6.78 lower to 3.86 higher)	-	63 (1 RCT)	⊕⊕⊕⊕ Low <sup>a</sup>	
Symptoms of depression at 3 months post-treatment assessed with: Depression Self-Rating Scale (DSRS) Scale from: 0 to 36	The mean symptoms of depression at 3 months post-treatment was <b>8</b>	MD <b>0.26 higher</b> (2.15 lower to 2.67 higher)	-	63 (1 RCT)	⊕⊕⊕⊕ Low <sup>a</sup>	
Psychological distress post-treatment assessed with: Brief Symptom Inventory (BSI)	The mean psychological distress post-treatment was <b>64</b>	MD <b>10.5 lower</b> (47.94 lower to 26.94 higher)	-	16 (1 RCT)	⊕⊕⊕⊕ Very low <sup>a,b,c</sup>	
Child behaviour post-treatment assessed with: Child Behaviour Checklist (CBCL)	The mean child behaviour post-treatment was <b>27</b>	MD <b>8.7 lower</b> (27.71 lower to 10.31 higher)	-	16 (1 RCT)	⊕⊕⊕⊕ Very low <sup>a,b,c</sup>	
Externalising behaviours 5 weeks post-treatment assessed with: BASC	The mean externalising behaviours 5 weeks post-treatment was <b>43</b>	MD <b>0.22 lower</b> (3.44 lower to 3 higher)	-	31 (1 RCT)	⊕⊕⊕⊕ Very low <sup>a,b,d</sup>	
Externalising behaviours 3 months post-treatment assessed with: HSCL-37A	The mean externalising behaviours 3 months post-treatment was <b>14</b>	MD <b>0.38 higher</b> (0.46 lower to 1.22 higher)	-	82 (1 RCT)	⊕⊕⊕⊕ Low <sup>a</sup>	

Internalising behaviours 5 weeks post-treatment assessed with: Behavior Assessment System for Children (BASC)	The mean internalising behaviours 5 weeks post-treatment was <b>41</b>	MD <b>1.59 higher</b> (1.26 lower to 4.44 higher)	-	31 (1 RCT)	⊕⊕⊕⊕ Very low <sup>a,b,d</sup>
Internalising behaviours 3 months post-treatment assessed with: Hopkins Symptom Checklist-37 (HSCL-37A)	The mean internalising behaviours 3 months post-treatment was <b>35</b>	MD <b>1.23 lower</b> (5.06 lower to 2.6 higher)	-	82 (1 RCT)	⊕⊕⊕⊕ Low <sup>d</sup>

\***The risk in the intervention group** (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; **MD:** mean difference

#### GRADE Working Group grades of evidence

**High certainty:** we are very confident that the true effect lies close to that of the estimate of the effect.

**Moderate certainty:** we are moderately confident in the effect estimate: the true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different.

**Low certainty:** our confidence in the effect estimate is limited: the true effect may be substantially different from the estimate of the effect.

**Very low certainty:** we have very little confidence in the effect estimate: the true effect is likely to be substantially different from the estimate of effect.

See interactive version of this table: [https://gdt.gradepro.org/presentations/#/isof/isof\\_question\\_revman\\_web\\_430437606638798472](https://gdt.gradepro.org/presentations/#/isof/isof_question_revman_web_430437606638798472).

<sup>a</sup> Downgraded one level for inconsistency because data were from one trial. Estimate covered both harm and benefit.

<sup>b</sup> Downgraded one level for risk of bias relating to outcome measurement.

<sup>c</sup> Downgraded one level for imprecision. Due to large variation in baseline scores, leading to a large standard deviation, a bigger sample would be required to detect clinically meaningful differences between study arms. Optimum Information Size was not met.

<sup>d</sup> Downgraded one level for imprecision as the Optimum Information Size was not met. Even larger differences in behavioural symptoms between study arms would require a bigger sample size.

## BACKGROUND

### Description of the condition

An unprecedented number of people around the world are experiencing forced displacement due to natural or man-made events such as the Syrian conflict, which has contributed to the largest forced movement of people across the globe since World War II. By the end of 2017, there were more than 65 million forcibly displaced individuals, of whom 25.4 million were refugees (UNHCR 2017). The 1951 Convention Relating to the Status of Refugees defines refugees as people who have a well-founded fear of persecution due to their religion, race, political beliefs, nationality, membership in a social group, or sexual identity, who cannot rely on their country of nationality to protect them (UN General Assembly 1951). According to the United Nations High Commissioner for Refugees (UNHCR), children are among the most severely affected victims in populations forcibly uprooted by conflict, due to their vulnerability (UNICEF 2016). Children and adolescents under 18 years of age constitute more than 50% of the refugee population (USA for UNHCR 2018).

The refugee experience is typically divided into two phases: pre-migratory and post-migratory. Pre-migratory experiences may include witnessing or experiencing violence, torture, murder, physical and emotional trauma, or a combination of these to the individual or family. It also includes the often long and hazardous journey to the resettlement or destination country, which may involve arduous travel, refugee camps, and detention centres. The post-migratory phase may present challenges such as linguistic and cultural barriers, poverty, discrimination, and adapting to a new and foreign environment.

Factors relating to the pre-migratory phase — in particular witnessing violence and experiencing traumatic events — have been associated with mental health problems in children and adolescents, including symptoms of post-traumatic stress disorder (PTSD) (Ellis 2008; Fazel 2012). Evidence suggests that mental health problems in refugee children and adolescents increase with the number of violent or traumatic events they have experienced in their country of origin (Ellis 2008; Im 2018). In the post-migratory phase, risk factors and protective factors relating to stressors of arrival and settlement in the host country have been identified. These include individual-level factors relating to indicators of vulnerability (such as being of female gender or having a single parent (Fazel 2012)), as well as family and societal factors (such as level of financial and social support (Fazel 2012), and discrimination (Ellis 2008; Fazel 2012)). Furthermore, children are impacted by mental health problems of the main caregivers, who may experience stresses related to trauma, migration, and resettlement (Davidson 2004; Fazel 2012).

A number of studies and reviews have shown a higher prevalence of mental health problems among refugee children and adolescents arriving in high-income resettlement countries, compared to the general population (Barghadouch 2018; Close 2016; Fazel 2005; Jakobsen 2014; Steel 2009). Estimates of the prevalence of mental health problems in this population differ widely due to methodological differences across studies as well as the diversity of experiences (Bogic 2015). Studies of high-income countries showed PTSD prevalence rates ranging from 10% to 25%, while those of low-income countries showed prevalence rates as high as 75% (Fazel 2015). Moreover, one review of over 40 studies on refugee

children in high-income countries suggested PTSD rates ranged from 40% to 63%, and depression rates from 25% to 50% (Reavell 2017). The measurement of symptoms of depression and anxiety in more recent studies has made the extent of mental health suffering among child and adolescent refugees more visible (Ziaian 2012).

### Description of the intervention

The World Health Organization (WHO) defines mental health as being "a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community" (WHO 2018). Mental health literature has often adapted a binary model, in which people are either with or without a diagnosis of a mental health problem. Various authors have proposed that it is more helpful and accurate to consider mental health on a continuum (Iasiello 2020). Symptom severity of diagnosed mental health problems varies between people and over time, and those without a diagnosis of a mental health problem may, at different times, find themselves on different points of a spectrum from enjoying excellent mental health to experiencing a lack of good mental health. We considered interventions for diagnosed mental health problems and for those who may experience symptoms of emotional suffering (psychological distress) which can affect their day-to-day lives, such as sadness, fatigue, anger, irritability, restlessness, or delusions, as well as prevention for those who have no symptoms and interventions that promote positive mental health across all these groups among refugee children and adolescents in high-income countries.

In this review we focused on community-based interventions, which may have taken place in schools, faith-based organisations, neighbourhoods, or other community settings. These interventions may have addressed experiences of traumatic events (pre-migration) or address factors relating to resettlement, such as learning a new language, sociocultural adjustment, and peer relationships, or both (Vostanis 2016).

While the Inter-Agency Standing Committee (IASC) guidelines on mental health and psychosocial support in emergency settings were originally written for low- and middle-income countries (where IASC agencies commonly work), the overall framework may also apply to high-income country settings. Therefore, we used the IASC pyramid approach to categorise the interventions (IASC 2007). We examined interventions that addressed any one or more of the four pyramid layers, as follows (see also [Types of interventions](#)).

1. Social considerations in basic services and security.
2. Community and family support.
3. Focused, non-specialised care.
4. Specialised services.
5. Multi-modal, multi-layered interventions.

While all the pyramid layers are important and should ideally be implemented simultaneously, we included any interventions that addressed at least one of the pyramid layers.

The lower layers (1, 2), which emphasise community foundations, may include interventions such as cultural and recreational activities and peer support (e.g. sports development, art/dance/drama therapy, creative expression, psychosocial and educational support). They build communication, educational, and vocational skills for children and adolescents to support integration into

society, promote positive mental health, and in turn prevent mental health problems associated with acculturative stress. For example, the Global Refugee Sponsorship Initiative, launched in 2016, has helped several high-income countries around the world to introduce community-based sponsorship programmes, contributing to a rise in community groups directly engaging in refugee resettlement efforts ([refugeesponsorship.org/](http://refugeesponsorship.org/)).

The upper layers (3, 4), which emphasise professional care, may include non-specialised interventions such as psychological first-aid for assessing and addressing needs and concerns. Specialised interventions that may be used for the treatment of distress or diagnosed mental disorders include cognitive-behavioural therapy (CBT), and other psychological therapies. These interventions are used in the treatment of PTSD, anxiety, depression, and other mental health problems.

Last, interventions may have addressed more than one IASC pyramid layer and incorporated both preventive and treatment measures, which may have been delivered with the involvement of various community workers and professional mental health workers, in a combination of formats (community, group, individual) and settings (layer 5).

### How the intervention might work

These various interventions are based on their different theoretical models describing specific prevention and treatment mechanisms/processes.

1. Social considerations in basic services and security interventions aim to reach as many children as possible in a participatory, safe, and socially/culturally appropriate way. These interventions use local social supports and community mobilisation to advocate for the delivery of basic services (food, shelter, water, basic healthcare) in ways that promote mental health. Whichever form the interventions may take, they address societal and community-level determinants of health and a common theme is the promotion of participation by the community.
2. Community and family support interventions aim to help children cope with disruption in family and community structures/networks due to loss or separation. They may improve social functioning, facilitate social and language skills, and strengthen relationships with family/communities. These interventions target the family or community rather than the individual and involve building communication, educational, and vocational skills for children to support integration into society and in turn prevent mental health problems associated with acculturative stress and resettlement.
3. Focused, non-specialised care interventions aim to maintain or enhance mental health within general social and primary health services. For example, Mental Health First Aid training teaches community members to recognise people in need of help, provide initial support, and refer to specialist services ([Morgan 2018](#)). An emerging method of psychological treatment is one that uses a common elements treatment approach, which incorporates treatments to address a range of mental disorders ([Fazel 2018a](#)). The mechanism of action of focused psychosocial support intervention might involve an improvement in general functioning which in turn contributes to decreasing psychological symptoms ([Purgato 2020](#)). Many of these interventions take place in a school environment, with the

greatest evidence base for those that focus on verbal processing of previous traumatic events ([Tyrer 2014](#)); for example, a classroom-based skills and psycho-education intervention that focuses on trauma and loss, and the traumatic stress and grief responses that they can give rise to.

4. Specialised services involve psychological therapies that can effect change via a number of mechanisms, including exposure or emotional processing (or both), cognitive processing or interpretation (or both), and meaning making. For example, CBT is an evidence-based approach (incorporating a range of techniques) used to change thoughts, feelings, and behaviours to improve mood and functioning. It has consistently ranked among the most effective interventions for traumatised refugee youth ([Cohen 2000](#)). CBT for depression is based on the premise that one's mood is associated with patterns of thought and that CBT can help an individual to recognise counterproductive thought patterns and replace them with positive ones ([Beck 1979](#); [WHO 2016](#)). For anxiety, CBT helps address negative patterns that stem from the way one views the world and themselves ([James 2015](#)).
5. Multi-modal, multi-tiered interventions may operate through a number of different mechanisms depending on the pyramid layers they address ([Description of the intervention](#)). An example of this is the multi-tiered Trauma-Systems Therapy for Refugees (TST-R), which extends beyond mental health problems and addresses other domains of well-being relevant to refugee children and adolescents, such as acculturative and resettlement stresses ([Abdi 2018](#)). It utilises a socio-ecological approach, which involves addressing children's mental health needs within the context of the family and community ([Bronfenbrenner 1979](#)). The lower tiers emphasise promotion of positive mental health through community-building and social support, while the upper tiers focus on treatment of mental health problems with individualised specialist care.

### Why it is important to do this review

In December 2018, the UCL-Lancet Commission on Migration and Health was convened to promote evidence-based approaches for the health of the world's populations on the move ([Abubakar 2018](#)). The Commission highlighted the unmet needs of refugees and urged for worldwide investments in health services for non-communicable diseases, including mental health ([Miliband 2018](#)). It called for interventions that extend beyond the health sector to target the social and environmental determinants that affect mental health and well-being, particularly in childhood and adolescence ([Patel 2018](#)). Given the influence of childhood experiences on the life course, the promotion of positive mental health and the treatment of mental health problems in childhood and adolescence can shape future health and well-being ([Kessler 2005](#)).

The purpose of this review was to examine and describe the current evidence base on the effectiveness of community-based interventions for improving the mental health of refugee children and adolescents in high-income countries. We are aware of systematic reviews of interventions for similar health outcomes, but in different populations.

One Cochrane Review on a range of common mental disorders in low- and middle-income countries affected by humanitarian crises included 33 studies with 3523 participants who had been



exposed to a range of multifaceted stressors (Purgato 2018). The study authors found low-quality evidence of a beneficial effect of psychological therapies in reducing PTSD, and depressive and anxiety symptoms in adults, and very low-quality evidence in children and adolescents. One Cochrane Review on the beneficial and adverse effects of psychological, social, and welfare interventions for torture survivors included nine studies with 507 participants (Patel 2014). The studies provided very low-quality evidence for narrative expression therapy and CBT having medium-sized benefits in lowering distress and PTSD symptoms. Although informative, these reviews were not focused on child and adolescent refugees specifically.

One Cochrane Review of primary-level worker interventions for adults and children in low- and middle-income countries found 95 trials, with promising results shown for a range of mental health outcomes (van Ginneken 2021).

The systematic review which most closely resembles our population and interventions of interest was conducted by Tyrer and colleagues (Tyrer 2014). Searches performed up to January 2013 identified 21 studies for inclusion (1800 participants), including 14 studies from high-income countries. The review included randomised controlled trials (RCTs), cohort studies, and case-control studies of school- and community-based interventions aimed at improving mental health in refugee and asylum-seeking children and adolescents up to 17 years of age.

We found one review focused on refugee children and adolescents in high-income settings, but it lacked a systematic approach and included only preventive interventions (Fazel 2018b). Resettlement poses challenges for refugee children and adolescents and their families, which are distinct from stressors experienced in the home country or during the migration journey. Studies from high-income countries and low- and middle-income countries will therefore tend to include populations with different experiences impacting on mental health. This, and the variation between countries and world regions in terms of healthcare systems and resources available, means that different interventions will be more or less relevant and appropriate in different settings. It may also mean that the efficacy of interventions differs between high-income countries and low- and middle-income countries.

This Cochrane Review adds to the evidence base in several ways. First, it provides an up-to-date evidence synthesis. Second, we assessed the efficacy and acceptability of interventions, using RCTs only to facilitate the synthesis of results, by outcome, across studies. Third, our review focused on child and adolescent refugees resettled in high-income countries only.

With increasingly complex population needs and tight budgets to address mental health of refugee children and adolescents, there is a need for robust evidence synthesis to inform commissioning of services. This review is likely to be of interest to researchers and policy-makers in high-income countries seeking to design, implement, and evaluate mental health and well-being interventions for child and adolescent refugees in high-income countries.

## OBJECTIVES

To assess the effectiveness and acceptability of community-based interventions (RCTs only) in comparison with controls (no

treatment, waiting list, alternative treatment) for preventing and treating mental health problems (major depression, anxiety, post-traumatic stress disorder, psychological distress) and improving mental health in refugee children and adolescents in high-income countries.

We had initially planned to include a description of non-randomised studies in this Cochrane Review, which is reflected in our literature search strategy and selection criteria. However, given that the main objective was to assess the effectiveness of interventions, the focus on of non-randomised studies did not seem appropriate. See also [Differences between protocol and review](#) section.

## METHODS

### Criteria for considering studies for this review

#### Types of studies

We included RCTs and cluster-RCTs. Cross-over RCTs were eligible for inclusion but we used only data from the first phase (i.e. before providing the intervention to the control group).

Non-randomised studies were eligible for inclusion but no data on effectiveness and acceptability were extracted (see [Differences between protocol and review](#)).

#### Types of participants

##### Age

We included children or adolescents aged 18 years or younger. If we identified studies that included children in an overlapping age range (e.g. participants aged between 15 and 21 years), we contacted the study authors to access individual participant data for children and adolescents that meet our criteria. If individual participant data were unavailable, we excluded that study. If 75% of included participants were children, we included the study.

##### Sex

We included participants of any sex or gender.

##### Ethnicity

We included participants of any ethnicity.

##### Diagnosis

We included studies with participants who were refugees or asylum seekers, with or without diagnosed mental health problems.

##### Diagnosed mental health problems

Studies evaluating treatment interventions may have included participants diagnosed with major depression, anxiety, PTSD, or other mental health problems. These were eligible for inclusion in this review.

##### Symptoms of mental health problems

Studies with participants with symptoms that did not meet the threshold for diagnosis of a mental health problem, for example, mild or subthreshold depression, were included. These participants may experience symptoms of psychological distress such as sadness, fatigue, anger, irritability, restlessness, or delusions, which

may be self-reported or measured using an instrument of symptom severity.

### No indication of mental health problems

Studies evaluating interventions for mental health promotion (to improve mental health) or prevention are likely to include participants without a diagnosis of a mental health problem or symptoms of mental health problems. Participants may have been selected on the basis of their refugee/asylum seeker status only or because they were thought to be vulnerable to mental health problems, for example, because of experience of trauma. These studies were eligible for inclusion in our review.

### Comorbidities

We included studies that involved participants with any physical or psychiatric comorbidities.

### Setting

We included interventions delivered in a community setting in high-income countries. According to McLeroy and colleagues, 'community-based' means the intervention was implemented in the participants' community (McLeroy 2003). This includes community institutions such as neighbourhoods, schools, churches, work sites, homes, and voluntary agencies. Such settings provide opportunities to reach the target group using existing social structures with which community members engage. Interventions in the community that can be more easily accessed by refugee children and their families may help to overcome financial, language, or cultural barriers associated with accessing mainstream mental health services. We did not include any such interventions conducted in a clinical setting. We also excluded any parent-focused interventions.

According to the UNHCR, there are currently 25 countries worldwide with resettlement programmes, the majority of which are high-income countries (UNHCR 2011). High-income countries with non-UNHCR resettlement programmes were also considered. Based on gross national income per capita, the World Bank classifies countries into four income groups: low, lower-middle, upper-middle, and high.

### Types of interventions

Recognising the importance of preventing and treating mental health problems in childhood and adolescence within the context of families and communities, we focussed on community-based interventions delivered to children and adolescents of refugee background in high-income countries. We used the IASC pyramid approach to categorise the interventions. Therefore, we included interventions that addressed any one or more of the four IASC pyramid layers: social considerations in basic services and security; community and family support; focused, non-specialised care; and specialised services.

### Experimental interventions

1. Social considerations in basic services and security. These consist of basic services and security that are delivered in ways that are participatory, safe, and culturally appropriate. They support methods of coping.

2. Community and family support. These interventions consist of care and support provided by caregivers, community members, and friends for family and community resilience.
3. Focused, non-specialised care. These interventions consist of more focused support interventions to the individual, family, or group. They are used to maintain or enhance mental health and psychosocial well-being.
4. Specialised services. These consist of professional care for children experiencing significant distress or severe mental disorders, whose needs exceed primary health services. These interventions are used in the treatment of PTSD, anxiety and depressive disorders, and other conditions. An example is CBT.
5. Multi-modal, multi-layered. These consist of interventions that address more than one of the IASC pyramid layers.

### Comparator interventions

1. No treatment.
2. Psychological placebo/attention placebo control. This included any intervention or sham treatment which may have been regarded as active treatment by participants but was considered inactive by the researchers.
3. Waiting list. The intervention in the control group was not delivered until after participants in the intervention group had completed the treatment.
4. Treatment as usual/standard care (e.g. regular classes/school programme, tutoring).

### Types of outcome measures

Studies that meet the above inclusion criteria were included regardless of whether they reported on the following outcomes.

### Primary outcomes

1. Efficacy of the intervention; continuous measures of symptom severity using validated scales for each of the following conditions:
  - a. PTSD (e.g. the clinician-administered Children's PTSD Inventory (CPTSD-I) (Saigh 2000));
  - b. anxiety disorders (e.g. the self-reported State Trait Anxiety Inventory for Children (STAIC) (Spielberger 1973));
  - c. depression (e.g. the self-reported Children's Depression Inventory (CDI) (Kovacks 1989));
  - d. psychological distress (e.g. the clinician-administered Child Psychosocial Distress Screener (CPDS) (Jordans 2008)).
2. Adverse events (intervention acceptability); counts of suicide, self-harm, or other adverse events.

### Secondary outcomes

1. Quality of life or well-being (e.g. the self-administered or parent/teacher-administered Pediatric Quality of Life Inventory (PedsQL) (Varni 2001)).
2. Externalising and internalising behaviour problems (e.g. total scores of the parent-completed Child Behaviour Checklist (CBCL) (Achenbach 1983)).
3. Participation and functioning as measured by engagement in education, community activity (e.g. the clinician-rated Children's Global Assessment Scale (CGAS) (Shaffer 1983)).
4. Participant satisfaction with the intervention (any measure).

We considered symptom severity, quality of life or well-being, behaviour problems, social skills, and participation and functioning to be outcomes relating to the efficacy of the intervention.

We adopted the following definition of treatment acceptability: "A multi-faceted construct that reflects the extent to which people delivering or receiving a healthcare intervention consider it to be appropriate, based on anticipated or experienced cognitive and emotional responses to the intervention" (Sekhon 2017). The outcomes 'adverse events' and 'participant satisfaction' measure two such facets of acceptability. Adverse events can be considered an extremely undesirable response to an intervention. Participant satisfaction reflects a person's experience with the intervention, with low satisfaction potentially leading to lower engagement with the intervention.

#### Timing of outcome assessment

We collected baseline and endpoint data, or change from baseline data, for each trial. To accommodate trials with varying lengths, we planned to categorise endpoint data as follows: short-term (up to six months), medium-term (seven to 12 months), long-term (more than 12 months). If multiple data points were reported within one of our categories, we extracted data for the latest data point within a category.

#### Hierarchy of outcome measures

For primary outcomes, if data from several commonly used rating scales were reported, we gave preference to a self-reported scale (i.e. completed by the participant) and extract these data for our synthesis.

### Search methods for identification of studies

#### Electronic searches

An information specialist with the Cochrane Common Mental Disorders Group searched the following databases, using relevant subject headings (controlled vocabularies) and search syntax, appropriate to each resource. Multiple searches were conducted for this review between August 2020 and February 2021. All search strategies are listed in [Appendix 1](#).

1. Cochrane Common Mental Disorders Controlled Trials Register (all available years) ([Appendix 2](#)).
2. Cochrane Central Register of Controlled Trials (CENTRAL; 2021, Issue 2) in the Cochrane Library (searched 21 February 2021).
3. Cochrane Database of Systematic Reviews (CDSR; 2021, Issue 2) in the Cochrane Library (searched 21 February 2021).
4. Ovid MEDLINE (1946 to 21 February 2021).
5. Ovid Embase (1974 to 21 February 2021).
6. Ovid PsycINFO (1806 to 21 February 2021).
7. EBSCO British Education Index (1980 to 21 February 2021).
8. EBSCO ERIC (Educational Resources Information Center) (all available years to 21 February 2021).
9. EPPI Centre Trials Register of Promoting Health Interventions (TRoPHI) (all available years to 21 February 2021).
10. ProQuest International Bibliography of the Social Sciences (IBSS) (1951 to 21 February 2021).
11. ProQuest Sociological Abstracts (1994 to 21 February 2021).

There were no restrictions on date, language, or publication status applied to the searches.

#### Searching other resources

##### Reference lists

We checked the reference lists of all included studies and relevant systematic reviews to identify additional studies missed from the original electronic searches (e.g. unpublished or in-press citations).

##### Correspondence

We contacted trialists and subject experts for information on unpublished or ongoing studies, and to request additional trial data.

### Data collection and analysis

#### Selection of studies

Two review authors (of FS, DC, LV, EU, HT, JH) independently screened titles and abstracts for inclusion using Covidence software. We retrieved the full-text study reports/publications and two review authors (FS, LV, EU, or DC) independently screened them, identified studies for inclusion, and identified and recorded reasons for exclusion of the ineligible studies. If the full text was not available, we requested a copy of the article from the authors. We resolved disagreement through discussion or, if required, we consulted a third review author (MP or CB). We identified and excluded duplicate records and collated multiple reports that related to the same study so that each study, rather than each report, was the unit of interest in the review. We recorded the selection process in sufficient detail to complete a PRISMA flow diagram and [Characteristics of excluded studies](#) table.

#### Data extraction and management

We used a data collection form to extract study characteristics and outcome data. We pilot-tested the form on one study in the review. Two review authors (FS, LV, or EU) independently extracted the following study characteristics and outcome data from included studies.

1. General information: author(s), type of source (journal, book, thesis, other), name of the source, year of study, author contact details.
2. Methods: study design, total duration of study, number of study centres and location, study setting, withdrawals, and date of study.
3. Participants: number, mean age, age range, gender, country of origin, country of settlement, refugee status (refugee/asylum seeker), severity of condition, diagnostic criteria, inclusion criteria, and exclusion criteria, number of dropouts for any reason.
4. Interventions: intervention, comparison/control, components of the intervention, setting (e.g. one-to-one, group, classroom), location (e.g. community centre, school), number of sessions, duration of sessions, target of the intervention (mental health promotion, or prevention or treatment of diagnosed mental health problems), level of the intervention (basic services and security, community and family support, focused, non-specialist care, specialised services, multi-modal or multi-layered interventions).

5. Outcomes: outcomes, data at baseline and endpoint for all outcomes specified in the protocol (Soltan 2020), time points of data collection measured from baseline, measurement tools used.
6. Notes: funding for study, and notable conflicts of interest of trial authors.

We noted in the [Characteristics of included studies](#) table if outcome data were not reported in a usable way. We resolved disagreements by consensus or by involving a third review author (MP or CB). One review author (EU) transferred data into the Review Manager Web (Review Manager Web 2020). We double-checked that data were entered correctly by comparing the data presented in the systematic review with the study reports. A second review author (FS) spot-checked study characteristics for accuracy against the trial report.

### Main planned comparisons

1. Community-based intervention versus no treatment.
2. Community-based intervention versus waiting list.
3. Community-based intervention versus treatment as usual.
4. Community-based intervention versus psychological placebo.

### Assessment of risk of bias in included studies

To assess risk of bias in RCTs, we used Cochrane's RoB2 tool (Sterne 2019).

Two review authors (of FS, LV, EU, DM, DC) independently assessed the risk of bias for the primary outcomes (efficacy of the treatment and adverse events) reported in the summary of findings table. We resolved any disagreements by discussion or by involving another review author (CB or MP). We were interested in assessing risk of bias for the effect of assignment to the intervention, rather than the effect of adherence to the intervention.

We considered bias relating to the following domains.

1. Randomisation process.
2. Deviations from intended interventions.
3. Missing outcome data.
4. Outcome measurement.
5. Selection of the reported result.

We reported answers to signalling questions for each domain, as well as the risk of bias judgement category. We used the free text box to present supporting information for each response. For each outcome, we reported an overall judgement about the risk of bias. A study judged at high risk of bias overall had at least one domain rated at high risk of bias, or some concerns for multiple domains which substantially lowered our confidence in the result. An overall judgement of low risk of bias was obtained if a study was at low risk of bias for all five domains for the outcome of interest.

We conducted risk of bias assessments for cluster-RCTs and cross-over RCTs using the specific RoB2 guidance available for these RCT designs. We created separate forms in Microsoft Word for parallel trials, cluster-RCTs, and cross-over RCTs to facilitate completion of the risk of bias assessments.

We reported risk of bias assessment summaries for each outcome. Detailed reports are available from the review authors upon request.

### Measures of treatment effect

#### Continuous outcomes

Where trials used the same continuous outcome measure for comparison, we pooled data by calculating the mean difference (MD). When trials used different measures to assess the same outcome, we pooled data with standardised mean difference (SMD) and calculate 95% confidence intervals (CIs). To facilitate the interpretation of results in terms of their clinical relevance, we considered whether effects were small (0.2 to less than 0.5), medium (0.5 to 0.8), or large (greater than 0.8) (Cohen 1988). We also re-expressed SMDs in terms of units of a commonly used outcome measure according to the *Cochrane Handbook for Systematic Reviews of Interventions* (Higgins 2019). The measure used depended on the outcome, for example, the CDI for symptoms of depression.

An SMD of zero means that the intervention and control groups have equivalent treatment effects. We anticipated that, for most measures, a lower score would indicate greater improvement. For example, a lower score on depression symptom instruments indicates an improvement in symptoms. In these cases, an SMD less than zero indicates that the intervention has a greater effect than the control. An SMD greater than zero indicates that the intervention has a smaller effect than the control. Interpretation of the SMD is reversed in cases where a greater continuous score indicates greater improvement.

If continuous outcomes were reported in a 'change from baseline' format rather than at endpoint, we combined 'change from baseline' data and endpoint data in one meta-analysis where possible using MDs. If multiple measures were used for the same outcome and it was therefore not possible to combine data in one meta-analysis, we imputed standard deviations (SDs) for 'change from baseline' data by calculating the correlation coefficient, as specified in the *Cochrane Handbook for Systematic Reviews of Interventions* (Schünemann 2017a). However, we did not use these methods as no meta-analyses were conducted.

#### Dichotomous outcomes

We planned to analyse dichotomous outcomes by calculating a risk ratio (RR) for each comparison. In addition, we planned to calculate the number needed to treat for an additional beneficial outcome (NNTB), with 95% CIs, for all dichotomous outcomes to facilitate interpretation; this is the expected number of people who need to receive the intervention rather than the comparator for one additional person to achieve a beneficial outcome (Higgins 2019).

If one trial used both continuous and dichotomous variables for the same outcome, we would have given preference to the continuous outcome. Statistical analyses were performed using Review Manager Web (Review Manager Web 2020).

### Unit of analysis issues

#### Cluster-randomised controlled trials

Some interventions were performed in school settings whereby randomisation took place in clusters (e.g. at a class or school level).

We extracted data from cluster-RCTs as long as proper adjustment for the intracluster correlation had either been conducted by the trial author or the paper reported sufficient data for an approximate adjustment, in accordance with the *Cochrane Handbook for Systematic Reviews of Interventions* (Higgins 2019). Effective sample sizes were calculated using a conservative intraclass correlation coefficient (ICC) of 0.2, based on estimates from two systematic reviews of school-based programmes for children and adolescents (Shackleton 2016; Walsh 2015).

### Cross-over trials

For cross-over designs, we only used data collected up to the first cross-over point of the study to avoid carry-over effects.

### Studies with multiple treatment groups

For studies comparing multiple relevant interventions with a single control group, we planned to split data from the control group to achieve pair-wise comparisons. If studies used multiple active control groups, we planned to combine data from these groups to allow comparison with the treatment group. If studies used multiple inactive control groups (treatment as usual, waiting list, no treatment, psychological placebo), we planned to combine the control groups to compare to the treatment groups.

### Dealing with missing data

We contacted investigators or study sponsors to verify key study characteristics and obtain missing numerical outcome data where possible (e.g. when a study was identified as abstract only). We documented all correspondence with study authors and reported which study authors responded in the full review. If a study did not provide the summary data required for meta-analysis (e.g. SDs), we planned to derive them using calculations provided in the *Cochrane Handbook for Systematic Reviews of Interventions* (Higgins 2019). If it was not possible to calculate SDs, we did not use these data.

The primary analysis was based on observed case data. If studies used imputation methods to calculate missing data, we reported this and considered the impact of imputation in the risk of bias assessment.

### Assessment of heterogeneity

We planned to create forest plots, allowing readers to visually inspect the data. We would have formally tested statistical heterogeneity using the  $\chi^2$  test, which provides evidence of variation in effect estimates beyond that of chance. Because the  $\chi^2$  test has low power to assess heterogeneity when a small number of participants or trials are included, we conservatively set the P value at 0.1 (Deeks 2017). We would also have quantified heterogeneity using the  $I^2$  statistic, which calculates the percentage of variability due to heterogeneity rather than to chance (Higgins 2002).

We used conventional criteria for interpreting  $I^2$  values based on the *Cochrane Handbook for Systematic Reviews of Interventions* (Higgins 2019):

- 0% to 40%: might not be important;
- 30% to 60%: may represent moderate heterogeneity;
- 50% to 90%: may represent substantial heterogeneity;
- 75% to 100%: considerable heterogeneity.

We would have explored heterogeneity indicated by an  $I^2$  statistic of 50% and above, considering the magnitude and direction of treatment effects and the characteristics of any studies which represented outliers. The  $I^2$  values would have been interpreted in conjunction with the CI for their result, the  $\chi^2$  P values, and visual inspection of the forest plots.

### Assessment of reporting biases

To minimise reporting bias, we conducted comprehensive searches, contacted study authors, and placed no restrictions on publication type or language. In the event that there were more than 10 included studies, we would have assessed the possibility of publication bias or small-study effects on primary outcomes by using funnel plots.

### Data synthesis

We anticipated studies to represent a mix of study designs, populations, and interventions. For RCTs, we planned to combine data for relevant outcomes in a meta-analysis if we judged the data to be sufficiently homogeneous for a meaningful interpretation of the results. If we could not meaningfully combine data, we planned to narratively describe results by outcome. We would have used random-effects models to account for the expected heterogeneity between studies.

### Subgroup analysis and investigation of heterogeneity

Providing data were available, we planned to conduct the following subgroup analyses for the primary outcomes (RCTs only).

1. Intervention setting (e.g. school, neighbourhood, voluntary agency). The setting may have an impact on the outcomes, on trial retention, and on the delivery of the intervention.
2. Level of intervention (IASC 2007). We planned to compare subgroups of basic services and security interventions, community and family support, focused non-specialised care, and specialist services. The individual-level efficacy and acceptability of interventions may differ depending on their target level.

### Sensitivity analysis

Providing data had been available, we would have conducted sensitivity analyses for the primary outcomes including high-quality RCTs only. An overall judgement of low risk of bias according to RoB 2 assessments (i.e. low risk of bias for all domains) would be considered high-quality for the purpose of these analyses.

### Summary of findings and assessment of the certainty of the evidence

We used the GRADE approach to create a summary of findings table of the evidence from RCTs. We did this using GRADEpro software to import data from Review Manager Web (Review Manager Web 2020), including the outcomes listed below and sample sizes, effect estimates, and 95% CIs of the effect estimates. Summary of findings tables provide outcome-specific information concerning the overall quality of evidence from studies included in the comparison, the magnitude effect of the community-based interventions examined, and the sum of available data on the outcomes we included. As outlined in the *Cochrane Handbook for Systematic Reviews of Interventions*, we abided by the standard

methods for the preparation and presentation of results (Higgins 2019).

We planned to include four continuous outcomes of symptom severity (treatment efficacy) and one outcome for treatment acceptability in the summary of findings table, as follows.

1. PTSD.
2. Anxiety disorders.
3. Depression.
4. Psychological distress.
5. Adverse effects (e.g. self-harm, suicide).

In the summary of findings table, we reported and assessed short-term data (up to six months' follow-up) only. We described the specific GRADE domains (e.g. risk of bias, indirectness,

inconsistency, imprecision, publication bias) as well as the GRADE levels of evidence (high, moderate, low, very low).

## RESULTS

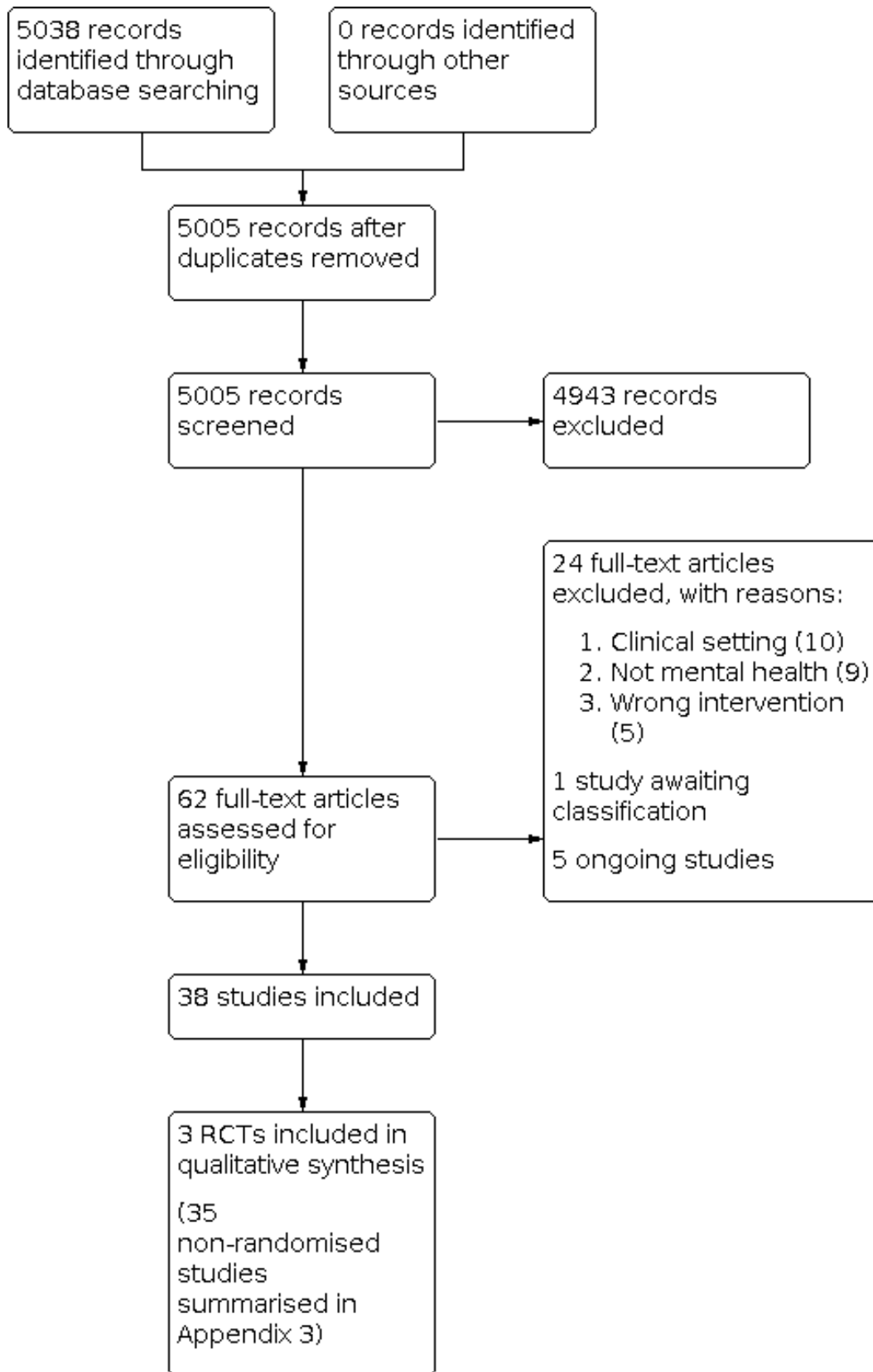
### Description of studies

#### Results of the search

The Cochrane Common Mental Disorders' Information Specialist performed all prespecified database searches on 23 February 2021.

Figure 1 shows the selection of studies through screening of titles and abstracts and full-text papers. After removal of duplicates, we screened the titles and abstracts of 5005 records. For 62 records, we sought and screened the full-text manuscripts. After linking records belonging to the same study, we extracted data for 38 studies.

**Figure 1. Study flow diagram.**



Three of the 38 included studies were RCTs (Baker 2006; Ooi 2016; Walg 2020). For these studies, we extracted outcome data in addition to information on the characteristics of the studies and participants. We performed risk of bias assessments for these RCTs. A description of non-randomised studies is available in Appendix 3.

We excluded 24 full-text articles.

One report was of an RCT with a sample of refugees aged between 13 and 21 years (Pfeiffer 2018). We requested data for children only, but these were not received in time and the study is awaiting classification.

Five studies, with study protocols published between 2019 and 2021, are ongoing (Durbееj 2021; Rosner 2020; Sarkadi 2020; Stiles 2019; Warner 2020). Durbееj 2021 is due to end in March 2022. Recruitment is ongoing for Rosner 2020; the end date is not yet known. It is not known when Sarkadi 2020 is due to end, but a feasibility study (randomised pilot trial) was conducted from April to June 2019. It is not known when Stiles 2019 is due to end. Warner 2020 completed the results in September 2021. These data will be included in the update of the review.

## Methodology

### Study design

We included three RCTs with 83 participants (Baker 2006; Ooi 2016; Walg 2020). Two were cluster-RCTs (Ooi 2016; Walg 2020), and one a cross-over RCT (Baker 2006).

### Geographical location

The included studies were conducted in Australia (Baker 2006; Ooi 2016), and Germany (Walg 2020).

### Sponsorship

One study reported funding and included a PhD fund and governmental support (Ooi 2016).

### Participants

Participants were teenagers, with two studies reporting a mean age between 12 and 14 years (Baker 2006; Ooi 2016), and one study including participants aged 15 to 18 years (Walg 2020).

Two studies included a mix of males and females, and one study only included males (Walg 2020).

One study did not report participants' country of origin (Baker 2006). The other two studies included participants from a range of countries. Participants in one study were predominantly from Afghanistan and Syria (Walg 2020), and in the other study they predominantly originated from sub-Saharan Africa (Ooi 2016). The study authors' location was the same as the participants' country of settlement for all three included studies.

One study had refugee status as an inclusion criteria (Baker 2006). The other two studies did not specify whether participants were refugees, asylum seekers, or a mix. Participants in one study were unaccompanied minors (Walg 2020). The third study had self-reported exposure to war or violence as a criterium for inclusion in the study (Ooi 2016).

One study included participants with a PTSD diagnosis (Ooi 2016), while the other two studies did not specifically report on the severity of mental health problems at baseline.

## Interventions

### Type of intervention and target

According to the IASC pyramid categories we used, interventions were classified as focused, non-specialist care (Baker 2006; Ooi 2016), and specialised services (Walg 2020). We categorised one 'music therapy' intervention as prevention (Baker 2006). We considered the 'Teaching Recovery Techniques' intervention to be treatment, with participants experiencing mild-to-moderate symptoms of PTSD (Ooi 2016). The Stabilization Training intervention evaluated in the third trial appeared to be more in line with treatment than prevention, although it was unclear whether participating adolescents were diagnosed with a condition such as PTSD prior to taking part (Walg 2020).

### Setting

Two studies delivered interventions in schools (Baker 2006; Ooi 2016), and one study delivered interventions in accommodation for unaccompanied minors (Walg 2020).

### Format

All three active interventions were delivered in a group format.

One intervention involved 69-minute sessions (Walg 2020), the second consisted of 10 sessions of 30 to 40 minutes each (Baker 2006), and the third consisted of eight one-hour sessions (Ooi 2016).

### Comparators

All three RCTs compared a community-based intervention to a waiting list (Baker 2006; Ooi 2016; Walg 2020). The study authors of one study mentioned that their waiting list had similarities with a 'treatment as usual' control group, as pedagogical experts provide support during the trial period (Walg 2020).

## Outcomes

### Primary outcomes

#### Efficacy of the intervention

Two RCTs reported on our primary outcomes: symptoms of PTSD, symptoms of depression, and psychological distress. One trial reported on symptoms of PTSD measured with the Children's Revised Impact of Event Scale (CRIES-13) three months after the intervention (Ooi 2016). The same trial reported on symptoms of depression after three months using the Depression Self-Rating Scale (DSRS) for children. One trial measured psychological distress immediately after the last intervention session using the Brief Symptom Inventory (BSI) (Walg 2020).

#### Adverse events (intervention acceptability)

None of the RCTs reported data on adverse events such as counts of suicide, self-harm, or other adverse events.

### Secondary outcomes

#### Quality of life or well-being

None of the RCTs reported data on quality of life or well-being.



### Externalising and internalising behaviour problems

All three included RCTs reported on child behaviour. In one trial, parents completed the CBCL after the last intervention session (Walg 2020). One trial used subscales for internalising and externalising behaviours of the Behavior Assessment System for Children (BASC) completed at five weeks post-intervention (Baker 2006). The third trial reported on internalising and externalising behaviours at three months post-intervention using the Hopkins Symptom Checklist-37 (HSCL-37A), which was developed for self-completion by unaccompanied refugee adolescents (Ooi 2016).

### Participation and functioning

None of the RCTs reported data on participation and functioning.

### Participant satisfaction

None of the RCTs reported data on participant satisfaction.

To our knowledge and based on an examination of online trial registrations and trial methods sections, outcomes that were not reported in the included RCTs were not measured.

### Excluded studies

Twenty-four studies were excluded upon screening of full-text articles. Five studies evaluated interventions not of interest to this review, for example because they were not aimed at refugees and asylum seekers or not focussed on mental health promotion, prevention, or treatment (Betancourt 2020; Brar-Josan 2019; Mattenschlager 2016; Mooren 2011; Neurohr 2019). Nine studies did not consider mental health outcomes (Cumming 2009; Dhillon 2020; Harris 2009; Marsh 2012; Naidoo 2009; Rosso 2016; Rousseau 2006; Sonn 2013; Weekes 2011). These studies for example focussed on literacy skills (Naidoo 2009) or social connections (Marsh 2012). Ten studies evaluated interventions delivered in a clinical setting rather than community-based interventions (Bohnacker 2017; Brückner 2020; Dixius 2017; Feen-Calligan 2020; Neuner 2019; Peltonen 2015; Ruf 2006; Ruf 2010; Ugurlu 2016; Unterhitzberger 2015).

Thirty-five non-randomised studies, which met the inclusion criteria, were initially included in our review. We decided at a later stage not to include information for these studies in the main section of the review, and descriptions of these studies were instead added to Appendix 3.

### Studies awaiting classification

One report was of an RCT with a sample of refugees aged between 13 and 21 years (Pfeiffer 2018). Requested data for children only were received after writing this review and will be considered at review update.

### Ongoing studies

Five studies, with study protocols published between 2019 and 2021, are ongoing (Durbjee 2021; Rosner 2020; Sarkadi 2020; Stiles 2019; Warner 2020).

### Risk of bias in included studies

Risk of bias was assessed for the available outcomes: symptoms of PTSD (Risk of bias table for Analysis 1.1), symptoms of depression (Risk of bias table for Analysis 1.2), psychological distress (Risk of bias table for Analysis 1.3), and child behaviour (Risk of bias table

for Analysis 1.4; Risk of bias table for Analysis 1.6; Risk of bias table for Analysis 1.5). The RoB 2 tool was accessed starting on 18 October 2021. Detailed risk of bias assessment data with consensus responses to signalling questions can be obtained from the authors.

### Symptoms of post-traumatic stress disorder

One cluster-RCT reported symptoms of PTSD (Ooi 2016). Overall, there were 'some concerns' relating to risk of bias for this outcome. Risk of bias was judged as low for all domains except the risk of bias in the selection of the reported result, for which there were some concerns. The trial was registered online after enrolment had started and it was unclear whether the trial registration was published before analyses had started.

### Symptoms of depression

One RCT reported symptoms of depression (Ooi 2016). As for the assessment of the PTSD outcome, there was 'some concern' about risk of bias in the selection of the reported result, due to retrospective trial registration and the absence of a published protocol. Risk of bias for the other domains was judged as low and the overall risk of bias assessment was 'some concerns'.

### Psychological distress

One trial reported on psychological distress (Walg 2020). This outcome was judged at high risk of bias overall. There were some concerns about risk of bias arising from the randomisation process, because the authors did not provide details regarding the allocation sequence. The outcome was at high risk of bias relating to measurement of the outcome. Participants completed the outcome assessments and were not blinded due to the nature of the intervention. Given that the control group was a waiting list, in other words no intervention, it is likely that participants would complete outcome assessments differently depending on whether they received an intervention or not.

### Child behaviour

Three trials reported child behaviour, using different measures and time points. Overall risk of bias judgements were some concerns for one trial (Ooi 2016), and high risk of bias for the other two (Baker 2006; Walg 2020).

There were some concerns about the lack of detail on descriptions of the randomisation procedure and allocation sequence (Baker 2006; Walg 2020). Risk of bias relating to measurement of the outcome was low in one trial (Ooi 2016), and high in the other two (Baker 2006; Walg 2020). In Baker 2006 and Walg 2020, outcome assessors were closely involved with the study or intervention delivery (or both). Therefore, knowledge of the allocation of participants may have influenced measurements.

There were some concerns about selection of reported results due to the absence of published trial protocols and prospectively registered trial registrations in two of the trials (Baker 2006; Ooi 2016).

### Effects of interventions

See: [Summary of findings 1 Summary of findings table - Teaching Recovery Techniques compared to waiting list for health problem or population](#)

The three included RCTs reported data on the efficacy of the interventions relating to symptoms of PTSD, symptoms of depression, psychological distress, and child behaviour. For our other outcomes of interest, no data were reported.

### Community-based intervention versus no treatment

We identified no RCTs comparing community-based intervention versus no treatment.

### Community-based intervention versus waiting list

Three trials compared community-based intervention versus waiting list (Baker 2006; Ooi 2016; Walg 2020).

#### Primary outcomes

##### Symptoms of post-traumatic stress disorder

There was no evidence of a difference in symptoms of PTSD at three months post-treatment between the intervention and waiting list groups in one cluster-RCT with 82 participants (effective sample size 63) (MD -1.46, 95% CI -6.78 to 3.86; Analysis 1.1; Ooi 2016).

##### Symptoms of anxiety

The trials did not report data for symptoms of anxiety.

##### Symptoms of depression

There was no evidence of a difference in symptoms of depression at three months post-treatment differ between the intervention and waiting list groups in one RCT with an effective sample size of 63 participants (MD 0.26, 95% CI -2.15 to 2.67; Analysis 1.2; Ooi 2016).

##### Psychological distress

There was no evidence of a difference in symptoms of psychological distress post-treatment between the intervention and waiting list groups in one RCT with 33 participants (effective sample size 16) (MD -10.5, 95% CI -47.94 to 26.94; Analysis 1.3; Walg 2020).

##### Adverse events

The trials did not report data for adverse events.

#### Secondary outcomes

##### Quality of life or well-being

The trials did not report data for quality of life or well-being.

##### Externalising and internalising behaviour problems

Three trials reported child behaviour, with two trials reporting on internalising and externalising behaviours separately (Baker 2006; Ooi 2016).

There was no evidence of a difference between intervention and waiting list groups in child behaviour scores immediately post-treatment in one RCT with 33 participants (MD -8.7, 95% CI -27.71 to 10.31; Analysis 1.4; Walg 2020).

Externalising behaviour scores did not differ between intervention and waiting list groups five weeks post-treatment (MD -0.22, 95% CI 3.44 to 3.0; Baker 2006) or three months post-treatment (MD 0.38, 95% CI -0.58 to 1.34; Ooi 2016) (Analysis 1.5).

Internalising behaviour scores did not differ between intervention and waiting list groups five weeks post-treatment (MD 1.59, 95%

CI -1.26 to 4.44; Baker 2006) or three months post-treatment (MD -1.23, 95% CI -5.61 to 3.15; Ooi 2016) (Analysis 1.6).

##### Participation and functioning

The trials did not report data for participation and functioning.

##### Participant satisfaction

The trials did not report data for participant satisfaction.

### Community-based intervention versus treatment as usual

We identified no RCTs comparing community-based intervention versus treatment as usual.

### Community-based intervention versus psychological placebo

We identified no RCTs comparing community-based intervention versus psychological placebo.

## DISCUSSION

### Summary of main results

Based on the three RCTs included in the narrative synthesis of results of this review, we can conclude there is no evidence for the effectiveness or acceptability of community-based interventions for child and adolescent refugees and asylum seekers in high-income countries. The certainty of the evidence was low to very low for the primary outcomes of symptoms of PTSD, symptoms of depression, and psychological distress. The certainty of the evidence was low to very low for the secondary outcome of child behaviour. There was no evidence for the primary outcomes of anxiety symptom severity and adverse events, neither for the secondary outcomes of quality of life or wellbeing, participation and functioning, and participant satisfaction.

### Overall completeness and applicability of evidence

While community-based interventions may be effective for mental health in various populations, we found no evidence to suggest that such interventions could promote mental health, or prevent or treat mental health conditions among refugee children and adolescents in high-income countries.

Some of the largest gaps in the evidence include the absence of RCTs that are statistically powered to detect moderate effects, evaluations of interventions for the treatment of diagnosed mental health conditions, and evaluations including outcomes relating to the acceptability of interventions.

We identified 35 non-randomised studies relevant to this topic (Appendix 3). Although these are not the most appropriate studies to draw conclusions on the effectiveness of interventions, they comprise a much wider range of study designs, settings, and interventions. Intervention settings not represented in RCTs included refugee shelters and camps, community centres, arrival centres for refugees and asylum seekers, universities, and the workplace. Interventions providing community and family support and multi-modal interventions were evaluated in non-randomised studies but not in the included RCTs.

### Quality of the evidence

Our confidence in the findings of this review was low for symptoms of PTSD and depression and for child behaviour at three months

post-treatment. Our confidence was very low for the other outcomes for which data were available: psychosocial distress and child behaviour post-treatment and five weeks post-treatment ([Summary of findings 1](#)).

Evidence was downgraded for risk of bias relating to outcome measurement, inconsistency (only one trial was available for each outcome), and imprecision.

Two included RCTs had fewer than 20 participants per study arm, limiting statistical power to show any differences between study arms ([Baker 2006](#); [Walg 2020](#)). On average, mean scores of participants did not indicate clinical levels of mental health-related symptoms. To demonstrate effectiveness of an intervention among participants with subclinical symptoms, who can be expected to make relatively small gains from an intervention in terms of symptom severity, greater sample sizes are needed.

### Potential biases in the review process

Even though we conducted extensive searches, our search of grey literature was limited and focussed on academic sources of evidence. We may have missed evaluations of mental health interventions published elsewhere.

We planned to synthesise evidence on adverse events such as counts of suicide, self-harm, or other adverse events as an indicator of intervention acceptability. However, no data were available from the included RCTs. It is likely that non-randomised studies would offer an insight into the acceptability of interventions, with a broader range of measures extending beyond counts of adverse events. Although not within the scope of our review, a future review in this field could focus on evidence for the acceptability of interventions in non-randomised studies.

One RCT published data for both children and adolescents. We did not manage to receive the children-only data in time, which means this evidence was not included in our review ([Pfeiffer 2018](#)).

We were unable to assess the risk of publication bias due to the limited number of RCTs included. It is possible that trials that showed no effect, or even a negative effect, have been conducted but not published.

### Agreements and disagreements with other studies or reviews

Results of this review are consistent with those of a Cochrane systematic overview aimed at mapping the characteristics and methodological quality of existing systematic reviews on mental health promotion, prevention, and treatment of common mental disorders among refugees, asylum seekers, and internally displaced people. The overview highlighted a research gap in mental health interventions especially for children ([Uphoff 2020](#)), confirmed by the low number of trials included in the present review.

In terms of efficacy, our review failed to identify a strong and clinically significant effect of community-based interventions in comparison with control conditions. These results are aligned with those of one Cochrane systematic review of psychological therapies in humanitarian settings in low- and middle-income countries ([Purgato 2018](#)). This review included both participants resettled or born in low- and middle-income countries, and found only a

small set of trials of very low quality on children and adolescents, with a non-significant trend in favour of CBT in lowering PTSD symptoms at endpoint and no data on major depression or anxiety ([Purgato 2018](#)). Similarly, the Cochrane Review published by Patel and colleagues, which was focused on torture survivors, did not identify substantial differences between psychological therapies and controls in terms of immediate effects on PTSD symptoms, distress, or quality of life ([Patel 2014](#)).

One systematic review on group-based interventions for refugee minors and young adults (aged 21 years or younger) identified a general positive effect of interventions for decreasing psychological symptoms. However, this review included only a few RCTs of low quality, and mixed qualitative and quantitative studies either in high-income countries and in low- and middle-income countries with small sample sizes (1119 participants) ([Hutchinson 2022](#)).

One review focused on the mental health of refugee children and adolescents resettled in high-income countries and published in 2018 found a small evidence base for interventions for refugee children, limiting the conclusions that could be drawn for preventive interventions, but also for specific treatments ([Fazel 2018b](#)). For example, interventions developed to specifically address the sequelae of exposure to potentially traumatic events – most commonly PTSD and depression – are delivered as individual intervention strategies to treat mental disorders, which for refugee children are beset with additional stressors such as poverty, transportation, linguistic and cultural barriers, and lack of parental support. For this reason, interventions including or accounting for the social determinants of mental health would be particularly important to address mental health problems within a socio-ecological lens ([Lund 2018](#); [Purgato 2017](#)).

## AUTHORS' CONCLUSIONS

### Implications for practice

Based on the limited evidence identified in this review, we are unable to recommend avenues for practice. Evidence from global mental health may offer insights into community-based mental health interventions that may be effective and acceptable. For example, interventions using transdiagnostic approaches and treatment and prevention provided by primary care workers seem promising in settings with limited resources ([van Ginneken 2021](#)). However, these populations are likely to differ in terms of mental health needs and settings differ in terms of existing healthcare structures and available resources.

It would be valuable for policy-makers and those implementing community-based interventions for the improvement of mental health in refugee children and adolescents in high-income countries to seek collaborations with academics to evaluate the interventions.

### Implications for research

There are important challenges in the conduct of randomised controlled trials (RCTs) to evaluate mental health interventions in this population. Refugee children and adolescents who have recently arrived in the host country, and are arguably most in need of mental health support, often live in temporary accommodation. They may not be able to take part in an intervention delivered in the host country language without help from an interpreter.

The therapeutic alliance can be difficult to establish (Demazure 2021). Children and adolescents who have had a perilous journey and witnessed traumatic events may be reluctant to take part in clinical trials and they can have a negative perception of mental health services and consider that this is not a priority (Demazure 2021). All of these factors complicate trial recruitment and follow-up. However, this systematic review has shown there is a pressing need for methodologically sound, statistically powered trials with relevant outcomes.

Non-randomised trials cannot unequivocally establish the effectiveness of mental health interventions. However, they could prove valuable in exploring the challenges relating to the uptake and acceptability of interventions in this population. Qualitative studies in particular may be able to inform the design and implementation of interventions, so that they are delivered in a way that is sensitive to the needs of child and adolescent refugees.

RCTs in this field of research can be improved by more careful trial design and more transparent reporting. For example, the main aim of the intervention, whether mental health promotion, prevention, or treatment, should be clear from the published manuscripts. The IASC pyramid approach we adopted for this review can be used to correctly describe the aim and target of interventions, so that results can be compared between studies (IASC 2007). Several authors of this review have sought to clarify the distinction between health promotion, prevention, and treatment in global mental health (Purgato 2020). Reporting, and therefore the applicability of results, could be improved further by clearly defining the study population. For example, we have found that the distinction between migrants and refugees is not always clear and the baseline severity of symptoms or existing diagnoses are often not reported.

The five ongoing RCTs included in this review and the one study awaiting classification have the potential to deliver important and high-quality evidence. Three of these trials will evaluate the Teaching Recovery Techniques intervention for symptoms of post-traumatic stress disorder (Durbeej 2021; Sarkadi 2020; Warner 2020). Hopefully an update of this systematic review will be able to include a meta-analysis of these trials.

## ACKNOWLEDGEMENTS

Cochrane Common Mental Disorders (CCMD) supported the authors in the development of this review. We are grateful to the CCMD editorial team for guidance provided during review production.

The following people conducted the editorial process for this article.

Sign-off Editor (final editorial decision): Nick Meader, University of Newcastle.

Managing Editor (selected peer reviewers, collated peer-reviewer comments, provided editorial guidance to authors, edited the article): Jessica Hendon, CCMD, Centre for Reviews and Dissemination, University of York.

Information Specialist (developed the search strategies, provided editorial guidance to authors, edited the article): Sarah Dawson, CCMD and University of Bristol.

Peer-reviewers (provided comments and recommended an editorial decision): Markus Kösters, Department of Psychiatry II, Ulm University (content review); Claire Allen, Operations Manager, Evidence Aid (consumer review); Kerry Dwan, Cochrane Central Methods Unit (methods review); Lindsay Robertson, CCMD, Centre for Reviews and Dissemination, University of York (methods review).

Copy Editor (copy-editing and production): Anne Lawson

The authors and the CCMD Editorial Team are grateful to the peer reviewers for their time and comments. They would also like to thank Cochrane Copy Edit Support for the team's help.

We thank those who translated studies for us:

1. Filip Lyng Lindgren, MD (Department of Cardiology, Aalborg University Hospital, Aalborg, Denmark);
2. Dr Connor TA Brenna (Department of Anesthesiology & Pain Medicine, University of Toronto, Toronto (ON), Canada);
3. Mohammed Altameemi, MD.

We also thank the authors of primary studies who responded to our requests for information about their studies.

Cochrane Review Group funding acknowledgement: the National Institute for Health Research (NIHR) is the largest single funder of the CCMD Group.

Disclaimer: the views and opinions expressed herein are those of the review authors and do not necessarily reflect those of the NIHR, the National Health Service, or the Department of Health and Social Care.

## REFERENCES

### References to studies included in this review

#### Akthar 2019 {published data only}

Akthar Z, Lovell A."Art therapy with refugee children: a qualitative study explored through the lens of art therapists and their experiences": correction. *International Journal of Art Therapy* 2019;**24**(4):202.

\* Akthar Z, Lovell A.Art therapy with refugee children: a qualitative study explored through the lens of art therapists and their experiences. *International Journal of Art Therapy* 2019;**24**(3):139-48.

#### Baker 2006 {published data only}

\* Baker F, Jones C.The effect of music therapy services on classroom behaviours of newly arrived refugee students in Australia – a pilot study. *Emotional and Behavioural Difficulties* 2006;**11**(4):249-60.

#### Barrett 2000 {published data only}

\* Barrett PM, Moore AF, Sonderegger R.The FRIENDS program for young former-Yugoslavian refugees in Australia: a pilot study. *Behaviour Change* 2000;**17**(3):124-33.

#### Birman 2008 {published data only}

\* Birman D, Beehler S, Harris EM, Everson ML, Batia K, Liautaud J, et al.International Family, Adult, and Child Enhancement Services (FACES): a community-based comprehensive services model for refugee children in resettlement. *American Journal of Orthopsychiatry* 2008;**78**(1):121-32.

#### Boose 2019 {published data only}

\* Boose AM.Exploratory study of a school-based refugee mental health project. *Dissertation Abstracts International Section A: Humanities and Social Sciences* 2019;**80**:7-A(E).

#### Bujorbarua 2021 {published data only}

\* Bujorbarua P.Expressions through movement and dance: exploring the mind-body connection and its implications on the well-being of young refugee children. *Dissertation Abstracts International Section A: Humanities and Social Sciences* 2021;**82**:2-A.

#### Crawford 2017 {published data only}

\* Crawford R.Creating unity through celebrating diversity: a case study that explores the impact of music education on refugee background students. *International Journal of Music Education* 2017;**35**(3):343-56.

#### Crawford 2020 {published data only}

\* Crawford R.Socially inclusive practices in the music classroom: the impact of music education used as a vehicle to engage refugee background students. *Research Studies in Music Education* 2020;**42**(2):248-69.

#### de Freitas 2020 {published data only}

\* de Freitas Girardi J, Miconi D, Lyke C, Rousseau C.Creative expression workshops as Psychological First Aid (PFA) for

asylum-seeking children: an exploratory study in temporary shelters in Montreal. *Clinical Child Psychology and Psychiatry* 2020;**25**(2):483-93.

#### Demott 2017 {published data only}

\* Demott MA, Jakobsen M, Wentzel-Larsen T, Heir T.A controlled early group intervention study for unaccompanied minors: can expressive arts alleviate symptoms of trauma and enhance life satisfaction? *Scandinavian Journal of Psychology* 2017;**58**(6):510-8.

#### Dura-Vila 2013 {published data only}

\* Dura-Vila G, Klasen H, Makatini Z, Rahimi Z, Hodes M.Mental health problems of young refugees: duration of settlement, risk factors and community-based interventions. *Clinical Child Psychology and Psychiatry* 2013;**18**(4):604-23.

#### Ehnholt 2005 {published data only}

\* Ehnholt KA, Smith P, Yule W.School-based CBT group intervention for refugee children who have experienced war-related trauma. In: 31st Annual Conference of the British Association for Behavioural and Cognitive Psychotherapies; 2003 Jul 16–19; York (UK). 2003.

Ehnholt KA, Smith PA, Yule W.School-based cognitive-behavioural therapy group intervention for refugee children who have experienced war-related trauma. *Clinical Child Psychology and Psychiatry* 2005;**10**(2):235-50.

#### Ellis 2013 {published data only}

\* Ellis BH, Miller AB, Abdi S, Barrett C, Blood EA, Betancourt TS.Multi-tier mental health program for refugee youth. *Journal of Consulting and Clinical Psychology* 2013;**81**(1):129-40.

#### Fazel 2009 {published data only}

\* Fazel M, Doll H, Stein A.A school-based mental health intervention for refugee children: an exploratory study. *Clinical Child Psychology and Psychiatry* 2009;**14**(2):297-309.

#### Foka 2021 {published data only}

\* Foka S, Hadfield K, Pluess M, Mareschal I.Promoting well-being in refugee children: an exploratory controlled trial of a positive psychology intervention delivered in Greek refugee camps. *Development and Psychopathology* 2021;**33**(1):87-95.

#### Fox 2005 {published data only}

\* Fox PG, Rossetti J, Burns KR, Popovich J.Southeast Asian refugee children: a school-based mental health intervention. *International Journal of Psychiatric Nursing Research* 2005;**11**(1):1227-36.

#### Garoff 2019 {published data only}

\* Garoff F, Kangaslampi S, Peltonen K.Development and implementation of a group based mental health intervention for unaccompanied minors. *Scandinavian Journal of Psychology* 2019;**60**(1):7-15.

**Grasser 2019** {published data only}

\* Grasser LR, Al-Saghir H, Wanna C, Spinei J, Javanbakht A. Moving through the trauma: dance/movement therapy as a somatic-based intervention for addressing trauma and stress among Syrian refugee children. *Journal of the American Academy of Child & Adolescent Psychiatry* 2019;**58**(11):1124-6.

**Hurn 2018** {published data only}

\* Hurn R, Barron I. The EMDR integrative group treatment protocol in a psychosocial program for refugee children: a qualitative pilot study. *Journal of EMDR Practice and Research* 2018;**12**(4):208-23.

**Jackson 2006** {published data only}

\* Jackson D. Playgroups as protective environments for refugee children at risk of trauma. *Australian Journal of Early Childhood* 2006;**31**(2):1-6.

**Kowitt 2016** {published data only}

\* Kowitt SD, Emmerling D, Gavarkavich D, Mershon C-H, Linton K, Rubesin H, et al. A pilot evaluation of an art therapy program for refugee youth from Burma. *Art Therapy* 2016;**33**(1):13-20.

**Lampa 2021** {published data only}

\* Lampa E, Sarkadi A, Warner G. Implementation and maintenance of a community-based intervention for refugee youth reporting symptoms of post-traumatic stress: lessons from successful sites. *International Journal of Environmental Research and Public Health* 2021;**18**(1):1-13.

**Millar 2019** {published data only}

\* Millar O, Warwick I. Music and refugees' wellbeing in contexts of protracted displacement. *Health Education Journal* 2019;**78**(1):67-80.

**Mohlen 2005** {published data only}

Mohlen H, Parzer P, Resch F, Brunner R. Psychosocial support for war-traumatized child and adolescent refugees: evaluation of a short-term treatment program. *Australian and New Zealand Journal of Psychiatry* 2005;**39**(1-2):81-7.

**Mom 2019** {published data only}

\* Mom S, Coello M, Pittaway E, Downham R, Aroche J. Capoeira Angola: an alternative intervention program for traumatized adolescent refugees from war-torn countries. *Torture* 2019;**29**(1):85-96.

**Momartin 2018** {published data only}

\* Momartin S, Edielson da Silva M, Aroche J, Coello M. Resilience building through alternative intervention: 'STARTTS "Project Bantu Capoeira Angola"'; on the road to recovery. *Intervention* 2018;**16**(2):154-60.

**O'Shea 2000** {published data only}

O'Shea B, Hodes M, Down G, Bramley J. A school-based mental health service for refugee children. *Clinical Child Psychology and Psychiatry* 2000;**5**(2):189-201.

**Ooi 2016** {published data only}

Ooi C. The efficacy and social validity of a group cognitive behavioural therapy for young migrants from war-affected countries [A pretest posttest 3-month follow-up randomised controlled trial of a group intervention "Teaching Recovery Techniques" to prevent worsening of early posttraumatic stress symptoms in young migrants]. anzctr.org.au/Trial/Registration/TrialReview.aspx?ACTRN=12611000948998 (first received 29 August 2011).

\* Ooi CS, Rooney RM, Roberts C, Kane RT, Wright B, Chatzisarantis N. The efficacy of a group Cognitive Behavioral Therapy for war-affected young migrants living in Australia: a cluster randomized controlled trial. *Frontiers of Psychology* 2016;**7**:1641.

Ooi CS. The efficacy and social validity of a group cognitive behavioural therapy for young migrants from war-affected countries, 2011. core.ac.uk/download/pdf/195631442.pdf (accessed May 6 May 2022).

**Pfeiffer 2017** {published data only}

\* Pfeiffer E, Goldbeck L. Evaluation of a trauma-focused group intervention for unaccompanied young refugees: a pilot study. *Journal of Traumatic Stress* 2017;**30**(5):531-6.

**Quinlan 2016** {published data only}

\* Quinlan R, Schweitzer RD, Khawaja N, Griffin J. Evaluation of a school-based creative arts therapy program for adolescents from refugee backgrounds. *Arts in Psychotherapy* 2016;**47**:72-8.

**Rowe 2017** {published data only}

\* Rowe C, Watson-Ormond R, English L, Rubesin H, Marshall A, Linton K, et al. Evaluating art therapy to heal the effects of trauma among refugee youth: the Burma art therapy program evaluation. *Health Promotion Practice* 2017;**18**(1):26-33.

**Samec 2006** {published data only}

\* Samec JR, Ekstrom B-M. Short term group therapy for traumatized refugee children [Korttids gruppterapi anpassad att mota utvecklingsspecifika behov hos traumatiserade flyktingungdomar]. *Matrix* 2006;**23**(1):73-88.

**Sarkadi 2018** {published data only}

\* Sarkadi A, Adahl K, Stenvall E, Ssegonja R, Batti H, Gavra P, et al. Teaching Recovery Techniques: evaluation of a group intervention for unaccompanied refugee minors with symptoms of PTSD in Sweden. *European Child and Adolescent Psychiatry* 2018;**27**(4):467-79.

**Scheiber 2019** {published data only}

\* Scheiber B, Greinz G, Hillebrand JB, Wilhelm FH, Bleichert J. Resilience training for unaccompanied refugee minors: a randomized controlled pilot study [Resilienztraining für Unbegleitete Minderjährige Flüchtlinge: Eine Randomisierte Kontrollierte Pilotstudie]. *Kindheit und Entwicklung* 2019;**28**(3):173-81.

**Stæhr 2001** {published data only}

\* Stæhr Mia Antoni. Psychoeducation with Kosovo Albanian refugee children [Psykoedukation med Kosovo Albanske

flygtningeborn: En effektundersogelse af et program til forebyggelse af alvorlige psykiske belastningsreaktioner]. *Psyke & Logos* 2001;**22**(1):127-46.

**Unterhitzberger 2016** {published data only}

\* Unterhitzberger J, Rosner R. Case report: manualized trauma-focused cognitive behavioral therapy with an unaccompanied refugee minor girl. *European Journal of Psychotraumatology* 2016;**7**:29246.

**Unterhitzberger 2019** {published data only}

\* Unterhitzberger J, Wintersohl S, Lang M, Konig J, Rosner R. Providing manualized individual trauma-focused CBT to unaccompanied refugee minors with uncertain residence status: a pilot study. *Child and Adolescent Psychiatry and Mental Health* 2019;**13**(1):22.

**Walg 2020** {published data only}

\* Walg M, Angern JS, Michalak J, Hapfelmeier G. Effectiveness of stabilization training for adolescent refugees with trauma-induced disorders: a randomized controlled trial. *Zeitschrift fur Kinder- und Jugendpsychiatrie und Psychotherapie* 2020;**48**(5):369-79.

**References to studies excluded from this review**

**Betancourt 2020** {published data only}

Betancourt T. Addressing mental health disparities in refugee children: a Community-based Participatory Research (CBPR) collaboration. [clinicaltrials.gov/ct2/show/NCT02562794](https://clinicaltrials.gov/ct2/show/NCT02562794) (first received 29 September 2015).

\* Betancourt TS, Berent JM, Freeman J, Frounfelker RL, Brennan RT, Abdi S, et al. Family-based mental health promotion for Somali Bantu and Bhutanese refugees: feasibility and acceptability trial. *Journal of Adolescent Health* 2020;**66**(3):336-44.

**Bohnacker 2017** {published data only}

\* Bohnacker I, Goldbeck L. Family-based trauma-focused cognitive behavioral therapy with three siblings of a refugee family [Familienorientierte Traumafokussierte Verhaltenstherapie mit drei Geschwisterkindern einer Fluchtlingsfamilie]. *Praxis der Kinderpsychologie und Kinderpsychiatrie* 2017;**66**(8):614-28.

**Brar-Josan 2019** {published data only}

\* Brar-Josan N, Yohani SC. Cultural brokers' role in facilitating informal and formal mental health supports for refugee youth in school and community context: a Canadian case study. *British Journal of Guidance & Counselling* 2019;**47**(4):512-23.

**Brückner 2020** {unpublished data only}

\* Brückner B. A randomized, waiting list controlled, multi-center study to evaluate START (Stress-Trauma Symptoms-Arousal-Regulation-Treatment) training for young refugees with traumatic stress related disorders. [trialssearch.who.int/Trial2.aspx?TrialID=DRKS00020771](https://trialssearch.who.int/Trial2.aspx?TrialID=DRKS00020771) (first received 21 April 2020).

**Cumming 2009** {published data only}

\* Cumming S, Visser J. Using art with vulnerable children. *Support for Learning* 2009;**24**(4):151-8.

**Dhillon 2020** {published data only}

\* Dhillon KK, Centeio EE, Dillon S. Drumming and dancing: creative movement for convention refugee youth in a physical activity space. *Sport, Education and Society* 2020;**25**(3):318-31.

**Dixius 2017** {published data only}

\* Dixius A, Mohler E. A new therapy concept validating the special needs of refugee children and adolescents: START [Ein neues Therapie-Konzept validiert die besonderen Bedürfnisse geflüchteter Kinder und Jugendlicher: START]. *Psychotherapie Forum* 2017;**22**(3):76-85.

**Feen-Calligan 2020** {published data only}

\* Feen-Calligan H, Ruvolo Grasser L, Debryn J, Nasser S, Jackson C, Seguin D, et al. Art therapy with Syrian refugee youth in the United States: an intervention study. *Arts in Psychotherapy* 2020;**69**:101665.

**Harris 2009** {unpublished data only}

\* Harris EM. Outreach as a component of mental health services for refugee children. *Dissertation Abstracts International: Section B: The Sciences and Engineering* 2009;**69** (9-B):5779.

**Marsh 2012** {published data only}

\* Marsh K. "The beat will make you be courage": the role of a secondary school music program in supporting young refugees and newly arrived immigrants in Australia. *Research Studies in Music Education* 2012;**34**(2):93-111.

**Mattenschlager 2016** {published data only}

\* Mattenschlager A, Nahler S, Reisinger R. Unseen suffering – therapy for traumatized refugee children [Unsichtbares Leiden – Therapie Traumatisierter Kinder mit Fluchterfahrung]. *Praxis der Kinderpsychologie und Kinderpsychiatrie* 2016;**65**(10):781-801.

**Mooren 2011** {published data only}

\* Mooren T. Parents and children together: multifamily therapy for refugees with complex trauma symptoms. *Psychologie & Gesundheit* 2011;**39**(3):169-74.

**Naidoo 2009** {published data only}

\* Naidoo L. A structuration theory analysis of the refugee action support program in Greater Western Sydney. *Australian Journal of Teacher Education* 2009;**34**(4):40-50.

**Neuner 2019** {unpublished data only}

\* Neuner F. The efficacy of Narrative Exposure Therapy for children (KIDNET) as a treatment for traumatized young refugees versus treatment as usual: a multi-center randomized controlled trial. [trialssearch.who.int/?TrialID=DRKS00017222](https://trialssearch.who.int/?TrialID=DRKS00017222) (first received 15 May 2019).

**Neurohr 2019** {published data only}

\* Neurohr S, Willner H. Chances of psychotherapeutic interventions and stabilization with unaccompanied minor refugees during clearing procedure and during the transition

phase to youth welfare. *Praxis der Kinderpsychologie und Kinderpsychiatrie* 2019;**68**(6):475-87.

**Peltonen 2015** {unpublished data only}

\* Peltonen K. Effectiveness of narrative exposure therapy among refugee children and adolescents. [clinicaltrials.gov/ct2/show/NCT02425280](https://clinicaltrials.gov/ct2/show/NCT02425280) (first received 23 April 2015).

**Rosso 2016** {published data only}

\* Rosso E, McGrath R. Promoting physical activity among children and youth in disadvantaged South Australian CALD communities through alternative community sport opportunities. *Health Promotion Journal of Australia* 2016;**27**(2):105-10.

**Rousseau 2006** {published data only}

\* Rousseau C, Gauthier MF, Benoit M, Lacroix L, Moran A, Viger Rojas M, et al. Playing with identities, transforming shared realities: school theatre workshop for immigrant and refugee adolescents. *Sante Mentale au Quebec* 2006;**31**(2):135-52.

**Ruf 2006** {published data only}

\* Ruf M, Schauer M, Neuner F, Catani C, Elbert T. Traumatized refugee children in Germany – prevalence and treatment. *World Psychiatry Association* 2006;**146**:-.

**Ruf 2010** {published data only}

\* Ruf M, Schauer M, Neuner F, Catani C, Schauer E, Elbert T. Narrative exposure therapy for 7- to 16-year-olds: a randomized controlled trial with traumatized refugee children. *Journal of Traumatic Stress* 2010;**23**(4):437-45.

Ruf M. The effectiveness of KIDNET in treating traumatized refugee children in Germany. [clinicaltrials.gov/show/NCT00559000](https://clinicaltrials.gov/show/NCT00559000) (first received 16 November 2007).

**Sonn 2013** {published data only}

\* Sonn CC, Grossman M, Utorno A. Reflections on a participatory research project: young people of refugee background in an arts-based program. *Journal for Social Action in Counseling and Psychology* 2013;**5**(3):95-110.

**Ugurlu 2016** {published data only}

\* Ugurlu N, Akca L, Acarturk C. An art therapy intervention for symptoms of post-traumatic stress, depression and anxiety among Syrian refugee children. *Vulnerable Children and Youth Studies* 2016;**11**(2):89-102.

**Unterhitzberger 2015** {published data only}

\* Unterhitzberger J, Eberle-Sejari R, Rassenhofer M, Sukale T, Rosner R, Goldbeck L. Trauma-focused cognitive behavioral therapy with unaccompanied refugee minors: a case series. *BMC Psychiatry* 2015;**15**:260.

**Weekes 2011** {published data only}

\* Weekes T, Phelan L, Macfarlane S, Pinson J, Francis V. Supporting successful learning for refugee students: the classroom connect project. *Issues in Educational Research* 2011;**21**(3):310-29.

## References to studies awaiting assessment

**Pfeiffer 2018** {published data only (unpublished sought but not used)}

\* Pfeiffer E, Sachser C, Goldbeck L, Rohlmann F. Effectiveness of a trauma-focused group intervention for young refugees: a randomized controlled trial. *Journal of Child Psychology & Psychiatry* 2018;**59**(11):1171-9.

Pfeiffer E, Sachser C, Tutus D, Fegert JM, Plener PL. Trauma-focused group intervention for unaccompanied young refugees: "mein Weg" – predictors of treatment outcomes and sustainability of treatment effects. *Child and Adolescent Psychiatry and Mental Health* 2019;**13**:18.

Sukale T, Rassenhofer M, Kirsch V, Pfeiffer E. Low-threshold trauma-focused group intervention for traumatised adolescents with a migration background: the influence of non-suicidal self-injurious behaviour and suicidality. *Zeitschrift fur Psychiatrie, Psychologie und Psychotherapie* 2020;**68**(1):52-63.

## References to ongoing studies

**Durbeej 2021** {unpublished data only}

\* Durbeej N, McDiarmid S, Sarkadi A, Feldman I, Punamaki RL, Kankaanpaa R, et al. Evaluation of a school-based intervention to promote mental health of refugee youth in Sweden (The RefugeesWellSchool Trial): study protocol for a cluster randomized controlled trial. *Trials* 2021;**22**(1):98.

**Rosner 2020** {unpublished data only}

\* Rosner R, Sachser C, Hornfeck F, Kilian R, Kindler H, Mueche R, et al. Improving mental health care for unaccompanied young refugees through a stepped-care approach versus usual care +: study protocol of a cluster randomized controlled hybrid effectiveness implementation trial. *Trials* 2020;**21**(1):1013.

**Sarkadi 2020** {published data only}

\* Sarkadi A, Warner G, Salari R, Fångström K, Durbeej N, Lampa E, et al. Evaluation of the Teaching Recovery Techniques community-based intervention for unaccompanied refugee youth experiencing post-traumatic stress symptoms (Swedish Unaccompanied Youth Refugee Trial; SUPpORT): study protocol for a randomised controlled trial. *Trials* 2020;**21**(1):63.

**Stiles 2019** {unpublished data only}

\* Stiles DA, Alaraudanjoki E, Wilkinson LR, Ritchie KL, Brown KA. Researching the effectiveness of Tree of Life: an Imbeleko approach to counseling refugee youth. *Journal of Child and Adolescent Trauma* 2019;**14**:123-39.

**Warner 2020** {published data only}

\* Warner G, Durbeej N, Salari R, Fångström K, Lampa E, Beaghdasaryan Z, et al. Evaluation of the teaching recovery techniques community-based intervention for accompanied refugee children experiencing post-traumatic stress symptoms (Accompanied refugeeS In Sweden Trial; ASSIST): study protocol for a cluster randomised controlled trial. *BMJ Open* 2020;**10**(7):e035459.



## Additional references

### Abdi 2018

Abdi SM. Mental health of migrant children. In: Oxford Research Encyclopedia of Global Public Health. Oxford (UK): Oxford University Press, 2018.

### Abubakar 2018

Abubakar I, Aldridge RW, Devakumar D, Orcutt M, Burns R, Barreto ML, et al. The UCL-Lancet commission on migration and health: the health of a world on the move. *Lancet* 2018;**392**(10164):2606-54.

### Achenbach 1983

Achenbach TM, Edelbrock CS. Manual for the Child Behavior Checklist. Burlington (VT): University of Vermont, Department of Psychiatry, 1983.

### Barghadouch 2018

Barghadouch A, Carlsson J, Norredam M. Psychiatric disorders and predictors hereof among refugee children in early adulthood: a register-based cohort study. *Journal of Nervous and Mental Disease* 2018;**206**(1):3-10.

### Beck 1979

Beck AT, Rush AJ, Shaw BF, Emery G. Cognitive Therapy for Depression. New York (NY): Guilford Press, 1979.

### Bogic 2015

Bogic M, Njoku A, Priebe S. Long-term mental health of war-refugees: a systematic literature review. *BMC International Health and Human Rights* 2015;**15**:29.

### Bronfenbrenner 1979

Bronfenbrenner U. The Ecology of Human Development. Cambridge (MA): Harvard University Press, 1979.

### Close 2016

Close C, Kouvonen A, Bosqui T, Patel K, O'Reilly D, Donnelly M. The mental health and well being of first generation migrants: a systematic-narrative review of reviews. *Globalization and Health* 2016;**12**(1):47.

### Cohen 1988

Cohen J. Statistical Power Analysis in the Behavioral Sciences. 2nd edition. Hillsdale (NJ): Lawrence Erlbaum Associates, Inc, 1988.

### Cohen 2000

Cohen JA, Berliner L, March JS. Treatment of children and adolescents. In: Effective Treatments for PTSD: Practice Guidelines from the International Society for Traumatic Stress Studies. New York: Guilford Press, 2000:106-38.

### Davidson 2004

Davidson N, Skull S, Burgner D, Kelly P, Raman S, Silove D, et al. An issue of access: delivering equitable health care for newly arrived refugee children in Australia. *Journal of Paediatrics and Child Health* 2004;**40**(9-10):569-75.

### Demazure 2021

Demazure G, Baeyens C, Pinsault N. Review: Unaccompanied refugee minors' perception of mental health services and professionals: a systematic review of qualitative studies [2021]. *Child and Adolescent Mental Health* 2021 Jun 15 [Epub ahead of print]. [DOI: [doi.org/10.1111/camh.12486](https://doi.org/10.1111/camh.12486)]

### Ellis 2008

Ellis HB, MacDonald HZ, Lincoln AK, Cabral HJ. Mental health of Somali adolescent refugees: the role of trauma, stress, and perceived discrimination. *Journal of Consulting and Clinical Psychology* 2008;**76**(2):184-93.

### Fazel 2005

Fazel M, Wheeler J, Danesh J. Prevalence of serious mental disorder in 7000 refugees resettled in western countries: a systematic review. *Lancet* 2005;**365**(9467):1309-47.

### Fazel 2012

Fazel M, Reed RV, Panter-Brick C, Stein A. Mental health of displaced and refugee children resettled in high-income countries: risk and protective factors. *Lancet* 2012;**379**(9812):266-82.

### Fazel 2015

Fazel M, Reed R, Stein A. Refugee, asylum-seeking and internally displaced children and adolescents. *Rutter's Child and Adolescent Psychiatry* 2015;**17**:573-85.

### Fazel 2018a

Fazel M. Psychological and psychosocial interventions for refugee children resettled in high-income countries. *Epidemiology and Psychiatric Sciences* 2018;**27**:117-23.

### Fazel 2018b

Fazel M, Betancourt TS. Preventive mental health interventions for refugee children and adolescents in high-income settings. *Lancet Child and Adolescent Health* 2018;**2**:121-32.

### Higgins 2002

Higgins JP, Thompson SG. Quantifying heterogeneity in a meta-analysis. *Statistics in Medicine* 2002;**21**(11):1539-58.

### Higgins 2019

Higgins JP, Thomas J, Chandler J, Cumpston M, Li T, Page MJ, et al, editor(s). Cochrane Handbook for Systematic Reviews of Interventions Version 6.0 (updated July 2019). Cochrane, 2019. Available from [training.cochrane.org/handbook/archive/v6](https://training.cochrane.org/handbook/archive/v6).

### Hutchinson 2022

Hutchinson R, King N, Majumder P. How effective is group intervention in the treatment for unaccompanied and accompanied refugee minors with mental health difficulties: a systematic review. *International Journal of Social Psychiatry* 2022;**68**(3):484-99.

### IASC 2007

Inter-Agency Standing Committee (IASC). IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings. Geneva (Switzerland): IASC, 2007.

**Iasiello 2020**

Iasiello M, van Agteren J, Cochrane EM. Mental health and/or mental illness: a scoping review of the evidence and implications of the dual-continua model of mental health. *Evidence Base* 2020;**1**:1-45.

**Im 2018**

Im H. Constructing health capital in ecological systems: a qualitative evaluation of community-based health workshops in the refugee community. *Health & Social Care in the Community* 2018;**26**(4):e541-51.

**Jakobsen 2014**

Jakobsen M, Demott MA, Heir T. Prevalence of psychiatric disorders among unaccompanied asylum-seeking adolescents in Norway. *Clinical Practice and Epidemiology in Mental Health* 2014;**10**:53-8.

**James 2015**

James AC, James G, Cowdrey FA, Soler A, Choke A. Cognitive behavioural therapy for anxiety disorders in children and adolescents. *Cochrane Database of Systematic Reviews* 2015, Issue 2. Art. No: CD004690. [DOI: [10.1002/14651858.CD004690.pub4](https://doi.org/10.1002/14651858.CD004690.pub4)]

**Jordans 2008**

Jordans MJ, Komproe IH, Ventevogel P, Tol WA, de Jong JT. Development and validation of the Child Psychosocial Distress Screener in Burundi. *American Journal of Orthopsychiatry* 2008;**78**(3):290-9.

**Kessler 2005**

Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national comorbidity survey replication. *Archives of General Psychiatry* 2005;**62**(6):593-602.

**Kovacks 1989**

Kovacs M, Gatsonis C, Paulauskas S, Richards C. Depressive disorders in childhood. IV. A longitudinal study of comorbidity with and the risk for anxiety disorders. *Archives of General Psychiatry* 1989;**46**:776-82.

**Lund 2018**

Lund C, Brooke-Sumner C, Baingana F, Baron EC, Breuer E, Chandra P, et al. Social determinants of mental disorders and the Sustainable Development Goals: a systematic review of reviews. *Lancet Psychiatry* 2018;**5**(4):357-69.

**McLeroy 2003**

McLeroy KR, Norton BL, Kegler MC, Burdine JN, Sumaya CV. Community-based interventions. *American Journal of Public Health* 2003;**93**(4):529-33.

**Miliband 2018**

Miliband D, Tessema MT. The unmet needs of refugees and internally displaced people. *Lancet* 2018;**392**(10164):2530-2.

**Morgan 2018**

Morgan AJ, Ross A, Reavley NJ. Systematic review and meta-analysis of Mental Health First Aid training: effects

on knowledge, stigma, and helping behaviour. *PLoS One* 2018;**13**(5):e0197102.

**Patel 2014**

Patel N, Kellezi B, Williams AC. Psychological, social and welfare interventions for psychological health and well-being of torture survivors. *Cochrane Database of Systematic Reviews* 2014, Issue 11. Art. No: CD009317. [DOI: [10.1002/14651858.CD009317.pub2](https://doi.org/10.1002/14651858.CD009317.pub2)]

**Patel 2018**

Patel V, Saxena S, Lund C, Thornicroft G, Baingana F, Bolton PA, et al. The Lancet commission on global mental health and sustainable development. *Lancet* 2018;**392**(10157):1553-98. [DOI: [10.1016/S0140-6736\(18\)31612-X](https://doi.org/10.1016/S0140-6736(18)31612-X)]

**Purgato 2017**

Purgato M, Tol WA, Bass JK. An ecological model for refugee mental health: implications for research. *Epidemiology and Psychiatric Sciences* 2017;**26**(2):139-41.

**Purgato 2018**

Purgato M, Gastaldon C, Papola D, van Ommeren M, Barbui C, Tol WA. Psychological therapies for the treatment of mental disorders in low- and middle-income countries affected by humanitarian crises. *Cochrane Database of Systematic Reviews* 2018, Issue 7. Art. No: CD011849. [DOI: [10.1002/14651858.CD011849.pub2](https://doi.org/10.1002/14651858.CD011849.pub2)]

**Purgato 2020**

Purgato M, Uphoff E, Singh R, Pachya AT, Abdulmalik J, van Ginneken N. Promotion, prevention and treatment interventions for mental health in low- and middle-income countries through a task-shifting approach. *Epidemiology and Psychiatric Sciences* 2020;**29**:E150.

**Reavell 2017**

Reavell J, Fazil Q. The epidemiology of PTSD and depression in refugee minors who have resettled in developed countries. *Journal of Mental Health* 2017;**26**(1):74-83.

**Review Manager Web 2020 [Computer program]**

The Nordic Cochrane Centre, The Cochrane Collaboration Review Manager Web (RevMan Web). Version 5.4. Copenhagen: The Nordic Cochrane Centre, The Cochrane Collaboration, 2020.

**Saigh 2000**

Saigh PA, Yasik AE, Oberfield RA, Green BL, Halamandaris PV, Rubenstein H, et al. The Children's PTSD Inventory: development and reliability. *Journal of Traumatic Stress* 2000;**13**(3):369-80.

**Sekhon 2017**

Sekhon M, Cartwright M, Francis JJ. Acceptability of healthcare interventions: an overview of reviews and development of a theoretical framework. *BMC Health Services Research* 2017;**17**:88.

**Shackleton 2016**

Shackleton N, Hale D, Bonell C, Viner RM. Intra-class correlation values for adolescent health outcomes in secondary schools in 21 European countries. *SSM Population Health* 2016;**2**:217-25.

**Shaffer 1983**

Shaffer D, Gould MS, Brasic J, Ambrosini P, Fisher P, Bird H, et al. A Children's Global Assessment Scale (CGAS). *Archives of General Psychiatry* 1983;**40**(11):1228-31.

**Spielberger 1973**

Spielberger CD. Manual for the State-Trait Anxiety Inventory for Children. Palo Alto (CA): Consulting Psychologists Press, 1973.

**Steel 2009**

Steel Z, Chey T, Silove D, Marnane C, Bryant RA, van Ommeren M. Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: a systematic review and meta-analysis. *JAMA* 2009;**302**(5):537-49.

**Sterne 2019**

Sterne JA, Savović J, Page MJ, Elbers RG, Blencowe NS, Boutron I, et al. RoB 2: a revised tool for assessing risk of bias in randomised trials. *BMJ* 2019;**366**:l4898.

**Tyrer 2014**

Tyrer RA, Fazel M. School and community-based interventions for refugee and asylum seeking children: a systematic review. *PLoS One* 2014;**9**(2):e89359.

**UN General Assembly 1951**

UN General Assembly. Convention relating to the status of refugees. United Nations, Treaty Series 1951;**189**:137.

**UNHCR 2011**

United Nations High Commissioner for Refugees (UNHCR). UNHCR resettlement handbook and country chapters. [www.unhcr.org/uk/protection/resettlement/4a2ccf4c6/unhcr-resettlement-handbook-country-chapters.html](http://www.unhcr.org/uk/protection/resettlement/4a2ccf4c6/unhcr-resettlement-handbook-country-chapters.html) (accessed 5 May 2020).

**UNHCR 2017**

UNHCR: the UN Refugee Agency. UNHCR global trends-forced displacement in 2017. [www.unhcr.org/statistics/unhcrstats/5b27be547/unhcr-global-trends-2017.html](http://www.unhcr.org/statistics/unhcrstats/5b27be547/unhcr-global-trends-2017.html) (accessed 7 May 2020).

**UNICEF 2016**

United Nations International Children's Emergency Fund (UNICEF). Uprooted: the growing crisis for refugee and migrant children. New York (NY): UNICEF, 2016.

**Uphoff 2020**

Uphoff E, Robertson L, Cabieses B, Villalón FJ, Purgato M, Churchill R, et al. An overview of systematic reviews on mental health promotion, prevention, and treatment of common mental disorders for refugees, asylum seekers, and internally displaced persons. *Cochrane Database of Systematic Reviews* 2020, Issue 9. Art. No: CD013458. [DOI: [10.1002/14651858.CD013458.pub2](https://doi.org/10.1002/14651858.CD013458.pub2)]

**USA for UNHCR 2018**

USA for UNHCR: the UN Refugee Agency. What is a refugee? Definition and meaning. [www.unrefugees.org/refugee-facts/what-is-a-refugee/](http://www.unrefugees.org/refugee-facts/what-is-a-refugee/) (accessed 7 May 2020).

**van Ginneken 2021**

van Ginneken N, Chin WY, Lim YC, Ussif A, Singh R, Shahmalak U, et al. Primary-level worker interventions for the care of people living with mental disorders and distress in low- and middle-income countries. *Cochrane Database of Systematic Reviews* 2021, Issue 8. Art. No: CD009149. [DOI: [10.1002/14651858.CD009149.pub3](https://doi.org/10.1002/14651858.CD009149.pub3)]

**Varni 2001**

Varni JW, Seid M, Kurtin PS. PedsQL™ 4.0: reliability and validity of the Pediatric Quality of Life Inventory™ version 4.0. Generic core scales in healthy and patient populations. *Medical Care* 2001;**39**(8):800-12.

**Vostanis 2016**

Vostanis P. New approaches to interventions for refugee children. *World Psychiatry* 2016;**15**(1):75-7.

**Walsh 2015**

Walsh K, Zwi K, Woolfenden S, Shlonsky A. School-based education programmes for the prevention of child sexual abuse. *Cochrane Database of Systematic Reviews* 2015, Issue 4. Art. No: CD004380. [DOI: [10.1002/14651858.CD004380.pub3](https://doi.org/10.1002/14651858.CD004380.pub3)]

**WHO 2016**

World Health Organization. mhGAP Intervention Guide for Mental, Neurological and Substance Use Disorders in Non-specialized Health Settings. Geneva (Switzerland): Department of Mental Health and Substance Abuse, WHO, 2016.

**WHO 2018**

World Health Organization. Mental health: strengthening our response. [www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response](http://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response) (accessed 5 May 2020).

**Ziaian 2012**

Ziaian T, De Anstiss H, Antoniou G, Sawyer M, Baghurst P. Depressive symptomatology and service utilisation among refugee children and adolescents living in south Australia. *Child and Adolescent Mental Health* 2012;**17**(3):146-52.

**References to other published versions of this review**
**Soltan 2020**

Soltan F, Uphoff E, Newson R, Purgato M, Taddese H, Barbui C, et al. Community-based interventions for improving mental health in refugee children and adolescents in high-income countries. *Cochrane Database of Systematic Reviews* 2020, Issue 6. Art. No: CD013657. [DOI: [10.1002/14651858.CD013657](https://doi.org/10.1002/14651858.CD013657)]

\* Indicates the major publication for the study

## CHARACTERISTICS OF STUDIES

### Characteristics of included studies [ordered by study ID]

#### Akthar 2019

##### Study characteristics

Methods	<p><b>Design:</b> qualitative study</p> <p><b>Locations of study centres:</b> telephone/workplace</p> <p><b>Methods of qualitative study:</b> research approach selected phenomenology; semi-structured interview design. Thematic analysis applied to the data.</p> <p><b>Number of study centres:</b> NA</p>
Participants	<p><b>Inclusion criteria:</b> art therapists who currently work with or have worked with refugee children.</p> <p><b>Exclusion criteria:</b> –</p> <p><b>Number of participants:</b> 3</p> <p><b>Age (mean):</b> –</p> <p><b>Age (range):</b> –</p> <p><b>Sex:</b> –</p> <p><b>Country of origin:</b> Zimbabwe, Afghanistan, Sri Lanka, Kosovo, Pakistan, Iraq, Democratic Republic of Congo</p> <p><b>Country of settlement:</b> UK</p> <p><b>Refugee status:</b> asylum seekers and internally displaced refugees</p> <p><b>Severity of condition:</b> –</p> <p><b>Number of dropouts for any reason:</b> –</p>
Interventions	<p>Community-based intervention</p> <p><b>Name:</b> art therapy</p> <p><b>Type:</b> specialised services</p> <p><b>Description:</b> 2 key aspects of art therapy were established, these were identified as: providing refugee children with a safe space to heal and discover new-self, and giving refugee children a voice to express and share stories.</p> <p><b>Setting:</b> not reported</p> <p><b>Format:</b> group</p> <p><b>Number of sessions:</b> not reported</p> <p><b>Duration of 1 session:</b> not reported</p> <p><b>Target:</b> prevention or treatment</p>
Outcomes	
Notes	<p><b>Sponsorship source:</b> NR</p> <p><b>Comments:</b> study of art therapy through interviews with therapists.</p>

**Akthar 2019** (Continued)

**Author's name:** Zahra Akthar  
**Institution:** University of Chester  
**Email:** zahraakthar@outlook.com  
**Address:** University of Chester, Chester, UK

**Baker 2006**
**Study characteristics**

Methods	<p><b>Design:</b> randomised controlled trial</p> <p><b>Group:</b> cross-over</p>
Participants	<p><b>Inclusion criteria:</b> refugee status, and expected to remain enrolled in the school for another <math>\geq 2</math> school terms</p> <p><b>Exclusion criteria:</b> –</p> <p><b>Group differences:</b> no notable differences between groups.</p> <p><b>Number of participants:</b> 31</p> <p><b>Age:</b> 13.93 years</p> <p><b>Sex:</b> 35% male</p> <p><b>Country of origin:</b> Sudan 64%, Iran 16%, Liberia 6%, Rwanda 6%, Ethiopia 3%, Congo 1%</p> <p><b>Country of settlement:</b> Australia</p> <p><b>Refugee status:</b> refugee</p> <p><b>Severity of condition:</b> –</p> <p><b>Number of dropouts for any reason:</b> 0 but 4 missing at baseline</p>
Interventions	<p><u>Community-based intervention</u></p> <p><b>Name:</b> music therapy treatment</p> <p><b>Type:</b> focused non-specialist care</p> <p><b>Description:</b> tailored music therapy. Used techniques such as songwriting, group singing, guided imagery and music, music and relaxation techniques, instrumental improvisation, music and movement, and music and art activities to enhance well-being</p> <p><b>Setting:</b> classroom secondary school</p> <p><b>Format:</b> group</p> <p><b>Number of sessions:</b> 10 (twice-weekly)</p> <p><b>Duration of 1 session:</b> 30–40 minutes</p> <p><b>Target:</b> prevention (or treatment without diagnosis)</p> <p><u>Control group 1</u></p> <p>Waiting list</p>

**Baker 2006** (Continued)

Outcomes	Externalising behaviours; internalising behaviours; BASC composite measure; lower is better; endpoint data.
Notes	<p><b>Sponsorship source:</b> NR</p> <p><b>Comments:</b> pilot study</p> <p><b>Author's name:</b> Felicity Baker</p> <p><b>Institution:</b> University of Queensland</p> <p><b>Email:</b> f.baker1@uq.edu.au</p> <p><b>Address:</b> School of Music, The University of Queensland, Brisbane, Australia</p>

**Barrett 2000**

<b>Study characteristics</b>	
Methods	<b>Design:</b> case-control study
Participants	<p><b>Inclusion criteria:</b> attended a transitional school for non-English-speaking children; students who appeared stressed, sad, or worried in class</p> <p><b>Number of participants:</b> 20</p> <p><b>Age (mean):</b> 16.3 years</p> <p><b>Age (range):</b> 14–19 years</p> <p><b>Sex:</b> 100% female</p> <p><b>Country of origin:</b> the former Yugoslavia; 11 identified their nationality as Bosnian, 6 as Croatian, 1 as Serbian, 2 as Yugoslavian</p> <p><b>Country of settlement:</b> Australia</p> <p><b>Refugee status:</b> migrants</p> <p><b>Number of dropouts for any reason:</b> 3</p>
Interventions	<p><u>Community-based intervention</u></p> <p><b>Name:</b> FRIENDS program</p> <p><b>Type:</b> specialised services</p> <p><b>Description:</b> cognitive-behavioural, group-based anxiety intervention for youths aged 12–17 years</p> <p><b>Setting:</b> transitional school</p> <p><b>Format:</b> group face-to-face</p> <p><b>Number of sessions:</b> 10</p> <p><b>Target:</b> mental health treatment, prevention</p> <p><u>Control group 1</u></p> <p><b>Name:</b> 'Care' programme</p> <p><b>Type:</b> waiting list/usual care</p>

**Barrett 2000** (Continued)

**Description:** discussion with a teacher who spoke the same language

Outcomes

Notes

**Sponsorship source:** NR

**Author's name:** Paula M Barrett

**Institution:** School of Applied Psychology, Griffith University

**Email:** P.Barrett@mailbox.gu.edu.au

**Address:** School of Applied Psychology, Griffith University, Mt Gravatt Campus, Mt Gravatt, Queensland, Australia

**Birman 2008**

**Study characteristics**

Methods

**Design:** prospective cohort study

**Location of study centre:** USA

Participants

**Inclusion criteria:** participants of the FACES program

**Exclusion criteria:** none

**Group differences:** none

**Number of participants:** 97

**Age (mean):** 11 years

**Age (range):** 1.5–21 years

**Sex:** NR

**Country of origin:** Africa 47%, Central/Eastern Europe 30%, Latin America 16%, Middle East/Central Asia 3%, South Asia 4%

**Country of settlement:** USA

**Refugee status:** US citizen 12 (12.4%), refugee/asylee 47 (48.5%), asylum status pending 8 (8.2%), other legal permanent resident status 22 (22.6%), undocumented 5 (5.2%), unknown 3 (3.1%)

**Severity of condition:** PTSD 27%, adjustment disorders 23%, mood disorder 23%, 27% no diagnosed disorder

**Number of dropouts for any reason:** 29

Interventions

**Name:** International Family, Adult, and Child Enhancement Services (FACES)

**Type:** specialised services

**Description:** community-based mental health programme based on an outreach-oriented services model evolved from staff efforts to create a culturally sensitive and creative programme around overcoming obstacles to providing services for refugees from a variety of different cultural and linguistic backgrounds.

**Setting:** various (locations that were most comfortable and convenient for programme participants, including at home, in the community, or at school).

**Birman 2008** (Continued)

**Format:** varied though usually in person

**Number of sessions:** dependent on service delivered

**Duration of 1 session:** NA

**Target:** mental health prevention and treatment

## Outcomes

**Notes**

**Sponsorship source:** Substance Abuse and Mental Health Services Administration, the National Child Traumatic Stress Network, and the National Institute of Mental Health (K01MH67690)

**Author's name:** Dina Birman

**Institution:** University of Illinois at Chicago

**Email:** dbirman@uic.edu

**Address:** University of Illinois at Chicago, Chicago, Illinois, USA

**Boose 2019**
**Study characteristics**

**Methods**

**Design:** pre–post intervention study

**Locations of study centres:** Midwest US school

**Number of study centres:** 11 schools

**Participants**

**Inclusion criteria:** immigrants or refugees students from elementary, middle school and high schools; country of origin must have been Syria, Iraq, Afghanistan, Burma (now Myanmar), or refugee camps in nearby countries

**Exclusion criteria:** none

**Number of participants:** 43

**Age:** pre-kindergarten through to 12th grade

**Sex:** 23 male, 16 female

**Country of origin:** Iraq 46%, Thailand 18%, Afghanistan 7.7%, Iran 5%, Cameroon 2.5%, Guatemala 2.5%, Lebanon 2.5%, Mexico 2.5%, Pakistan 2.5%, USA 2.5%.

**Country of settlement:** USA

**Refugee status:** immigrant or refugee

**Severity of condition:** –

**Number of dropouts for any reason:** 4

**Interventions**

**Name:** CBT

**Type:** specialised services

**Description:** CBT with age-appropriate content

**Setting:** school



**Boose 2019** (Continued)

**Format:** individual

**Number of sessions:** 8–10

**Duration of 1 session:** 1 hour

**Target:** treatment (but not formal diagnosis)

## Outcomes

## Notes

**Sponsorship source:** NR

**Comments:** dissertation

**Author's name:** Anne Marie Boose

**Institution:** University of Nebraska

**Email:** NR

**Address:** University of Nebraska at Omaha, Omaha, Nebraska, USA

**Bujorbarua 2021**
**Study characteristics**

Methods	<p><b>Design:</b> qualitative observational study</p> <p><b>Location of study centre:</b> suburb in Pacific Northwest</p> <p><b>Number of study centres:</b> 1</p>
Participants	<p><b>Inclusion criteria:</b> children aged 5–12 years; had been living in the USA for &lt; 5 years (2014–2019)</p> <p><b>Exclusion criteria:</b> NR</p> <p><b>Group differences:</b> none</p> <p><b>Number of participants:</b> 8</p> <p><b>Age (mean):</b> 7.9 years</p> <p><b>Age (range):</b> 5–11 years</p> <p><b>Sex:</b> 13% male</p> <p><b>Country of origin:</b> Iraq</p> <p><b>Country of settlement:</b> USA</p> <p><b>Refugee status:</b> refugee children</p> <p><b>Severity of condition:</b> 2 girls experienced traumatic events directly and 1 of them was diagnosed with PTSD</p> <p><b>Number of dropouts for any reason:</b> none</p>
Interventions	<p><b>Name:</b> movement and dance sessions</p> <p><b>Type:</b> community and family support</p>

**Bujorbarua 2021** (Continued)

**Description:** sessions primarily based on expressions of movement and dance but also included other creative expressions such as drawing

**Setting:** community centre hall

**Format:** face-to-face, group

**Number of sessions:** 8–10

**Duration of 1 session:** 1.5–2 hours

**Target:** mental health treatment

Outcomes

Notes

**Sponsorship source:** NR

**Author's name:** Pongkhi Bujorbarua

**Institution:** University of Washington

**Email:** pongkhi@uw.edu

**Address:** College of Education, University of Washington, Seattle, Washington, USA

**Crawford 2017**

**Study characteristics**

Methods

**Design:** case-study

**Location of study centre:** Green College in Victoria, Australia

**Methods of qualitative study:** semi-structured interviews and observational data were analysed using interpretative phenomenological analysis.

**Number of study centres:** 1

Participants

**Inclusion criteria:** NR

**Exclusion criteria:** NR

**Number of participants:** 10

**Age (mean):** 14.8 years

**Age (range):** 13–17 years

**Sex:** 50% male

**Country of origin:** Iran 40%, Sudan 40%, Afghanistan 20%

**Country of settlement:** Australia

**Refugee status:** immigrants and refugees

**Number of dropouts for any reason:** 0

Interventions

**Name:** music education

**Type:** focused, non-specialist care

**Crawford 2017** (Continued)

**Description:** music programme with a focus on singing and percussion

**Setting:** classroom, F-12 school

**Format:** face-to-face, group

**Number of sessions:** 10 weeks

**Target:** mental health prevention

---

 Outcomes

---

 Notes

**Sponsorship source:** no specific grant

**Author's name:** Renée Crawford

**Institution:** Monash University

**Email:** renee.crawford@monash.edu

**Address:** Monash University, Clayton, Victoria, Australia

---

**Crawford 2020**
**Study characteristics**


---

 Methods

**Design:** qualitative study

**Location of study centre:** Australia

**Methods of qualitative study:** qualitative research with semi-structured interviews; analysed using thematic analysis.

**Number of study centres:** 1

---

 Participants

**Inclusion criteria:** students from a refugee background, 3 teachers, school principal

**Exclusion criteria:** NR

**Number of participants:** 20

**Age (mean):** –

**Age (range):** 13–17 years

**Sex:** 10 male, 10 female

**Country of origin:** 10 Iran, 8 Sudan, 2 Afghanistan

**Country of settlement:** USA

**Refugee status:** refugees

**Number of dropouts for any reason:** –

---

 Interventions

**Name:** music lessons

**Type:** community and family support

**Description:** music as an elective school subject within a creative arts programme.

**Setting:** classroom in secondary school

---

**Crawford 2020** (Continued)

**Format:** group

**Number of sessions:** –

**Duration of 1 session:** –

**Target:** mental health promotion

## Outcomes

**Notes**

**Sponsorship source:** author(s) received no financial support for the research, authorship, or publication of the article.

**Author's name:** Renée Crawford

**Institution:** Faculty of Education, Monash University

**Email:** renee.crawford@monash.edu

**Address:** Faculty of Education, Monash University, Clayton, Victoria, Australia

**de Freitas 2020**
**Study characteristics**

**Methods**

**Design:** qualitative study

**Location of study centre:** Montreal, Canada

**Methods of qualitative study:** thematic analysis of field and supervision notes and focus group

**Number of study centres:** 3

**Participants**

**Inclusion criteria:** facilitators of a creative expression intervention in temporary shelters

**Exclusion criteria:** –

**Number of participants:** 8 facilitators

**Age (range):** 2–18 years

**Country of settlement:** USA

**Refugee status:** refugees

**Number of dropouts for any reason:** NA

**Interventions**

**Name:** creative expression workshops

**Type:** multimodal

**Description:** workshops with the core elements of psychological first aid

**Setting:** temporary refugee shelters

**Format:** group

**Number of sessions:** 2 per week for 6 months

**Duration of 1 session:** 1–2 hours

**Target:** prevention

**de Freitas 2020** (Continued)

## Outcomes

Notes

**Sponsorship source:** research funded by a Social Sciences and Humanities Research Council (SSHRC) grant.

**Author's name:** Cecile Rousseau

**Institution:** McGill University

**Email:** cecile.rousseau@mcgill.ca

**Address:** Division of Social and Transcultural Psychiatry, McGill University, Montreal, Quebec, Canada

**Demott 2017**
**Study characteristics**

Methods

**Design:** non-randomised controlled trial

**Group:** parallel group

**Location of study centre:** refugee facilities in Oslo and other parts of Norway

**Methods of qualitative study:** NA

**Number of study centres:** 1; until children were moved to other centres after 6 weeks.

Participants

**Inclusion criteria:** youths who stayed at the refugee facility for < 3 weeks and willing to stay for 6 weeks more.

**Number of participants:** 71

**Age (mean):** 16.3 (SD 0.8) years

**Age (range):** 15–18 years

**Sex:** male

**Country of origin:** Afghanistan 54, Somalia 13, Iran 1, Western Sahara 2, Palestine 1

**Country of settlement:** Norway

**Refugee status:** unaccompanied asylum seekers

**Severity of condition:** 79% had experienced life-threatening events; no formal diagnosis

**Number of drop-outs for any reason:** 6 at 6 weeks post-treatment, 29 at 25 months post-treatment

Interventions

Community-based intervention

**Name:** Expressive Arts in Transition (EXIT)

**Type:** focused non-specialist care

**Description:** manualised psychosocial group intervention using arts and breathing exercises

**Setting:** arrival centre for unaccompanied asylum-seeking children and other refugee facilities in Norway

**Format:** group

**Number of sessions:** 10

**Demott 2017** (Continued)

**Duration of one session:** 1.5 hours

**Target:** not stated but can be considered prevention given that there was no diagnosis at baseline.

Control group 1

**Name:** life as usual

**Type:** care as usual (no intervention)

---

Outcomes

---

Notes

**Sponsorship source:** Norwegian immigration authorities

**Author's name:** Melinda A Meyer Demott

**Institution:** Norwegian Centre for Violence and Traumatic Stress Studies

**Email:** meli-m@online.no

**Address:** Norwegian Centre for Violence and Traumatic Stress Studies, Oslo, Norway

---

**Dura-Vila 2013**

**Study characteristics**

---

Methods

**Design:** before-after study without control group

**Location of study centre:** Westminster, London, UK

**Methods of qualitative study:** NA

**Number of study centres:** NA

---

Participants

**Inclusion criteria:** local children and adolescents from asylum-seeking and refugee backgrounds

**Exclusion criteria:** –

**Number of participants:** 102

**Age (mean):** 10.1 years

**Age (range):** 3–17 years

**Sex:** 75% male

**Country of origin:** Middle East 45, African 27, European 23, elsewhere 7

**Country of settlement:** UK

**Refugee status:** refugees and asylum-seekers

**Severity of condition:** referred because of psychosocial distress or problems

**Number of dropouts for any reason:** "a third"

---

Interventions

**Name:** community-based mental health service

**Type:** specialised services + community and family support

**Dura-Vila 2013** (Continued)

**Description:** a variety of services including liaison with other agencies, problem-solving, and practical help; and direct therapeutic work such as individual psychotherapy, supportive treatments, family therapy, and cognitive work.

**Setting:** primary school, secondary school, homeless family service

**Format:** individual

**Number of sessions:** variable depending on need

**Duration of 1 session:** variable depending on need

**Target:** prevention/treatment

---

Outcomes

Notes

**Sponsorship source:** Action for Peoples in Conflict & Kensington Chelsea and Westminster Health Authority

**Author's name:** Matthew Hodes

**Institution:** Imperial College London

**Email:** m.hodes@imperial.ac.uk

**Address:** Academic Unit of Child & Adolescent Psychiatry, Imperial College London, London, UK

---

**Ehnholt 2005**

**Study characteristics**

Methods

**Design:** non-randomised controlled trial

**Group:** parallel group

**Location of study centre:** North London and South London

**Methods of qualitative study:** NA

**Number of study centres:** 2

Participants

**Inclusion criteria:** refugees or asylum-seekers from war-affected countries who had experienced traumatic events; experiencing psychological or behavioural difficulties as a result of trauma according to teachers

**Exclusion criteria:** learning difficulties; not speaking, reading, or comprehending conversational English

**Group differences:** children in the control group were slightly older (12.5 years in treatment group vs 13.5 years in control group). At baseline, children in the treatment group scored higher on PTSD symptoms, intrusion (symptom of PTSD) and emotional difficulties.

Community-based intervention

**Number of participants:** 15

**Age (mean):** 12.47 (SD 0.74) years

**Age (range):** –

**Sex:** 10 male, 5 female

**Ehnholt 2005** (Continued)

**Country of origin:** Kosovo 7, Sierra Leone 7, Turkey 1

**Country of settlement:** UK

**Refugee status:** asylum seekers

**Number of dropouts for any reason:** none reported

Control group

**Number of participants:** 11

**Age (mean):** 13.46 (SD 1.13) years

**Age (range):** –

**Sex:** 7 male, 4 female

**Country of origin:** Kosovo 4, Sierra Leone 3, Turkey 2, Afghanistan 1, Somalia 1

**Country of settlement:** UK

**Refugee status:** 9 asylum seekers, 2 refugees

**Number of dropouts for any reason:** none reported

**Severity of condition, overall:** 92.3% of children scored above the cut-off for likely diagnosis of PTSD

Interventions

Community-based intervention

**Name:** CBT

**Type:** focused, non-specialist care

**Description:** CBT

**Setting:** small classroom in 2 secondary state-funded schools in London

**Format:** group

**Number of sessions:** 6

**Duration of 1 session:** 1 hour

**Target:** treatment (children with symptoms but no formal diagnosis)

Control group

**Name:** waiting list

**Type:** control

Outcomes

Notes

**Sponsorship source:** NA

**Author's name:** Kimberly A Ehnholt

**Institution:** Michael Rutter Centre for Children and Young people

**Email:** kim.ehnholt@slam.nhs.uk

**Address:** Michael Rutter Centre for Children and Young People, Maudsley Hospital, De Crespigny Park, London, UK



**Ellis 2013**
**Study characteristics**

Methods	<p><b>Design:</b> before–after study without control group; longitudinal</p> <p><b>Location of study centre:</b> middle school in New England (US) city</p> <p><b>Number of study centres:</b> 1</p>
Participants	<p><b>Inclusion criteria:</b> being a Somali ELL student at the middle school in which the programme was implemented</p> <p><b>Exclusion criteria:</b> –</p> <p><b>Group differences:</b> no statistically significant differences</p> <p><b>Number of participants:</b> 30</p> <p><b>Age (mean):</b> 13.0 (SD 0.96) years</p> <p><b>Age (range):</b> 11–15 years</p> <p><b>Sex:</b> 19 male, 11 female</p> <p><b>Country of origin:</b> Somalia</p> <p><b>Country of settlement:</b> USA</p> <p><b>Refugee status:</b> refugees</p> <p><b>Number of dropouts for any reason:</b> 7</p>
Interventions	<p><b>Name:</b> Project SHIFA</p> <p><b>Type:</b> community support + focused non-specialist care + specialised services</p> <p><b>Description:</b> multi-tiered programme based on Trauma Systems Therapy</p> <p><b>Setting:</b> classroom in middle school</p> <p><b>Format:</b> group</p> <p><b>Number of sessions:</b> 39 (weekly for 9 months)</p> <p><b>Duration of 1 session:</b> variable</p> <p><b>Target:</b> mental health promotion, prevention, and intervention</p>
Outcomes	
Notes	<p><b>Sponsorship source:</b> Robert Wood Johnson Foundation through the Caring Across Communities Initiative and by the Substance Abuse Mental Health Services Administration</p> <p><b>Author's name:</b> B Heidi Ellis</p> <p><b>Institution:</b> Children's Hospital Boston</p> <p><b>Email:</b> heidi.ellis@childrens.harvard.edu</p> <p><b>Address:</b> Department of Psychiatry, Children's Hospital Boston, Boston, Massachusetts, USA</p>

Fazel 2009

*Study characteristics*

Methods	<p><b>Design:</b> non-randomised controlled trial</p> <p><b>Group:</b> parallel group</p> <p><b>Location of study centre:</b> Oxford, UK</p> <p><b>Methods of qualitative study:</b> NA</p>
Participants	<p><b>Inclusion criteria:</b> children in 3 Oxford schools with a high refugee and asylum-seeker population</p> <p><b>Exclusion criteria:</b> –</p> <p><b>Group differences:</b> intervention group was refugees and asylum seekers; control group 1 were non-refugee ethnic minority children; control group 2 were white children. Children were matched by age and gender.</p> <p><u>Community-based intervention</u></p> <p><b>Number of participants:</b> 47</p> <p><b>Age (mean):</b> –</p> <p><b>Age (range):</b> 5–18 years</p> <p><b>Sex:</b> 32 male, 15 female</p> <p><b>Country of origin:</b> Balkans 24, Asia or India 20, Africa 3</p> <p><b>Country of settlement:</b> UK</p> <p><b>Refugee status:</b> refugees and asylum seekers</p> <p><b>Number of dropouts for any reason:</b> 25</p> <p><u>Control group 1</u></p> <p><b>Number of participants:</b> 47</p> <p><b>Age (range):</b> 5–18 years</p> <p><b>Sex:</b> 32 male, 15 female</p> <p><b>Country of origin:</b> Pakistan 29, Bangladesh 14, other 4</p> <p><b>Country of settlement:</b> UK</p> <p><b>Refugee status:</b> non-refugees</p> <p><b>Number of dropouts for any reason:</b> –</p> <p><u>Control group 2</u></p> <p><b>Number of participants:</b> 47</p> <p><b>Age (range):</b> 5–18 years</p> <p><b>Sex:</b> 32 male, 15 female</p> <p><b>Country of origin:</b> NR; ethnicity 'White'</p> <p><b>Country of settlement:</b> UK</p> <p><b>Refugee status:</b> non-refugees</p>

**Fazel 2009** (Continued)

**Number of dropouts for any reason: –**

Interventions

Community-based intervention

**Name:** school-based mental health service

**Type:** multiple (dependent on need)

**Description:** mental health team discussing cases and providing/referring for additional support according to need.

**Setting:** school

**Format:** individual/group

**Number of sessions:** variable

**Duration of 1 session:** variable

**Target:** prevention and treatment

Control group 1

No treatment

Control group 2

No treatment

Outcomes

Notes

**Sponsorship source:** Wellcome Research Senior House Officer Research Grant to Dr Fazel

**Author's name:** Mina Fazel

**Institution:** Oxford University

**Email:** mina.fazel@psych.ox.ac.uk

**Address:** University Department of Psychiatry, Warneford Hospital, Oxford, UK

**Foka 2021**

**Study characteristics**

Methods

**Design:** quasi-randomised pilot study

**Location of study centre:** refugee camp in Lesbos, Greece

**Methods of qualitative study:** focus groups

**Number of study centres:** 3

Participants

**Inclusion criteria:** youths aged 7–14 years who were living in 1 of the refugee camps in Lesbos or other low-resource environments

**Exclusion criteria:** intellectual disability, mental illness, or who were receiving psychological treatment

**Group differences:** some variation in gender

**Number of participants:** 72

**Foka 2021** (Continued)

**Age (mean):** 10.76 (SD 1.96) years

**Age (range):** 7–14 years

**Sex:** 35% male

**Country of origin:** Syria 57%, Iraq 18%, Afghanistan 18%, Lebanon 1%, Kurdistan 1%, stateless 1%, unknown 3%

**Country of settlement:** Greece

**Refugee status:** refugee

**Severity of condition:** non-clinical sample

**Number of dropouts for any reason:** 0

Interventions

Community-based intervention

**Name:** Strengths for the Journey

**Type:** focused, non-specialist care

**Description:** a brief, group-based preventive intervention that can be delivered with limited resources by trained non-specialists and fieldworkers in refugee camps or other humanitarian settings.

**Setting:** refugee camps in Lesbos, Greece

**Format:** face-to-face, group

**Number of sessions:** 6

**Duration of 1 session:** 2 hours

**Target:** prevention, mental health promotion

Waiting list

**Name:** waiting list

**Type:** control

Outcomes

Notes

**Sponsorship source:** NR

**Author's name:** Sevasti Foka

**Institution:** Queen Mary University of London

**Email:** k.hadfield@qmul.ac.uk

**Address:** Department of Biological and Experimental Psychology, Queen Mary University of London, Bethnal Green, London, UK

**Fox 2005**

**Study characteristics**

Methods

**Design:** before-after study without control group

**Location of study centre:** public school in a US city in the Midwest

**Fox 2005** (Continued)

**Methods of qualitative study:** NA

**Number of study centres:** 1

Participants

**Inclusion criteria:** refugee children from South-East Asia at a public school; convenience sample

**Exclusion criteria:** –

**Group differences:** NA

**Number of participants:** 58

**Age (mean):** 10 years

**Age (range):** 6–15 years

**Sex:** 43% male

**Country of origin:** Vietnam 41%, Cambodia 59%

**Country of settlement:** USA

**Refugee status:** NR; supposedly refugees

**Severity of condition:** NR

**Number of dropouts for any reason:** NR

Interventions

**Name:** school-based mental health intervention

**Type:** focused, non-specialist care

**Description:** bespoke programme based on CBT with emphasis on skills building

**Setting:** school classroom in urban public school

**Format:** group

**Number of sessions:** 8

**Duration of 1 session:** 1 hour

**Target:** treatment (although no diagnosis)

Outcomes

Notes

**Sponsorship source:** NR

**Author's name:** Patricia G Fox

**Institution:** Northern Illinois University

**Email:** pfox@niu.edu

**Address:** Northern Illinois University, School of Nursing, DeKalb, Illinois, USA

**Garoff 2019**
**Study characteristics**

Methods

**Design:** pre–post with qualitative component

**Locations of study centres:** Helsinki and Tampere

**Garoff 2019** (Continued)

	<b>Methods of qualitative study:</b> focus groups; questionnaires; ethnographic interviewing; symptom scales
Participants	<b>Inclusion criteria:</b> unaccompanied minors living in the study centre accommodation <b>Exclusion criteria:</b> – <b>Number of participants:</b> 18 (completers) <b>Age (mean):</b> 15.1 (SD 2.3) years <b>Age (range):</b> 9–17 years <b>Sex:</b> 16 male, 2 female <b>Country of origin:</b> Afghanistan 12, Iraq 2 <b>Country of settlement:</b> Finland <b>Refugee status:</b> unaccompanied minors with refugee status or asylum seekers <b>Severity of condition:</b> NR <b>Number of dropouts for any reason:</b> unclear; possibly 2
Interventions	<b>Name:</b> group intervention for unaccompanied minors <b>Type:</b> focused non-specialist care or treatment <b>Description:</b> psychoeducational style therapy with body-oriented relaxation and stabilisation exercise, exercises and discussions about the topic of the session, relaxation exercises and final words or showing how you feel with picture cards. <b>Setting:</b> refugee accommodation <b>Format:</b> group <b>Number of sessions:</b> 10 <b>Duration of 1 session:</b> 90 minutes <b>Target:</b> prevention or treatment
Outcomes	
Notes	<b>Sponsorship source:</b> Academy of Finland (grant # 305590) <b>Author's name:</b> Ferdinand Garoff <b>Institution:</b> University of Tampere <b>Email:</b> ferdinand.garoff@gmail.com <b>Address:</b> University of Tampere, Tampere, Finland

**Grasser 2019**
**Study characteristics**

Methods	<b>Design:</b> before-after study <b>Location of study centre:</b> Detroit, USA
---------	------------------------------------------------------------------------------------

**Grasser 2019** (Continued)

## Participants

**Inclusion criteria:** children aged 7–14 years who had been resettled in the USA for a mean of 2 years. Participants were not undergoing concurrent treatment.

**Number of participants:** 25

**Age (mean):** 10 years

**Age (range):** 7–14 years

**Sex:** 50% male

**Country of origin:** Syria

**Country of settlement:** USA

**Refugee status:** refugee

**Severity of condition:** PTSD

**Number of dropouts for any reason:** 9

## Interventions

**Name:** dance/movement therapy

**Type:** community and family support

**Description:** therapeutic movement and dance

**Setting:** university

**Format:** face-to-face, group

**Number of sessions:** 12

**Duration of 1 session:** 90 minutes

**Target:** treatment

## Outcomes

## Notes

**Sponsorship source:** Blue Cross Blue Shield of Michigan Foundation Student Award (Lana Ruvolo Grasser), Blue Cross Blue Shield of Michigan Foundation Physician Investigator Award (Arash Javanbakht), Detroit Medical Center Foundation Grant (Arash Javanbakht), and State of Michigan Lyca-ki/Young Foundation (Arash Javanbakht).

**Author's name:** Lana Ruvolo Grasser

**Institution:** Wayne State University School of Medicine

**Email:** lgrasser@med.wayne.edu

**Address:** Wayne State University Psychiatry and Behavioral Neurosciences, Detroit, Michigan, USA

**Hurn 2018**
**Study characteristics**

## Methods

**Design:** pre–post and evaluative case study

**Location of study centres:** Bedfordshire, UK

**Methods of qualitative study:** focus groups; thematic analysis

**Hurn 2018** (Continued)

**Number of study centres:** 2

Participants

**Inclusion criteria:** family stability (having been granted refugee status for 5 years with the right to stay in the country and for parents to work), similar cultural origins, shared Arabic language, and primary school age

**Number of participants:** 8

**Age (mean):** 9.3 years

**Age (range):** 6–11 years

**Sex:** 62.5% male

**Country of origin:** Libya 12.5%, Syria 87.5%

**Country of settlement:** UK

**Refugee status:** refugee

**Severity of condition:** PTSD, flashbacks, sleep difficulties, nightmares, attention deficit hyperactivity disorder

**Number of dropouts for any reason:** 0

Interventions

**Name:** EMDR-IGTP

**Type:** multi-modal

**Description:** program which incorporated EMDR-IGTP and art- and music-based interventions

**Setting:** CHUMS centre

**Format:** group, face-to-face

**Number of sessions:** 4

**Duration of 1 session:** 3 hours

**Target:** treatment

Outcomes

Notes

**Sponsorship source:** NR

**Author's name:** Russell Hurn

**Institution:** CHUMS

**Email:** russell.hurn@chums.uk.com

**Address:** Wrest Park Enterprise Centre, Silsoe, Bedfordshire, UK

**Jackson 2006**

**Study characteristics**

Methods

**Design:** case study

**Location of study centre:** school in Australia

**Methods of qualitative study:** semi-structured interviews; analysis using ecological framework



**Jackson 2006** (Continued)

**Number of study centres:** 1

Participants

**Inclusion criteria:** families needed to have  $\geq 1$  children under the age of 5 years attending playgroup; have been exposed to war-related violence or related disruptive environments in the past 3–4 years.

**Exclusion criteria:** –

**Number of participants:** 9 children; 5 adults

**Age (mean):** –

**Age (range):** 0–5 years

**Sex:** –

**Country of origin:** –

**Country of settlement:** Australia

**Refugee status:** refugee

**Severity of condition:** PTSD

**Number of dropouts for any reason:** –

Interventions

**Name:** playgroup

**Type:** community and family support

**Description:** supported playgroup with parent discussions

**Setting:** school

**Format:** group

**Number of sessions:** weekly

**Duration of 1 session:** 2 hours

**Target:** mental health promotion/prevention

Outcomes

Notes

**Sponsorship source:** NR

**Author's name:** Dianne Jackson

**Institution:** University of Western Sydney

**Email:** –

**Address:** University of Western, Penrith, Sydney, Australia

**Kowitt 2016**

**Study characteristics**

Methods

**Design:** pre–post–observational intervention study

**Locations of study centres:** North Carolina, USA

**Kowitt 2016** (Continued)

**Methods of qualitative study:** process evaluation conducting by interacting with participants and therapists

**Number of study centres:** 1

Participants

**Number of participants:** 9

**Age (mean):** 15 years

**Age (range):** 12–19 years

**Sex:** 78% male

**Country of origin:** Burma (now Myanmar)

**Country of settlement:** USA

**Refugee status:** refugee

**Severity of condition:** –

**Number of dropouts for any reason:** 0

Interventions

**Name:** Burma Art Therapy Project

**Type:** specialised services

**Description:** art therapy sessions tailored to each client's individual needs, as established by the client, family, and therapist

**Setting:** school

**Format:** face-to-face, individual

**Number of sessions:** 24 sessions (once per week)

**Duration of 1 session:** –

**Target:** mental health promotion, prevention

Outcomes

Notes

**Sponsorship source:** NR

**Author's name:** Sarah Dorothy Kowitt

**Institution:** University of North Carolina at Chapel Hill Gillings School of Global Public

**Email:** kowitt@email.unc.edu

**Address:** UNC Gillings School of Global Public Health, Chapel Hill, North Carolina, USA

**Lampa 2021**

**Study characteristics**

Methods

**Design:** qualitative study

**Location of study centres:** Sweden

**Methods of qualitative study:** semi-structured interviews; data analysed using content analysis

**Lampa 2021** (Continued)

	<b>Number of study centres:</b> 6
Participants	<b>Inclusion criteria:</b> having conducted $\geq 2$ TRTs groups; planning to continue conducting groups in the future  <b>Number of participants:</b> 7  <b>Age (mean):</b> –  <b>Age (range):</b> –  <b>Sex:</b> 100% female  <b>Country of origin:</b> –  <b>Country of settlement:</b> Sweden
Interventions	<b>Name:</b> TRTs  <b>Type:</b> specialised services  <b>Description:</b> a manualised intervention based on trauma-focused CBT. It focused on psychoeducation and strategies to reduce trauma symptoms.  <b>Setting:</b> community-based mental health services delivering TRTs already  <b>Format:</b> group, face-to-face  <b>Number of sessions:</b> 5 (and 2 for caregivers)  <b>Duration of 1 session:</b> –  <b>Target:</b> treatment
Outcomes	
Notes	<b>Sponsorship source:</b> research was supported by BRIS and formed part of a wider project funded by the KavliTrust (Grant: ID: A-321629)  <b>Author's name:</b> Elin Lampa  <b>Institution:</b> Uppsala University  <b>Email:</b> elin.lampa@pubcare.uu.se  <b>Address:</b> Department of Public Health and Caring Sciences, Uppsala University, Uppsala, Sweden

**Millar 2019**
**Study characteristics**

Methods	<b>Design:</b> exploratory case study  <b>Location of study centre:</b> Northern Greece  <b>Methods of qualitative study:</b> observation of individual music lessons and group music workshops + semi-structured interviews
Participants	<b>Inclusion criteria:</b> NR  <b>Exclusion criteria:</b> NR

**Millar 2019** (Continued)

**Number of participants:** 6 (12 by observation)

**Age (mean):** –

**Age (range):** 11–18 years

**Sex:** 50% male

**Country of origin:** Iraq and Syria (proportion NR)

**Country of settlement:** Greece

**Refugee status:** in refugee camp

**Severity of condition:** –

**Number of dropouts for any reason:** 0

## Interventions

**Name:** music education

**Type:** focused, non-specialist care

**Description:** guitar lessons and singing workshops

**Setting:** public community space outside the refugee camp in Greece

**Format:** face-to-face, group

**Number of sessions:** 5 sessions in total

**Duration of 1 session:** –

**Target:** mental illness prevention and promotion

## Outcomes

## Notes

**Sponsorship source:** none

**Author's name:** Oscar Millar

**Institution:** University College London

**Email:** stnvojp@ucl.ac.uk

**Address:** UCL Institute of Education, London, UK

**Mohlen 2005**
**Study characteristics**

## Methods

**Design:** prospective experimental study with a pre- and post-test design

**Group:** parallel group

**Location of study centre:** University Clinic for Child and Adolescent Psychiatry in Germany

**Methods of qualitative study:** NA

**Number of study centres:** unclear ("refugee accommodation area")

## Participants

**Inclusion criteria:** NR

**Exclusion criteria:** NR

**Mohlen 2005** (Continued)

**Number of participants:** 10

**Age (mean):** 13.3 (SD 2) years

**Age (range):** 10–16 years

**Sex:** 6 males, 4 females

**Country of origin:** Kosovo, Albania, Italy (1 Gipsy participant)

**Country of settlement:** Germany

**Refugee status:** refugees

**Severity of condition:** at time of pretreatment evaluation 7/10 children fulfilled the diagnostic criteria for a psychiatric disorder according to DSM-IV.

Interventions

**Name:** psychosocial support programme

**Type:** psychological

**Description:** combination of trauma/grief-focused therapy, relaxation techniques, and creative sessions

**Setting:** refugee accommodation in Germany which hosted refugees who had fled the Kosovo conflict in 1998–1999

**Format:** group, individual, family

**Number of sessions:** 13–15

**Duration of one session:** 2–3 hours

**Target:** individuals, groups, families

Outcomes

Notes

**Sponsorship source:** Wilhelm Bitter Foundation and the Dieter Radaj Foundation, Germany

**Author's name:** Mohlen Heike

**Institution:** Faculty of Medicine, University of Heidelberg, Department of Child and Adolescent Psychiatry

**Email:** romuald\_brunner@med.uni-heidelberg.de

**Address:** University of Heidelberg, Heidelberg, Germany

**Mom 2019**

**Study characteristics**

Methods

**Design:** before-after study without control group

**Locations of study centres:** high schools in Western Sydney, Australia

**Methods of qualitative study:** NA

**Number of study centres:** 2

Participants

**Inclusion criteria:** refugee children in the Intensive English Centre at 2 high schools

**Mom 2019** (Continued)

**Exclusion criteria:** –

**Number of participants:** 37

**Age (mean):** 15 years

**Age (range):** 12–18 years

**Sex:** 21 male, 11 female

**Country of origin:** Iraq, Afghanistan, Pakistan, Sudan, Somalia, Burma (now Myanmar), East Timor (Timor-Leste)

**Country of settlement:** Australia

**Refugee status:** refugees

**Severity of condition:** no diagnosis; all had witnessed or experienced human rights violations

**Number of dropouts for any reason:** 5

Interventions

**Name:** STARTTS Capoeira Angola programme

**Type:** community and family support

**Description:** psychological treatment with Afro-Brazilian martial art and dance (Capoeira Angola), integrated with music (orchestra of traditional instruments) and songs

**Setting:** high school

**Format:** group

**Number of sessions:** 39 (weekly for 9 months)

**Duration of 1 session:** 1 hour

**Target:** prevention or treatment

Outcomes

Notes

**Sponsorship source:** NR

**Author's name:** Shakek Momartin

**Institution:** Service for the Treatment and Rehabilitation of Torture and Trauma Survivors (STARTTS)

**Email:** shakeh.momartin@health.nsw.gov.au

**Address:** Service for the Treatment and Rehabilitation of Torture and Trauma Survivors (STARTTS), New South Wales, Australia

**Momartin 2018**

**Study characteristics**

Methods

**Design:** qualitative study

**Location of study centres:** Western Sydney, Australia

**Methods of qualitative study:** interviews

**Number of study centres:** 2

## Momartin 2018 (Continued)

### Participants

**Inclusion criteria:** NR

**Exclusion criteria:** NR

**Number of participants:** 32

**Age (mean):** 15 years

**Age (range):** 12–18 years

**Sex:** 67% male

**Country of origin:** mainly from the regions of the Middle East and Central Asia (Iraq, Afghanistan, Pakistan), Africa (Sudan, Somalia) and South-East Asia (Burma (now Myanmar), East Timor (Timor-Leste))

**Country of settlement:** Australia

**Refugee status:** NR

**Severity of condition:** all participants had experienced or witnessed human rights violations, interrupted education and the lack of basic needs, which had been shown to impact on their behaviour.

**Number of dropouts for any reason:** NR

### Interventions

**Name:** Capoeira Angola programme

**Type:** community and family support

**Description:** Capoeira Angola is fundamentally a simulated, non-contact combat between 2 players which uses an amalgamation of music, singing and martial arts movements

**Setting:** secondary schools

**Format:** face-to-face, group

**Number of sessions:** NR (9 months/3 terms)

**Duration of one session:** NR

**Target:** mental health prevention?

### Outcomes

### Notes

**Sponsorship source:** Organizational Research and Evaluation internal funds

**Author's name:** Shakeh Momartin

**Institution:** The New South Wales Service for the Treatment and Rehabilitation of Torture and Trauma Survivors (STARTTS)

**Email:** shakeh.momartin@health.nsw.gov.au

**Address:** Dr Shakeh Momartin, STARTTS, Carramar, New South Wales, Australia

## O'Shea 2000

### Study characteristics

### Methods

**Design:** pre–post

**Location of study centre:** West London primary school

**O'Shea 2000** (Continued)

	<b>Methods of qualitative study:</b> NA <b>Number of study centres:</b> 1
Participants	<b>Inclusion criteria:</b> assessed as having severe psychological problem by teacher or they had passed to stage 2 of the educational Code of Practice pathway <b>Exclusion criteria:</b> NR <b>Number of participants:</b> 14 <b>Age (mean):</b> 9.6 years <b>Age (range):</b> 7–11 years <b>Sex:</b> 86% male <b>Country of origin:</b> Middle East 65%, Africa 21%, Europe 14% <b>Country of settlement:</b> UK <b>Refugee status:</b> temporary leave 29%, exceptional leave 21%, indefinite leave 36%, NR 14% <b>Severity of condition:</b> assessed as having severe psychological problem <b>Number of dropouts for any reason:</b> 3
Interventions	<b>Name:</b> mental health service <b>Type:</b> specialised services <b>Description:</b> outreach mental health worker who provided treatment on the school site (weekly visits) <b>Setting:</b> primary school <b>Format:</b> face-to-face assessment, format would have varied according to service provided. <b>Number of sessions:</b> variable <b>Duration of one session:</b> variable <b>Target:</b> mental health treatment
Outcomes	
Notes	<b>Sponsorship source:</b> Action for Peoples in Conflict <b>Author's name:</b> Bridget O'Shea <b>Institution:</b> St Mary's Dept of Child and Adolescent Psychiatry, Westminster Mental Health Trust <b>Email:</b> NR <b>Address:</b> Department of Child and Adolescent Psychiatry, Westminster Mental Health Trust, Hounslow, UK

**Ooi 2016**
**Study characteristics**

Methods	<b>Design:</b> cluster-randomised controlled trial
---------	----------------------------------------------------



Ooi 2016 (Continued)

**Group:** parallel

**Locations of study centres:** Perth metropolitan area

**Number of study centres:** 11 schools

Participants

**Inclusion criteria:** self-report exposure to war or violence; lived in Australia for < 7 years; mild-to-moderate level of PTSD indicated by a score of 4–38 on the UCLA PTSD Reaction Index for DSM-IV

**Exclusion criteria:** clinical level of PTSD (score  $\geq$  38 UCLA PTSD Reaction Index), limited English proficiency, unaccompanied humanitarian entrant, currently receiving psychological therapy

**Group differences:** intervention group scored slightly higher on PTSD, depression, and emotional difficulty scales at baseline

Community-based intervention

**Number of participants:** 45

**Age (mean):** 13.13 (SD 1.50) years

**Age (range):** 10–16 years

**Sex:** 73% male

**Country of origin:** Africa 60%, Asia 11%, Middle East 20%

**Country of settlement:** Australia

**Refugee status:** –

**Severity of condition:** mild-to-moderate PTSD

**Number of dropouts for any reason:** 6

Control group

**Number of participants:** 37

**Age (mean):** 12.05 (SD 1.75) years

**Age (range):** 10–17 years

**Sex:** 54% male

**Country of origin:** Africa 51%, Asia 35%, Middle East 14%

**Country of settlement:** Australia

**Refugee status:** –

**Severity of condition:** mild-to-moderate PTSD

**Number of dropouts for any reason:** 0

Interventions

Community-based intervention

**Name:** TRTs

**Type:** focused non-specialist care

**Description:** CBT

**Setting:** school

**Format:** group

**Ooi 2016** (Continued)

**Number of sessions:** 8

**Duration of 1 session:** 1 hour

**Target:** prevention

Control group
**Name:** waiting list

**Type:** control

Outcomes	PTSD symptoms (instrument: CRIES-13, lower is better, endpoint data), depression (instrument: DSRS, lower is better, endpoint data), internalising behaviour (instrument: HSCL-37A, lower is better, endpoint data), externalising behaviour (instrument: HSCL-37A, lower is better, endpoint data)
----------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Notes	<p><b>Sponsorship source:</b> Curtin University School of Psychology PhD fund for CO and Western Australia Health Promotion Foundation (Healthway)</p> <p><b>Author's name:</b> Chew S Ooi</p> <p><b>Institution:</b> Curtin University</p> <p><b>Email:</b> chewsia@gmail.com</p> <p><b>Address:</b> Faculty of Health Sciences, School of Psychology and Speech Pathology, Curtin University, Perth, Western Australia, Australia</p>
-------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Pfeiffer 2017**
**Study characteristics**

Methods	<b>Design:</b> uncontrolled before-after study
---------	------------------------------------------------

Participants	<p><b>Inclusion criteria:</b> aged 13–21 years; not undergoing alternative behavioural treatment; stay in the current child welfare programme for <math>\geq 3</math> more months; no acute suicidality; exposure to <math>\geq 1</math> traumatic event(s); willingness and ability to attend weekly treatment sessions; German language</p> <p><b>Exclusion criteria:</b> –</p> <p><b>Number of participants:</b> 36</p> <p><b>Age (mean):</b> 16.7 (SD 0.8) years</p> <p><b>Age (range):</b> 14–18 years</p> <p><b>Sex:</b> 100% male</p> <p><b>Country of origin:</b> Afghanistan (14); Eritrea (3); Gambia, Pakistan, and Albania (2 each); Syria, Somalia, Sudan, Iraq, Nigeria, and Ghana (1 each)</p> <p><b>Country of settlement:</b> Germany</p> <p><b>Refugee status:</b> unaccompanied refugees</p> <p><b>Severity of condition:</b> moderate severity PTSD on screening instrument</p> <p><b>Number of dropouts for any reason:</b> 7</p>
--------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Interventions	<p><b>Name:</b> Mein Weg</p> <p><b>Type:</b> focused non-specialist</p>
---------------	-------------------------------------------------------------------------

**Pfeiffer 2017** (Continued)

**Description:** short-term intervention delivered by social workers with trauma-focused cognitive behavioural as well as group-processing principles

**Setting:** child and adolescent mental health service

Format: group

**Number of sessions:** 6

**Duration of 1 session:** 90 minutes

**Target:** treatment

Outcomes	NA
Notes	<p><b>Sponsorship source:</b> Otto-Kaßbohrer Foundation</p> <p><b>Author's name:</b> Elisa Pfeiffer</p> <p><b>Institution:</b> University Hospital Ulm</p> <p><b>Email:</b> elisa.pfeiffer@uniklinik-ulm.de</p> <p><b>Address:</b> University Hospital Ulm, Clinic for Child and Adolescent Psychiatry/Psychotherapy, Ulm, Germany</p>

**Quinlan 2016**
**Study characteristics**

Methods	<p><b>Design:</b> non-randomized controlled trial</p> <p><b>Group:</b> parallel group</p> <p><b>Location of study centre:</b> Brisbane, Australia</p> <p><b>Methods of qualitative study:</b> NA</p> <p><b>Number of study centres:</b> 1</p>
Participants	<p><b>Inclusion criteria:</b> NR</p> <p><b>Exclusion criteria:</b> NR</p> <p><u>Community-based intervention</u></p> <p><b>Number of participants:</b> 22</p> <p><b>Age (mean):</b> 15 years</p> <p><b>Age (range):</b> NR</p> <p><b>Sex:</b> 36% male</p> <p><b>Country of origin:</b> Middle East, East Asia, Africa</p> <p><b>Country of settlement:</b> Australia</p> <p><b>Refugee status:</b> refugee students</p> <p><b>Severity of condition:</b> NA</p> <p><b>Number of dropouts for any reason:</b> none mentioned</p>

**Quinlan 2016** (Continued)

Control group

**Number of participants:** 20

**Age (mean):** 15 years

**Age (range):** NR

**Sex:** 45% male

**Country of origin:** Middle East, East Asia, Africa

**Country of settlement:** Australia

**Refugee status:** refugee students

**Severity of condition:** NA

**Number of dropouts for any reason:** none mentioned

Interventions

**Name:** HEAL (Home of Expressive Arts and Learning)

**Type:** focused, non-specialist care

**Description:** arts therapy activities and music therapy

**Setting:** intensive English language state high school

**Format:** 1-to-1 and group

**Number of sessions:** 10 (once per week)

**Duration of 1 session:** 45–60 minutes

**Target:** treatment or prevention

Control group

**No intervention**

Outcomes

Notes

**Sponsorship source:** NR

**Comments:** none

**Authors name:** Rosalind Quinlan

**Institution:** School of Psychology and Counselling, Queensland University of Technology

**Email:** r.schweitzer@qut.edu.au

**Address:** School of Psychology and Counselling, Queensland University of Technology, Brisbane, Queensland, Australia

**Rowe 2017**
**Study characteristics**

Methods

**Design:** before–after study without control group

**Locations of study centres:** Piedmont region of North Carolina, USA

**Rowe 2017** (Continued)

	<p><b>Methods of qualitative study:</b> focus groups</p> <p><b>Number of study centres:</b> unclear</p>
Participants	<p><b>Inclusion criteria:</b> Burmese refugees aged 11–20 years who participated in the intervention programme, as long as therapists could feasibly conduct the assessments without compromising client confidentiality.</p> <p><b>Exclusion criteria:</b> NA</p> <p><b>Number of participants:</b> 30</p> <p><b>Age (mean):</b> 15 years</p> <p><b>Age (range):</b> 11–20 years</p> <p><b>Sex:</b> 67% male</p> <p><b>Country of origin:</b> Burma (now Myanmar) or Thailand</p> <p><b>Country of settlement:</b> USA</p> <p><b>Refugee status:</b> refugees</p> <p><b>Severity of condition:</b> no diagnoses; 90% had directly witnessed a traumatic event.</p> <p><b>Number of dropouts for any reason:</b> 4</p>
Interventions	<p><b>Name:</b> Burma Art Therapy Program (BATP)</p> <p><b>Type:</b> specialised services</p> <p><b>Description:</b> psychotherapy for traumatised adolescents, using art making to process traumatic images</p> <p><b>Setting:</b> middle/high school</p> <p><b>Format:</b> mixed; individual and group</p> <p><b>Number of sessions:</b> 16</p> <p><b>Duration of 1 session:</b> 50 minutes</p> <p><b>Target:</b> prevention (or treatment but not diagnosed)</p>
Outcomes	
Notes	<p><b>Sponsorship source:</b> NR</p> <p><b>Author's name:</b> Cassandra Rowe</p> <p><b>Institution:</b> North Carolina Coalition Against Domestic Violence, North Carolina, USA</p> <p><b>Email:</b> cassandrajrowe@gmail.com</p> <p><b>Address:</b> Palladium Group, Durham, North Carolina, USA</p>

**Samec 2006**

**Study characteristics**

Methods	<b>Study design:</b> retrospective cohort study
---------	-------------------------------------------------

**Samec 2006** (Continued)

	<p><b>Location of study centre:</b> Sweden</p> <p><b>Methods of qualitative study:</b> NR</p> <p><b>Number of study centres:</b> NR</p>
Participants	<p><b>Inclusion criteria:</b> adolescent refugees</p> <p><b>Exclusion criteria:</b> –</p> <p><b>Number of participants:</b> 98</p> <p><b>Age (median):</b> 17 years</p> <p><b>Age (range):</b> 16–20 years</p> <p><b>Sex:</b> NR</p> <p><b>Country of origin:</b> Yugoslavia, China, Iraq, Morocco, Thailand, Rwanda, Greece, Turkey, Eritrea, Somalia, Kuwait and South America</p> <p><b>Country of settlement:</b> Sweden</p> <p><b>Refugee status:</b> NR</p> <p><b>Severity of condition:</b> NR</p> <p><b>Number of dropouts for any reason:</b> NR</p>
Interventions	<p><b>Name:</b> Angel Pobletes short-term therapy</p> <p><b>Type:</b> focused, non-specialist care</p> <p><b>Description:</b> short-term group therapy based on Angel Pobletes model, including EMDR</p> <p><b>Setting:</b> secondary school</p> <p><b>Format:</b> group</p> <p><b>Number of sessions:</b> 8</p> <p><b>Duration of 1 session:</b> NR</p> <p><b>Target:</b> treatment (no diagnoses)</p>
Outcomes	Not applicable.
Notes	<p><b>Sponsorship source:</b> NR</p> <p><b>Author's name:</b> James R Samec</p> <p><b>Institution:</b> NR</p> <p><b>Email:</b> ames.samec@telia.com</p> <p><b>Address:</b> Karlbergsvägen 49, 2 tr., 113 35 Stockholm, Sverige</p> <p>Translated from Swedish by Filip Lyng Lindgren.</p>

**Sarkadi 2018**
**Study characteristics**

**Sarkadi 2018** (Continued)

Methods	<p><b>Design:</b> pre-post with qualitative element</p> <p><b>Location of study centres:</b> –</p> <p><b>Methods of qualitative study:</b> focus group interviews; content analysis</p>
Participants	<p><b>Inclusion criteria:</b> unaccompanied refugee minors aged 13–18 years who scored <math>\geq 17</math> on CRIES-8 for PTSD symptoms and could nominate a caregiver to participate in sessions.</p> <p><b>Exclusion criteria:</b> NR</p> <p><b>Number of participants:</b> 55 (data only provided for the 46 who were retained)</p> <p><b>Age (mean):</b> 16.13 (SD 0.96) years</p> <p><b>Age (range):</b> 14–18 years</p> <p><b>Sex:</b> 93% male</p> <p><b>Country of origin:</b> NR</p> <p><b>Country of settlement:</b> Sweden</p> <p><b>Refugee status:</b> unaccompanied refugee minor</p> <p><b>Severity of condition:</b> PTSD symptoms present</p> <p><b>Number of dropouts for any reason:</b> 9 (plus 14 that did not complete baseline)</p>
Interventions	<p><b>Name:</b> Teaching Recovery Techniques</p> <p><b>Type:</b> specialised services</p> <p><b>Description:</b> group trauma-targeted therapy including psychoeducation, relation skills, affective modulation skills, cognitive coping and processing, trauma narrative, in vivo mastery of trauma reminders and enhancing future safety and development for children and their caregivers</p> <p><b>Setting:</b> asylum healthcare centre, treatment centre, school health services, group homes for unaccompanied refugee minors</p> <p><b>Format:</b> group but with some individual sessions</p> <p><b>Number of sessions:</b> 5</p> <p><b>Duration of 1 session:</b> 90–120 minutes</p> <p><b>Target:</b> prevention or treatment</p>
Outcomes	
Notes	<p><b>Sponsorship source:</b> Ideas for Life Foundation, Skandia and the National Public Health Agency, #20161220 as well as the joint grant from FORMAS, Vetenskapsrådet, FAS and VINNOVA (Grant number 259-2012-68)</p> <p><b>Author's name:</b> Anna Sarkadi</p> <p><b>Institution:</b> Uppsala University</p> <p><b>Email:</b> anna.sarkadi@pubcare.uu.se</p> <p><b>Address:</b> Child Health and Parenting (CHAP), Department of Public Health and Caring Sciences, Uppsala University, BMC, Uppsala, Sweden</p>

**Scheiber 2019**
**Study characteristics**

Methods	<p><b>Design:</b> non-randomised controlled trial</p> <p><b>Group:</b> parallel group</p> <p><b>Location of study centre:</b> Austria</p> <p><b>Methods of qualitative study:</b> NA</p> <p><b>Number of study centres:</b> 1</p>
Participants	<p><b>Inclusion criteria:</b> resident at refugee centre for unaccompanied minors; aged 14–17 years; appropriate language skills to complete screening instruments; understanding of taking part in research; willingness to take part in intervention</p> <p><b>Exclusion criteria:</b> –</p> <p><u>Community-based intervention</u></p> <p><b>Number of participants:</b> 18</p> <p><b>Age (mean):</b> 16.67 (SD 0.72) years</p> <p><b>Age (range):</b> 14–17 years</p> <p><b>Sex:</b> 100% male</p> <p><b>Country of origin:</b> Afghanistan (14), Pakistan (1)</p> <p><b>Country of settlement:</b> Austria</p> <p><b>Refugee status:</b> refugee</p> <p><b>Severity of condition:</b> –</p> <p><b>Number of dropouts for any reason:</b> 3</p> <p><u>Control group</u></p> <p><b>Number of participants:</b> 37</p> <p><b>Age (mean):</b> 16.19 (SD 0.78) years</p> <p><b>Age (range):</b> 14–17 years</p> <p><b>Sex:</b> 100% male</p> <p><b>Country of origin:</b> Afghanistan (32)</p> <p><b>Country of settlement:</b> Austria</p> <p><b>Refugee status:</b> refugee</p> <p><b>Severity of condition:</b> –</p> <p><b>Number of dropouts for any reason:</b> 5</p>
Interventions	<p><u>Community-based intervention</u></p> <p><b>Name:</b> preventive resilience training</p> <p><b>Type:</b> specialised services</p> <p><b>Description:</b> group training delivered by mental health professionals and translators.</p>



**Scheiber 2019** (Continued)

**Setting:** refugee centre

**Format:** group

**Number of sessions:** 6

**Duration of 1 session:** 90 minutes

**Target:** prevention

Control group

**Name:** waiting list

**Type:** control

---

 Outcomes

---

 Notes

**Sponsorship source:** NR

**Comments:** described as a randomised controlled trial but some language groups were automatically added to control group; not truly randomised.

**Author's name:** Barbara Scheiber

**Institution:** Salzburg University

**Email:** barbara.scheiber@stud.sbg.sc.at

**Address:** Salzburg University, Salzburg, Austria

---

**Stæhr 2001**


---

**Study characteristics**

## Methods

**Study design:** non-randomised controlled trial

**Location of study centre:** Denmark

**Methods of qualitative study:** NA

**Number of study centres:** NR

## Participants

**Inclusion criteria:** aged 7–18 years; in Danish Red Cross Asylum Department (DRK) Kosovo centres

**Exclusion criteria:** none

**Number of participants:** 464

**Age (mean):** NR

**Age (range):** 7–17 years

**Sex:** 51% male

**Country of origin:** Kosovo

**Country of settlement:** Denmark

**Refugee status:** refugees (no details provided)

**Severity of condition:** most children showed symptoms of PTSD

**Stæhr 2001** (Continued)

**Number of dropouts for any reason:** 426 (by third data point)

Interventions

**Name:** psychoeducation

**Type:** focused, non-specialist care

**Description:** short-term psychoeducation to build resilience, based on Lindskov and Abdalla (1999)

**Setting:** refugee centres

**Format:** group

**Number of sessions:** not reported

**Duration of 1 session:** 2 hours

**Target:** prevention

Outcomes

Notes

**Sponsorship source:** NR

**Author's name:** Mia Antoni Stæhr

**Institution:** Danish Red Cross's Asylum Department

**Email:** NR

**Address:** NR

Translated from Danish by Mohammed Altameemi and Connor Brenna.

**Unterhitzberger 2016**

**Study characteristics**

Methods

**Design:** case study

**Location of study centre:** Ingolstadt, Germany

**Number of study centres:** 1

Participants

**Number of participants:** 1

**Age:** 17 years

**Sex:** 100% female

**Country of origin:** East Africa

**Country of settlement:** Germany

**Refugee status:** refugee

**Severity of condition:** PTSD

**Number of dropouts for any reason:** 0

Interventions

**Name:** trauma-focused CBT

**Type:** specialist services

**Unterhitzenberger 2016** (Continued)

**Description:** trauma-focused CBT

**Setting:** group home

**Format:** 1-to-1

**Number of sessions:** 12 plus 1 follow-up 6 months later

**Duration of 1 session:** –

**Target:** treatment

## Outcomes

## Notes

**Sponsorship source:** none

**Author's name:** Johanna Unterhitzenberger

**Institution:** Catholic University Eichstatt-Ingolstadt

**Email:** johanna.unterhitzenberger@ku.de

**Address:** Clinical and Biological Psychology, Catholic University, Eichstatt, Germany

**Unterhitzenberger 2019**
**Study characteristics**

## Methods

**Design:** uncontrolled pilot study pre–post

**Location of study centre:** Eichstätt-Ingolstadt

**Number of study centres:** 1

## Participants

**Inclusion criteria:** arrived in Germany unaccompanied and aged < 18 years; current age < 21 years; PTSD diagnosis according to DSM-5; living in a facility run by the German Child and Adolescent Welfare agency; stability of living situation ( $\geq 4$  weeks in the current group home); availability of a caregiver to take part in assessment and psychotherapy

**Exclusion criteria:** acute suicidality or risk of harm to others, acute life-threatening self-harm, bipolar disorder, psychotic disorder, acute substance abuse

**Number of participants:** 26

**Age (mean):** 17.1 (SD 1.0) years

**Age (range):** 15–19 years

**Sex:** 100% male

**Country of origin:** Afghanistan 73%; Eritrea, Gambia, Iran, Sierra Leone, Somalia, Sudan, Syria 4% each

**Country of settlement:** Germany

**Refugee status:** unaccompanied refugee minors

**Severity of condition:** PTSD

**Number of dropouts for any reason:** 12

## Interventions

**Name:** trauma-focused CBT

**Unterhitzenberger 2019** (Continued)

**Type:** specialised services

**Description:** psychological therapy using an integrated combination of psychoeducation, relaxation, trauma narrative and cognitive processing, and exposure therapy. Sessions with and without caregiver.

**Setting:** university psychotherapeutic outpatient clinic

**Format:** 1-to-1, face-to-face

**Number of sessions:** 15

**Duration of 1 session:** 100 minutes

**Target:** treatment

---

 Outcomes

---

 Notes

**Sponsorship source:** financing of participant incentives was supported by ProFOR+, a funding programme of the Catholic University of Eichstätt-Ingolstadt. The publication of this work was supported by the German Research Foundation (DFG) within the funding programme Open Access Publishing.

**Author's name:** Johanna Unterhitzenberger

**Institution:** Catholic University Eichstätt-Ingolstadt

**Email:** johanna.unterhitzenberger@ku.de

**Address:** Department of Psychology, Catholic University Eichstätt-Ingolstadt, Eichstätt, Germany

---

**Walg 2020**
**Study characteristics**


---

## Methods

**Design:** cluster-randomised controlled trial

**Group:** parallel group

**Locations of study centres:** Germany

**Methods of qualitative study:** NA

**Number of study centres:** 9

---

## Participants

**Inclusion criteria:** living in accommodation for unaccompanied minors;  $\geq 3$  months schooling in Germany

**Exclusion criteria:** developmental disorders; psychosis; substance abuse; illiterate

**Group differences:** no statistically significant differences: "unterschieden sich Trainings- und Kontrollgruppe weder bezüglich demografischer Daten noch bezüglich der psychischen Belastung bei der Prä-Messung." [training and control groups differed neither in terms of demographic data nor in terms of psychological stress in pre-measurement]

Community-based intervention

**Number of participants:** 23

**Age (mean):** 17.1 (SD 1.0) years

**Age (range):** 15–18 years

**Sex:** 100% male

---

**Walg 2020** (Continued)

**Country of origin:** Afghanistan (10), Syria (3), New Guinea (3), other (7)

**Country of settlement:** Germany

**Refugee status:** –

**Severity of condition:** –

**Number of dropouts for any reason:** 7

Control group

**Number of participants:** 23

**Age (mean):** 16.8 (SD 0.9) years

**Age (range):** 15–18 years

**Sex:** 100% male

**Country of origin:** Afghanistan (11), Syria (6), New Guinea (2), other (4)

**Country of settlement:** Germany

**Refugee status:** –

**Severity of condition:** –

**Number of dropouts for any reason:** 6

## Interventions

Community-based intervention

**Name:** Stabilization Training for Adolescent Refugees with Trauma Induced Disorders

**Type:** specialised services

**Description:** therapy based on CBT and dialectic behaviour therapy to achieve emotional and psychological 'stability'.

**Setting:** accommodation for unaccompanied refugee minors

**Format:** group

**Number of sessions:** 6

**Duration of 1 session:** 90 minutes

**Target:** intervention appears to be treatment but not diagnoses prior to taking part.

Control group

**Name:** waiting list

**Type:** control

## Outcomes

Psychological distress (instrument: Brief Symptoms Checklist, lower is better, endpoint data); child behaviour (instrument: Child Behaviour Checklist, lower is better, endpoint data)

## Notes

**Sponsorship source:** NR

**Author's name:** Marco Walg

**Institution:** Sana-Klinikum Remscheid

**Email:** marco.walg@sana.de

Walg 2020 (Continued)

**Address:** Zentrum für seelische Gesundheit des Kindes- und Jugendalters [Centre for Mental Health of Childhood and Adolescence], Wuppertal, Germany

BASC: Behavior Assessment System for Children; CBT: cognitive-behavioural therapy; CRIES-13: Children's Revised Impact of Event Scale; DSM-IV: Diagnostic and Statistical Manual of Mental Disorders, 4th Edition; DSM-5: Diagnostic and Statistical Manual of Mental Disorders, 5th edition; DSRS: Depression Self-Rating Scale; EMDR-IGTP: Eye Movement Desensitization and Reprocessing Integrative Group Treatment Protocol; FACES: Family, Adult, and Child Enhancement Services; HSCL-37A: Hopkins Symptom Checklist-37; NA: not available; NR: not reported; PTSD: post-traumatic stress disorder; SD: standard deviation; TRT: Teaching Recovery Technique; UCLA: University of California, Los Angeles.

### Characteristics of excluded studies [ordered by study ID]

Study	Reason for exclusion
Betancourt 2020	Wrong intervention
Bohnacker 2017	Not community-based
Brar-Josan 2019	Wrong intervention
Brückner 2020	Not community-based
Cumming 2009	Wrong outcomes (not mental health)
Dhillon 2020	Wrong outcomes (not mental health)
Dixius 2017	Not community-based
Feen-Calligan 2020	Not community-based
Harris 2009	Wrong outcomes (not mental health)
Marsh 2012	Wrong outcomes (not mental health)
Mattenschlager 2016	Wrong intervention
Mooren 2011	Wrong intervention
Naidoo 2009	Wrong outcomes (not mental health)
Neuner 2019	Not community-based
Neurohr 2019	Wrong intervention
Peltonen 2015	Not community-based
Rosso 2016	Wrong outcomes (not mental health)
Rousseau 2006	Wrong outcomes (not mental health)
Ruf 2006	Not community-based
Ruf 2010	Not community-based
Sonn 2013	Wrong outcomes (not mental health)

Study	Reason for exclusion
Ugurlu 2016	Not community-based
Unterhitzberger 2015	Not community-based
Weekes 2011	Wrong outcomes (not mental health)

### Characteristics of studies awaiting classification *[ordered by study ID]*

#### Pfeiffer 2018

Methods	<b>Design:</b> randomised controlled trial  <b>Number of study centres:</b> 7 co-operating child welfare agencies
Participants	Unaccompanied refugees settled in Germany age 13–21 years with moderate PTSD symptoms
Interventions	Mein Weg (short-term psychotherapy treatment delivered by social workers) and usual care
Outcomes	Symptoms of PTSD; symptoms of depression
Notes	<b>Author's name:</b> Elisa Pfeiffer  <b>Institution:</b> Universitätsklinikum Ulm  <b>Email:</b> elisa.pfeiffer@uniklinik-ulm.de  <b>Address:</b> University Hospital Ulm, Clinic for Child and Adolescent Psychiatry/Psychotherapy, Ulm, Germany  <b>Status:</b> data for children only (age < 19 years) requested from first author, but not received before submission of the review.

PTSD: post-traumatic stress disorder.

### Characteristics of ongoing studies *[ordered by study ID]*

#### Durbeej 2021

Study name	The RefugeesWellSchool Trial
Methods	Cluster randomised controlled trial
Participants	Refugee youths
Interventions	Teaching Recovery Techniques and In-service Teacher Training
Outcomes	Primary outcome: PTSD symptoms (CRIES-13)
Starting date	
Contact information	
Notes	

**Rosner 2020**

Study name	
Methods	Cluster RCT
Participants	Young refugees
Interventions	BETTER CARE
Outcomes	Primary outcome: PTSD (CATS-2)
Starting date	
Contact information	
Notes	

**Sarkadi 2020**

Study name	Swedish Unaccompanied yOuth Refugee Trial; SUPpORT
Methods	Randomised controlled trial
Participants	Unaccompanied refugee youths
Interventions	Teaching Recovery Techniques
Outcomes	PTSD
Starting date	
Contact information	
Notes	

**Stiles 2019**

Study name	
Methods	
Participants	Refugee youths
Interventions	Tree of Life therapy
Outcomes	Child behaviour, resilience, stress
Starting date	
Contact information	



**Stiles 2019** (Continued)

Notes

**Warner 2020**







Study name	Accompanied refugees In Sweden Trial; ASsIST
Methods	Cluster-RCT
Participants	Refugee children
Interventions	Teaching Recovery Techniques
Outcomes	PTSD
Starting date	
Contact information	
Notes	

CRIES-13: Children's Revised Impact of Event Scale; PTSD: post-traumatic stress disorder.







**RISK OF BIAS**

**Legend:**  Low risk of bias  High risk of bias  Some concerns

**Risk of bias for analysis 1.1 Symptoms of post-traumatic stress disorder at 3 months post-treatment**

Study	Bias					Overall
	Randomisation process	Deviations from intended interventions	Missing outcome data	Measurement of the outcome	Selection of the reported results	
Ooi 2016						

**Risk of bias for analysis 1.2 Symptoms of depression at 3 months post-treatment**

Study	Bias					Overall
	Randomisation process	Deviations from intended interventions	Missing outcome data	Measurement of the outcome	Selection of the reported results	
Ooi 2016						

**Risk of bias for analysis 1.3 Psychological distress post-treatment**

Study	Bias					Overall
	Randomisation process	Deviations from intended interventions	Missing outcome data	Measurement of the outcome	Selection of the reported results	
Walg 2020						

**Risk of bias for analysis 1.4 Child behaviour post-treatment**

Study	Bias					Overall
	Randomisation process	Deviations from intended interventions	Missing outcome data	Measurement of the outcome	Selection of the reported results	
Walg 2020						

**Risk of bias for analysis 1.5 Externalising behaviours (up to 3 months post-treatment)**

Study	Bias					Overall
	Randomisation process	Deviations from intended interventions	Missing outcome data	Measurement of the outcome	Selection of the reported results	
Baker 2006						
Ooi 2016						

**Risk of bias for analysis 1.6 Internalising behaviours (up to 3 months post-treatment)**

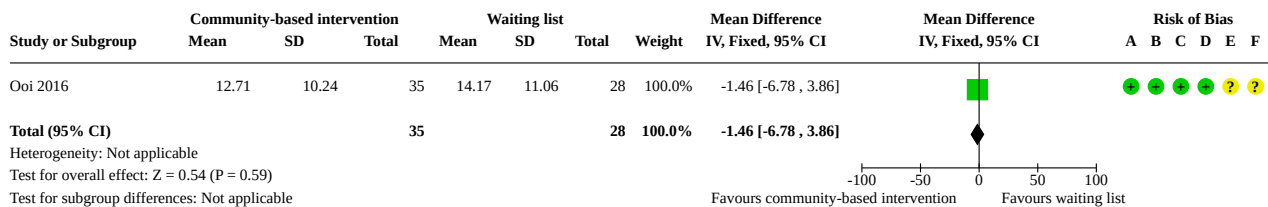
Study	Bias					Overall
	Randomisation process	Deviations from intended interventions	Missing outcome data	Measurement of the outcome	Selection of the reported results	
Baker 2006						
Ooi 2016						

**DATA AND ANALYSES**

**Comparison 1. Community-based intervention versus control**

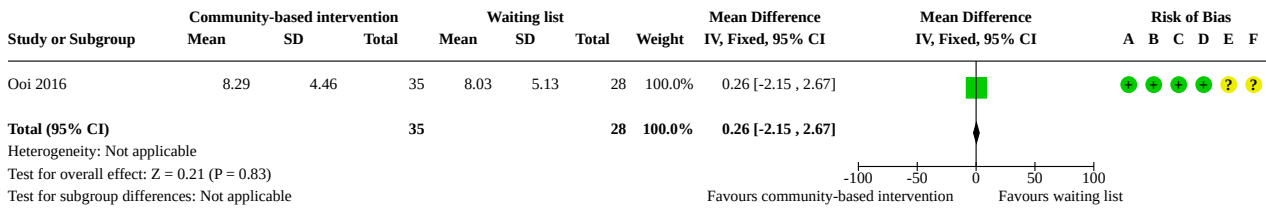
Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1.1 Symptoms of post-traumatic stress disorder at 3 months post-treatment	1	63	Mean Difference (IV, Fixed, 95% CI)	-1.46 [-6.78, 3.86]
1.2 Symptoms of depression at 3 months post-treatment	1	63	Mean Difference (IV, Fixed, 95% CI)	0.26 [-2.15, 2.67]
1.3 Psychological distress post-treatment	1	16	Mean Difference (IV, Fixed, 95% CI)	-10.50 [-47.94, 26.94]
1.4 Child behaviour post-treatment	1	16	Mean Difference (IV, Fixed, 95% CI)	-8.70 [-27.71, 10.31]
1.5 Externalising behaviours (up to 3 months post-treatment)	2		Mean Difference (IV, Random, 95% CI)	Totals not selected
1.6 Internalising behaviours (up to 3 months post-treatment)	2		Mean Difference (IV, Random, 95% CI)	Totals not selected

**Analysis 1.1. Comparison 1: Community-based intervention versus control, Outcome 1: Symptoms of post-traumatic stress disorder at 3 months post-treatment**



**Risk of bias legend**  
 (A) Bias arising from the randomization process  
 (B) Bias due to deviations from intended interventions  
 (C) Bias due to missing outcome data  
 (D) Bias in measurement of the outcome  
 (E) Bias in selection of the reported result  
 (F) Overall bias

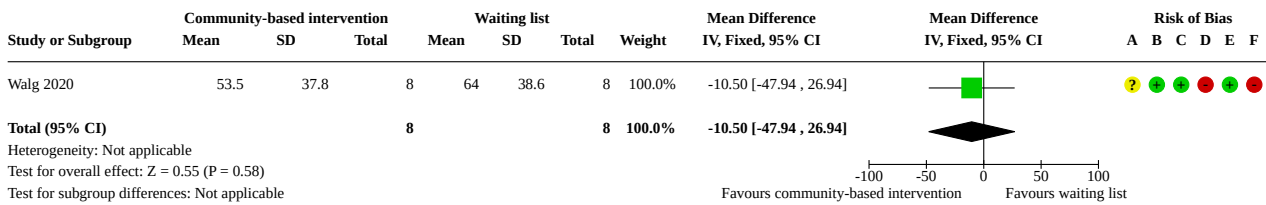
### Analysis 1.2. Comparison 1: Community-based intervention versus control, Outcome 2: Symptoms of depression at 3 months post-treatment



**Risk of bias legend**

- (A) Bias arising from the randomization process
- (B) Bias due to deviations from intended interventions
- (C) Bias due to missing outcome data
- (D) Bias in measurement of the outcome
- (E) Bias in selection of the reported result
- (F) Overall bias

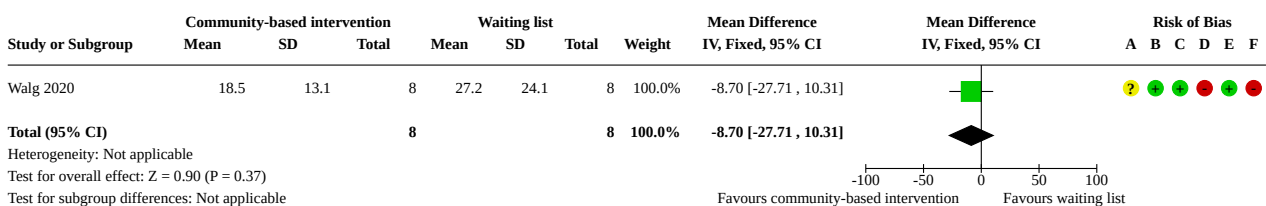
### Analysis 1.3. Comparison 1: Community-based intervention versus control, Outcome 3: Psychological distress post-treatment



**Risk of bias legend**

- (A) Bias arising from the randomization process
- (B) Bias due to deviations from intended interventions
- (C) Bias due to missing outcome data
- (D) Bias in measurement of the outcome
- (E) Bias in selection of the reported result
- (F) Overall bias

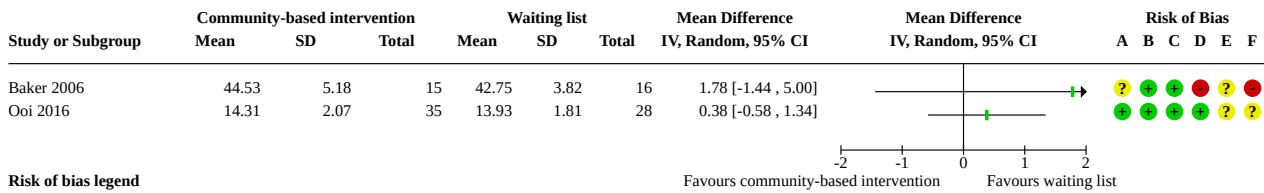
### Analysis 1.4. Comparison 1: Community-based intervention versus control, Outcome 4: Child behaviour post-treatment



**Risk of bias legend**

- (A) Bias arising from the randomization process
- (B) Bias due to deviations from intended interventions
- (C) Bias due to missing outcome data
- (D) Bias in measurement of the outcome
- (E) Bias in selection of the reported result
- (F) Overall bias

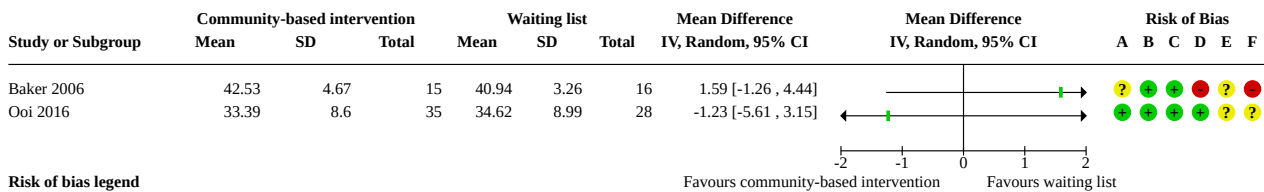
**Analysis 1.5. Comparison 1: Community-based intervention versus control, Outcome 5: Externalising behaviours (up to 3 months post-treatment)**



**Risk of bias legend**

- (A) Bias arising from the randomization process
- (B) Bias due to deviations from intended interventions
- (C) Bias due to missing outcome data
- (D) Bias in measurement of the outcome
- (E) Bias in selection of the reported result
- (F) Overall bias

**Analysis 1.6. Comparison 1: Community-based intervention versus control, Outcome 6: Internalising behaviours (up to 3 months post-treatment)**



**Risk of bias legend**

- (A) Bias arising from the randomization process
- (B) Bias due to deviations from intended interventions
- (C) Bias due to missing outcome data
- (D) Bias in measurement of the outcome
- (E) Bias in selection of the reported result
- (F) Overall bias

**APPENDICES**

**Appendix 1. Database search strategies**

We conducted some searches between August 2020 and February 2021. The search strategies are listed below in chronological order.

Search-4 (21 February 2021)

- Cochrane Library search, Issue 2 of 12, 2021, N = 19 (new)
- Ovid multi-file search – MEDLINE/Embase/PsycINFO N = 1320
- Educational Resources Information Center (ERIC) & British Education Index (BEI) (EBSCOHost) N = 496
- Trials Register of Promoting Health Interventions (TRoPHI) N = 108
- International Bibliography of the Social Sciences (IBSS) & Sociological Abstracts (ProQuest) N = 295

Total, N = 2238

Duplicates removed, N = 1046

New to screen, N = 1192

Database: APA PsycInfo <1806 to February week 3 2021>, Embase <1974 to 2021 week 07>, Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily <1946 to 19 February 2021>

Search strategy:

-----  
 1 (unaccompanied adj2 refugee?).mp. (426)  
 2 (refugee? and (adolescent? or children? or schoolchild\* or boys or girls or minors or young or students or teens or teenage\* or youth\* or family or families)).ti. (3802)

- 3 (refugee? adj5 (adolescent? or children? or schoolchild\* or boys or girls or minors or young or students or teens or teenage\* or youth? or family or families?) adj5 (exile? or from or ((in or host or receiving) adj3 (countr\* or nation)) or arriving or arrived or arrival or clearing or newcomer? or new-comer? or resettl\* or re-settl\* or settle\* or setting? or transit\* or (postmigrat\* or ((post or after) adj migrat\*))))).mp. (1083)
- 4 ((migrant? or migrat\* or immigra\* or displaced) and refugee? and (adolescent? or children? or schoolchild\* or boys or girls or minors or young or students or teens or teenage\* or youth? or family or families)).mp. (8199)
- 5 ((migrant? or migrat\* or immigra\*) adj5 (adolescent? or children? or schoolchild\* or boys or girls or minors or young or students or teens or teenage\* or youth? or family or families) adj5 (war or wars or disaster? or humanitarian or survivors or tortur\* or camps or genocide or armed conflict? or mass execution? or violence or cataclysmic or catastrophe\* or disaster or disasters or drought? or earthquake? or evacuations or evacuated or evacuee? or exile? or famine? or flood? or hurricane? or cyclone? or landslide? or land slide? or mass casualt\* or tsunami? or tidal wave? or volcan\*)).mp. (382)
- 6 or/1-5 (11120)
- 7 (intervention? or program\* or therap\* or trial? or workshop?).ti. (3555748)
- 8 (counseling or counselling or psychotherap\* or psycho\* therap\* or psychoeducat\* or psycho educat\* or psychological first aid or (therap\* adj3 (intervention? or program\* or project? or workshop?))).mp. (1072845)
- 9 (cogniti\* behavio\* or CBT\* or cCBT or CBASP or behavio\* therap\* or behavio\* activat\* or metacognitive or meta-cognitive).mp. (268946)
- 10 ((cogniti\* or behavi\* or bereav\* or grief or grieving or creative or cultural or multicultural\* or multi-cultural\* or transcultural or trans-cultural or educational or expressive or drama or dance\* or dancing or music\* or play\* or art or drawing or writing or language? or linguistic\* or narrative? or holistic or multimodal\* or multi-modal\* or multifacet\* or multi-facet\* or multi-factor\* or multifactor\* or multi-level or multilevel or multitiered or multi-tiered or complex or socioeconomic or intersectoral or inter-sectoral or intersectional or inter-sectional) adj3 (counsel\* or method\* or technique? or train\* or teach\* or therap\* or intervention? or program\* or project? or practice or practis\* or treatment? or workshop?)).mp. (1235475)
- 11 ((healing or psychological or psychosocial or reality or reciprocal inhibition or resilien\* or recovery or sensitivity or skills oriented or stabili\* or stress management or support\* or system\* or trauma\* focus\* or mental health or mental well\* or ((school\* or highschool\* college?) adj based)) adj3 (counsel\* or method\* or technique? or train\* or teach\* or intervention? or program\* or project? or therap\* or treatment? or workshop?)).mp. (1336175)
- 12 ((prevent\* or promot\* or school? or classroom? or curricul\* or communit\*) adj3 (counsel\* or method\* or technique? or train\* or teach\* or therap\* or intervention? or program\* or project? or practice or practis\* or workshop?)).mp. (927802)
- 13 (confidence building or conflict resolution or coping skills or psychological recovery or recovery skills or life skills or solution focus\* or (problem? adj (focus\* or manage\* or sol\*)) or positive activities).mp. (184950)
- 14 ((educat\* adj3 train\*) or ((education\* or training) adj3 (course? or program\* or workshop?))).mp. (481761)
- 15 (health promotion or ((prevent\* or promot\* or improv\*) adj (emotion\* or mental\* or mood\* or psychological or well\*)) or empower\*).mp. (382491)
- 16 ((short term or family or families or group) adj (counsel\* or support or therap\*)).mp. (136254)
- 17 (((social or psychosocial) adj (counsel\* or support or therap\*)) or support group?).mp. (309427)
- 18 (exposure therap\* or exposure focus\* or trauma focus\* or TF-CBT or TF-CBT or trauma therap\* or trauma\* narrative? or Mein Weg or Bounce Back or CBITS or KIDNET).mp. (16609)
- 19 (eye movement desensiti\* or EMDR).mp. (4218)
- 20 (mentoring or ((peer or mentor\*) adj3 support\*)).mp. (52939)
- 21 ((migrant\* or migrat\* or immigra\* or refugee?) adj (journey or journies or story or stories)).mp. (334)
- 22 cultural broker\*.mp. (344)
- 23 protective factor?.mp. (68254)
- 24 or/7-23 (7548423)
- 25 6 and 24 (3931)
- 26 ((trial? or study or studies or intervention? or framework? or workshop? or controlled or uncontrolled or un-controlled or observational or longitudinal or prospective\* or retrospective\* or case control\* or case series or cohort? or random\* or nonrandom\* or RCT or cRCT or control group? or intervention group? or subgroup\* or sub-group\* or wait\* list\* or waitlist\* or experimental or quasixperiment\* or quasi-experiment\* or quasirandom\* or quasi-random\* or pseudoexperiment\* or pseudo-experiment\* or pseudorandom\* or pseudo-random\* or ((pretest or pre-test) and (posttest or post-test)) or prepost or pre-post or (pre adj3 post) or postintervention\* or post-intervention\* or (before adj3 after) or CBA or time series or time point? or repeat\* measur\* or mixed method\*) and (analy\* or data or effect\* or efficac\* or evaluat\* or evidence or outcome? or results or aim or aims or address\* or assess\* or compar\* or disseminat\* or endors\* or findings or implement\* or impact or investigat\* or feedback or feed\* back or follow\* up? or followup? or manualized or methodolog\* or model\* or pilot or exploratory or quantitative or qualitative or questionnaire? or interview\* or focus group? or report or self-report\* or themes or thematic or research based or (feasib\* and acceptab\*) or feasibility or acceptability or applicability or best practice? or limitations or ((further or future) adj research))).mp. (35905254)
- 27 25 and 26 (3010)
- 28 (affective disorder\* or mental\* or psychological\* or stress\* or distress\* or adjustment disorder\* or AD/OS or agoraphobi\* or phobi\* or anxiety or GAD or (combat adj (disorder\* or fatigue or neuros\* or syndrome\*)) or compulsi\* or (obsessive adj2 disorder\*) or OCD or depressed or depression or depressive? or dysphori\* or dysthymi\* or melanchol\* or trauma or fear or hysteri\* or MDD or mental\* or mood? or neurastheni\* or neurotic or neuros\* or panic or trauma\* or post-trauma\* or posttrauma\* or post trauma\* or flashback\* or nightmare\* or neuros\* or psychotrauma\* or psychiatri\* or psychopathol\* or PTSD or grief or grieving or bereavement or emotions or emotional or stress or stressed or distress or distressed or internalising or internalizing or externalising or externalizing or wellbeing or well-being).mp. (9715747)
- 29 27 and 28 (2067)

30 remove duplicates from 29 (1320)

Educational Resources Information Center (ERIC), British Education Index (BEI) (EBSCOHost)  
 (21 February 2021)

Limit to academic journals and dissertations (509)

S7 (S6 and S3)

S6 (S4 and S5)

S5 (analy\* or data or effect\* or efficac\* or evaluat\* or evidence or outcome\* or results or aim or aims or address\* or assess\* or compar\* or disseminat\* or endors\* or findings or implement\* or impact or investigat\* or feedback or feed\* back or "follow up" or "followed up" or "follow ups" or "followed up" or followup\* or manualized or methodolog\* or model\* or pilot or exploratory or quantitative or qualitative or questionnaire\* or interview\* or "focus group" or "focus groups" or report or self-report\* or themes or thematic or research or (feasib\* and acceptab\*) or feasibility or acceptability or applicability or "best practice" or limitations)

S4 TI ( (trial or trials or study or studies or intervention\* or framework\* or program\* or workshop\* or controlled or uncontrolled or uncontrolled or observational or longitudinal or prospective\* or retrospective\* or case control\* or case series or cohort\* or random\* or nonrandom\* or RCT or cRCT or "control group" or "control groups" or subgroup\* or sub-group\* or "waiting list" or "waiting lists" or "wait listed" or waitlist\* or experimental or quasiexperiment\* or quasi-experiment\* or quasirandom\* or quasi-random\* or pseudoexperiment\* or pseudo-experiment\* or pseudorandom\* or pseudo-random\* or ((pretest or pre-test) and (posttest or post-test)) or prepost or pre-post or or postintervention\* or post-intervention\* or (before and after) or CBA or "time series" or "time point" or "time points" or "repeat measures" or "repeated measures" ) ) OR AB ( (trial or trials or study or studies or intervention\* or framework\* or program\* or workshop\* or controlled or uncontrolled or un-controlled or observational or longitudinal or prospective\* or retrospective\* or case control\* or case series or cohort\* or random\* or nonrandom\* or RCT or cRCT or "control group" or "control groups" or subgroup\* or sub-group\* or "waiting list" or "waiting lists" or "wait listed" or waitlist\* or experimental or quasiexperiment\* or quasi-experiment\* or quasirandom\* or quasi-random\* or pseudoexperiment\* or pseudo-experiment\* or pseudorandom\* or pseudo-random\* or ((pretest or pre-test) and (posttest or post-test)) or prepost or pre-post or or postintervention\* or post-intervention\* or (before and after) or CBA or "time series" or "time point" or "time points" or "repeat measures" or "repeated measures" ) ) OR SU ( (trial or trials or study or studies or intervention\* or framework\* or program\* or workshop\* or controlled or uncontrolled or un-controlled or observational or longitudinal or prospective\* or retrospective\* or case control\* or case series or cohort\* or random\* or nonrandom\* or RCT or cRCT or "control group" or "control groups" or subgroup\* or sub-group\* or "waiting list" or "waiting lists" or "wait listed" or waitlist\* or experimental or quasiexperiment\* or quasi-experiment\* or quasirandom\* or quasi-random\* or pseudoexperiment\* or pseudo-experiment\* or pseudorandom\* or pseudo-random\* or ((pretest or pre-test) and (posttest or post-test)) or prepost or pre-post or or postintervention\* or post-intervention\* or (before and after) or CBA or "time series" or "time point" or "time points" or "repeat measures" or "repeated measures" ) )

S3 (S1 or S2)

S2 (((migrant or migrants or immigrant or immigrants) N5 (adolescent or adolescents or children or schoolchildren or boys or girls or minors or young or students or teens or teenage or teenagers or youth or youths or family or families or school or schools) N5 ("adjustment disorder" or "adjustment disorders" or anxiety or ADNOS or "affective disorder" or "affective disorders" or agoraphobia or phobic or phobias or GAD or compulsive or obsessive or OCD or depressed or depression or depressive or dysphoria or dysthymia or melancholic or melancholia or trauma or traumatic or fear or hysteria or MDD or mental or mentally or mood or moods or moody or neurasthenia or neurotic or neurosis or neuroses or panic or post-trauma or post-traumatic or posttrauma or posttraumatic or "post trauma" or "post traumatic" or flashback or flashbacks or nightmare or nightmares or stress or psychotrauma or psychological or psychosocial or psychiatry or psychiatric or psychopathology or psychopathologies or PTSD or grief or grieving or bereavement or emotions or emotional or stress or stressed or distress or distressed or internalising or internalizing or externalising or externalizing or wellbeing or well-being)) AND (war or wars or disaster or disasters or humanitarian or survivors or tortur\* or camps or genocide or "armed conflict" or "armed conflicts" or "mass execution" or "mass executions" or violence or cataclysmic or catastrophe or catastrophes or catastrophic or disaster or disasters or drought or droughts or earthquake or earthquakes or evacuations or evacuated or evacuee or evacuees or exile or exiled or famine or famines or flood or floods or hurricane or hurricanes or cyclone or cyclones or landslide or landslides or "land slide" or "land slides" or "mass casualties" or tsunami or tsunamis or "tidal wave" or "tidal waves" or volcano or volcanoes))

S1 (((refugee or refugees) N5 (adolescent or adolescents or children or schoolchildren or boys or girls or minors or young or students or teens or teenage or teenagers or youth or youths or family or families or school or schools) N5 ("adjustment disorder" or "adjustment disorders" or anxiety or ADNOS or "affective disorder" or "affective disorders" or agoraphobia or phobic or phobias or GAD or compulsive or obsessive or OCD or depressed or depression or depressive or dysphoria or dysthymia or melancholic or melancholia or trauma or traumatic or fear or hysteria or MDD or mental or mentally or mood or moods or moody or neurasthenia or neurotic or neurosis or neuroses or panic or post-trauma or post-traumatic or posttrauma or posttraumatic or "post trauma" or "post traumatic" or flashback or flashbacks or nightmare or nightmares or stress or psychotrauma or psychological or psychosocial or psychiatry or psychiatric or psychopathology or psychopathologies or PTSD or grief or grieving or bereavement or emotions or emotional or stress or stressed or distress or distressed or internalising or internalizing or externalising or externalizing or wellbeing or well-being)))

Trials Register of Promoting Health Interventions (TRoPHI) <https://epi.ioe.ac.uk/webdatabases4/SearchHistory.aspx> (21 February 2021)

1 "refugee\*"

2 "migrant\*"

3 "migrat\*"

4 "immigrant\*"

5 asylum

6 (or/1-5) (108)

ProQuest International Bibliography of the Social Sciences (IBSS) (1951 to 21 February 2021)

ProQuest Sociological Abstracts (1994 to 21 February 2021)

S3 (S1 or S2) (343)

S2 noft((((migrant or migrants or immigrant or immigrants) NEAR/5 (adolescent or adolescents or children or schoolchildren or boys or girls or minors or young or students or teens or teenage or teenagers or youth or youths or family or families or school or schools) NEAR/5 ("adjustment disorder" or "adjustment disorders" or anxiety or ADNOS or "affective disorder" or "affective disorders" or agoraphobia or phobic or phobias or GAD or compulsive or obsessive or OCD or depressed or depression or depressive or dysphoria or dysthymia or melancholic or melancholia or trauma or traumatic or fear or hysteria or MDD or mental or mentally or mood or moods or moody or neurasthenia or neurotic or neurosis or neuroses or panic or post-trauma or post-traumatic or posttrauma or posttraumatic or "post trauma" or "post traumatic" or flashback or flashbacks or nightmare or nightmares or stress or psychotrauma or psychological or psychosocial or psychiatry or psychiatric or psychopathology or psychopathologies or PTSD or grief or grieving or bereavement or emotions or emotional or stress or stressed or distress or distressed or internalising or internalizing or externalising or externalizing or wellbeing or well-being)) AND (war or wars or disaster or disasters or humanitarian or survivors or tortur\* or camps or genocide or "armed conflict" or "armed conflicts" or "mass execution" or "mass executions" or violence or cataclysmic or catastrophe or catastrophes or catastrophic or disaster or disasters or drought or droughts or earthquake or earthquakes or evacuations or evacuated or evacuee or evacuees or exile or exiled or famine or famines or flood or floods or hurricane or hurricanes or cyclone or cyclones or landslide or landslides or "land slide" or "land slides" or "mass casualties" or tsunami or tsunamis or "tidal wave" or "tidal waves" or volcano or volcanoes))))

S1 noft(((refugee or refugees) NEAR/5 (adolescent or adolescents or children or schoolchildren or boys or girls or minors or young or students or teens or teenage or teenagers or youth or youths or family or families or school or schools) NEAR/5 ("adjustment disorder" or "adjustment disorders" or anxiety or ADNOS or "affective disorder" or "affective disorders" or agoraphobia or phobic or phobias or GAD or compulsive or obsessive or OCD or depressed or depression or depressive or dysphoria or dysthymia or melancholic or melancholia or trauma or traumatic or fear or hysteria or MDD or mental or mentally or mood or moods or moody or neurasthenia or neurotic or neurosis or neuroses or panic or post-trauma or post-traumatic or posttrauma or posttraumatic or "post trauma" or "post traumatic" or flashback or flashbacks or nightmare or nightmares or stress or psychotrauma or psychological or psychosocial or psychiatry or psychiatric or psychopathology or psychopathologies or PTSD or grief or grieving or bereavement or emotions or emotional or stress or stressed or distress or distressed or internalising or internalizing or externalising or externalizing or wellbeing or well-being)))) (356)

\*\*\*\*\*

Search-3 (January 2021):

Ovid multi-file search – MEDLINE/Embase/PsycINFO (15 January 2020) N = 2570

Duplicates removed, 143

New to screen (January 2021), 2427

Database: APA PsycInfo <1806 to January week 2 2021>, Embase <1974 to 2021 Week 01>, Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily <1946 to 15 January 2021>

Search strategy: [No study design filters]

1 Refugee?.mp. (41236)

2 (asylumseeker\* or (asylum adj3 (seek\* or sought))).mp. (6579)

3 (displac\* adj1 (person\* or people\* or population\*)).mp. (3789)

4 or/1-3 (44649)

5 (displac\* adj1 (infant\* or preschool\* or toddler\* or child\* or boys or girls or juvenile\* or minors or pediatric\* or paediatric\* or adolescent\* or prepubescent\* or pre-pubescent\* or pubescent\* or students or teens or teenager\* or young or youth or family or families)).mp. (1010)

6 (infant\* or preschool\* or toddler\* or child\* or boys or girls or juvenile\* or minors or pediatric\* or paediatric\* or adolescent\* or prepubescent\* or pre-pubescent\* or pubescent\* or students or teens or teenager\* or young or youth or family or families or school? or classroom? or nursery or nurseries or kindergarten?).mp. (13841220)

7 (infant? or child\* or adolesc\* or paediatr\* or pediater\*).jn. (652174)

8 6 or 7 (13918755)

9 5 or (4 and 8) (22146)

10 acculturation.mp. (32343)

11 ((host or receiving) adj1 (countr\* or nation\*)).mp. (6743)

12 (resettl\* or re-settl\* or exile\*).mp. (9575)

13 (postmigrat\* or ((post or after) adj migrat\*)).mp. (4567)

14 exp North America/ or exp Canada/ or exp United States/ or exp Europe/ or exp Australasia/ (6289929)

15 exp North American/ or exp European/ or exp Oceanian/ (359048)

16 High Income Country/ or Upper Income Level/ (4536)

17 ((high\* or upper) adj5 income? adj5 (countr\* or econom\* or group? or nation?)).mp. (32588)

18 (America\* or Andorra\* or Antigua\* or Aruba\* or Australia\* or Austria\* or Barbuda\* or Bermuda\* or Britain or British or Baham\* or Bahrain\* or Barbad\* or Belgium or Belgian\* or Brunei\* or Canada or Canadian\* or Cayman Island\* or Channel Island\* or Chile\* or Cook Island\* or Croatia\* or Curacao\* or Cyprus or Cyprian\* or Cypriot? or Czech\* or Denmark or Danish or England or English or Estonia\* or Faroe Island\* or Finland or Finnish or Finn? or France or French or German\* or Gibralt\* or Greece or Greek\* or Greenland\* or Guam\* or Guernsey or Hong Kong\* or Hungary or Hungarian\* or Iceland\* or Ireland or Irish or Israel\* or Italy or Italian\* or Japan\* or Jersey or South Korea\* or Kuwait\*



or Latvia\* or Liechtenstein\* or Lithuania\* or Luxembourg\* or Macao\* or Malta or Maltese or Mauriti\* or Monaco or Nauru\* or Netherlands or Dutch or New Caledonia\* or New Zealand\* or Norway or Norwegian\* or Oman\* or Palau\* or Panama\* or Poland or Polish or Portug\* or Puerto Ric\* or Romania\* or Qatar\* or Saint Kitts or San Marino or Saint Martin or Sint Maarten or Saudi Arabia\* or Scotland or Scottish or Seychelles or Singapore\* or Slovak\* or Slovenia\* or Spain or Spanish or Sweden or Swedish or Switzerland or Swiss or Taiwan\* or Trinidad\* or Tobago\* or (Turks and Caicos Island\*) or United Arab Emirates or United Kingdom or UK or United States or USA or Uruguay\* or Virgin Island\* or Wales or Welsh or (western adj (countr\* or econom\* or nation\*))).mp. (13743057)

19 or/10-18 (14740456)

20 9 and 19 (14035)

21 ((affective or emotional\* or mental\* or psychological\*) adj2 (disease? or disorder? or health\* or ill\* or well\* or stress\* or distress\* or trauma\*)).mp. (1737424)

22 mental disease/ or mental disorders/ or mental health/ (701439)

23 anxiety/ or anxiety disorder/ or depression/ or agitated depression/ or atypical depression/ or chronic depression/ or dysphoria/ or dysthymia/ or endogenous depression/ or involuntal depression/ or major depression/ or melancholia/ or minor depression/ or organic depression/ or postoperative depression/ or reactive depression/ or recurrent brief depression/ or subsyndromal depression/ or treatment resistant depression/ or neurosis/ or affective neurosis/ or anxiety neurosis/ or hysteria/ or neurasthenia/ or psychasthenia/ or adjustment disorder/ or anxiety disorder/ or acute stress disorder/ or distress syndrome/ or generalized anxiety disorder/ or panic/ or posttraumatic stress disorder/ or separation anxiety/ or obsessive compulsive disorder/ or compulsion/ or obsession/ or phobia/ or agoraphobia/ or claustrophobia/ or neophobia/ or social phobia/ or masked depression/ or mood disorder/ or major affective disorder/ or minor affective disorder/ or emotional disorder/ (1408880)

24 mood disorders/ or depression/ or depressive disorder/ or depressive disorder, major/ or depressive disorder, treatment-resistant/ or dysthymic disorder/ or anxiety disorders/ or agoraphobia/ or anxiety, separation/ or neurocirculatory asthenia/ or neurotic disorders/ or obsessive-compulsive disorder/ or hoarding disorder/ or panic disorder/ or phobic disorders/ or phobia, social/ or "trauma and stressor related disorders"/ or adjustment disorders/ or stress disorders, traumatic/ or combat disorders/ or psychological trauma/ or stress disorders, post-traumatic/ or stress disorders, traumatic, acute/ (894808)

25 anxiety.ti,id,kw,kf. or (anxi\* adj3 (asylum\* or immigrant? or migrant? or refugee?)).ab. (257387)

26 (acute stress or adjustment disorder\* or ADNOS or affective disorder\* or agoraphobi\* or phobi\* or anxiety disorder? or GAD or (combat adj (disorder\* or fatigue or neuros\* or syndrome\*)) or compulsi\* or (obsessive adj2 disorder\*) or OCD or depressed or depression or depressive? or dysphori\* or dysthymi\* or melanchol\* or emotional trauma or fear or health anxiety or hysteri\* or MDD or mental\* or mood? or neurastheni\* or neurotic or neuros\* or panic or ((post-trauma\* or posttrauma\* or post trauma) adj stress\*) or flashback\* or (trauma\* adj (nightmare\* or stress or neuros\*)) or (psych\* adj (stress or trauma\*)) or psychotrauma\* or ((sever\* or serious\* or major\* or chronic\* or complex\* or critical\* or endur\* or persist\* or resist\* or acute) adj2 (anxiety or psycholog\*)) or psychiatr\* or psychopathol\* or PTSD).mp. (4932796)

27 (grief or grieving or bereave\*).mp. (68285)

28 or/21-27 (5286235)

29 20 and 28 (5710)

30 (prevention or treatment or intervention or program\* or therapy or workshop?).ti,id,kf,kw,sh. (7309163)

31 ((prevent\* or treat\* or intervention or program\* or therapy or workshop?) adj2 (mental\* or psych\* or trauma\* or posttrauma\* or post-trauma\* or PTSD)).ab. (244615)

32 health promotion.mp. (248051)

33 (promoting adj3 (emotion\* or mental\* or mood\* or psychol\* or well\*)).mp. (11754)

34 exp psychiatric treatment/ (333570)

35 exp psychotherapy/ or exp counseling/ (904280)

36 (psychotherap\* or ((psycholog\* or psychodynamic) adj (aid\* or first aid or help\* or intervention\* or recovery or support\* or therap\* or training or treatment\*))).mp. (455932)

37 (trauma focus\* or TF-CBT or TF-CBT or trauma\* narrative? or (trauma adj2 therapy)).mp. (6677)

38 ((bereavement or grief) adj3 (counsel\* or intervention\* or management or support\* or therap\* or training or treatment\* or prevention)).mp. (7763)

39 (((cultural\* or multicultural\* or multi-cultural\*) adj (adapted or tailored)) and (counsel\* or intervention\* or management or support\* or therap\* or training or treatment\* or prevention)).mp. (6571)

40 ((family or group or conjoint) adj3 (counsel\* or intervention\* or management or program\* or support\* or therap\* or training or treatment\* or prevention)).mp. (727035)

41 ((classroom\* or communit\* or school\*) adj3 (counsel\* or intervention\* or management or program\* or support\* or therap\* or training or treatment\* or prevention)).mp. (298412)

42 ((behavio\* or abreact or act\* out\* or age regression or assertive or autogenic or experiential or Adlerian or analytic\* or aversion or balint group or brief or conversion or conjoint) adj2 (activation or analys\* or conditioning or contracting or intervention\* or modification\* or therap\* or training or treatment\*)).mp. (415458)

43 ((cognitive adj2 (behavior\* or intervention or restructur\* or techniques or therap\*)) or (CBT\* or CBASP or contingency management or covert conditioning or covert sensiti?ation or defusion or MBCT\* or (problem? adj (focus\* or manage\* or sol\*)) or rational emotive or REBT or schema or solution focus\*) or ((third wave or 3rd wave) adj2 (intervention\* or therap\* or treatment\*))).mp. (401602)

44 (confidence building or conflict resolution or coping skills or recovery skills or ((conversation\* or dialectic\* or emotion\* or group\* or insight or narrative or non-directive or nondirective or non-specific or nonspecific or rational or client-centred or client-centered or

humanistic or integrative or interpersonal or person-centred or person-centered or personal construct or persuasion or Rogerian or talking or time-limited) adj2 (intervention\* or therap\* or training or treatment\*))).mp. (673255)

45 (countertransference or drama or (dream\$ adj3 analys\*) or eclectic therap\* or encounter group therap\* or existential therap\* or experiential therap\* or exposure therap\* or exposure task or grad\* exposure or ((expressive or creative) adj art?) or art therapy or expressive therap\* or eye movement desensiti#ation or EMDR or free association or gestalt therap\* or guided image\* or holistic therap\* or humanistic or hypnosis or hypnotherapy or hypnoti#zability or implosive therap\* or insight therap\* or integrative therap\$ or interpersonal therap\*).mp. (142673)

46 (life skills or logotherap\* or marathon group therap\* or mentoring or metacognitive therap\* or milieu therap\* or mindfulness or morita therap\* or movement therapy or dance or music or narrative exposure or narrative therap\* or nondirective therap\* or personal construct or person cent\* therap\* or persuasion therap\* or positive activities or psychoanalysis or psychoanalytic therap\* or psychodrama or psychodynamic therapy or psychoeducat\* or psychological recovery or psychosocial or psychotherapeutic counsel\* or psychotherapeutic training).mp. (733537)

47 (reality therap\* or recovery techniques or reciprocal inhibition therap\* or relationship therap\* or relaxation or skills oriented or stress management or role play\* or self analys\* or sensitivity training or social support or support group\* or systematic desensiti#ation or therapeutic communit\* or transactional analysis or validation therap\*).mp. (725858)

48 (Bounce Back or CBITS or KIDNET).mp. (1007)

49 or/30-48 (10082219)

50 29 and 49 (2420)

51 ((accompanied or unaccompanied) adj2 (asylum\* or immigrant? or migrant? or refugee?)).mp. (764)

52 51 and (28 and 49) (241)

53 (((immigrant\* or migrant\*) adj2 (infant\* or preschool\* or toddler\* or child\* or boys or girls or juvenile\* or minors or pediatric\* or paediatric\* or adolescen\* or prepubescent\* or pre-pubescent\* or pubescent\* or students or teens or teenager\* or young or youth)) and (war or wars or warfare or armed conflict\* or torture or (politic\* adj2 (detention or detainee\* or persecut\* or prison\* or imprison\* or violen\*)) or disaster or disasters or (humanitarian adj3 (aid or affair\* or agenc\* or assistance or catastrophe\* or crisis or crises or disaster or disasters or effort\* or emergenc\* or evacuation\* or integration or reintegration or mission or organization\* or organisation\* or program\* or relief or setting\* or support\* or task force or work\*)) or genocide\* or mass execution\* or mass violence or cataclysmic or catastroph\* or drought\* or earthquake\* or mass evacuation\* or famine\* or flood or floods or hurricane or cyclone\* or landslide\* or land slide\* or mass casualt\* or tsunami\* or tidal wave\* or volcano\* or (displac\* adj1 (forced or mass)) or postconflict\* or post conflict\* or Medecin\* San\* Front\* or Red Cross or Red Crescent)).mp. (257)

54 (refugee? adj3 (infant\* or preschool\* or toddler\* or child\* or boys or girls or juvenile\* or minors or pediatric\* or paediatric\* or adolescen\* or prepubescent\* or pre-pubescent\* or pubescent\* or students or teens or teenager\* or young or youth or family or families)).mp. and (prevention or promotion or treatment or intervention or program\* or therapy or training or trial or study or workshop?).ti,kf,kw,id,hw. and (school\* or classroom\* or nursery or nurseries or kindergarten? or communit\*).mp. (1037)

55 (refugee? adj3 (infant\* or preschool\* or toddler\* or child\* or boys or girls or juvenile\* or minors or pediatric\* or paediatric\* or adolescen\* or prepubescent\* or pre-pubescent\* or pubescent\* or students or teens or teenager\* or young or youth or family or families)).mp. and ((prevention or promotion or treatment or intervention or program\* or therapy or training or trial or workshop?) adj3 (school\* or classroom\* or nursery or nurseries or kindergarten? or communit\*)).ab. (188)

56 ((refugee? adj3 (infant\* or preschool\* or toddler\* or child\* or boys or girls or juvenile\* or minors or pediatric\* or paediatric\* or adolescen\* or prepubescent\* or pre-pubescent\* or pubescent\* or students or teens or teenager\* or young or youth or family or families)) and (postmigrat\* or ((post or after) adj migrat\*))).mp. (220)

57 (refugee? adj3 (infant\* or preschool\* or toddler\* or child\* or boys or girls or juvenile\* or minors or pediatric\* or paediatric\* or adolescen\* or prepubescent\* or pre-pubescent\* or pubescent\* or students or teens or teenager\* or young or youth or family or families or accompanied or unaccompanied)).mp. and (trial.ti. or (randomi#ed or randomi#ation or randomi#ing or RCT or cRCT or "at random" or (random\* adj3 (administ\* or allocat\* or assign\* or class\* or cluster or crossover or cross-over or control\* or determine\* or divide\* or division or distribut\* or expose\* or fashion or number\* or place\* or pragmatic or quasi or recruit\* or split or substitut\* or treat\*))).ti,hw,id,kf,kw,ab.) (164)

58 50 or 52 or 53 or 54 or 55 or 56 or 57 (3752)

59 remove duplicates from 58 (2570)

\*\*\*\*\*

Search-2 (25 Nov 2020) (RCTs, Cochrane Reviews)  
 Cochrane Library Search-1, Issue 8 of 12, 2020, n=753  
 Cochrane Library Search-2, Issue 11 of 12, 2020, n=40 (new)  
 Ovid MEDLINE 1946 to November 25, 2020, n=998  
 Total=1791  
 Duplicates removed, n=375  
 New to screen (30/11/20), n=663

Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily <1946 onwards>  
 Search strategy:

-----  
 1 Refugees/  
 2 asylum.ti,ab,kf.

3 refugee\*.ti,ab,kf.  
 4 exp "emigrants and immigrants"/  
 5 "transients and migrants"/  
 6 (migrant? or immigrant? or emigrant?).ti,ab,kf.  
 7 (displac\* adj1 (person\* or people\* or population\*)).ti,ab,kf.  
 8 ((post or after) adj migrat\*).ti,ab,kf.  
 9 or/1-8  
 10 exp "Warfare and Armed Conflicts"/  
 11 Torture/  
 12 exp Disasters/ and (psychology or prevention & control or therapy or rehabilitation).fs.  
 13 (humanitarian adj3 (aid or affair\* or agenc\* or assistance or catastrophe\* or crisis or crises or disaster\* or effort\* or emergenc\* or evacuation\* or integration or reintegration or mission or organization\* or organisation\* or program\* or relief or setting\* or support\* or task force or work\*)).ti,ab,kf.  
 14 (genocide or armed conflict\* or mass execution\* or mass violence).ti,ab,kf.  
 15 (cataclysmic or catastroph\* or natural disaster\* or drought\* or earthquake\* or mass evacuation\* or famine\* or flood or floods or hurricane or cyclone\* or landslide\* or land slide\* or mass casual\* or tsunami\* or tidal wave\* or volcano\*).ti,ab,kf.  
 16 (torture\* or (politic\* adj2 (detention or detainee? or persecut\* or prison\* or imprison\* or violen\*))).ti,ab,kf.  
 17 ((war or wars or warfare) adj5 (affected or abuse\* or crime\* or expose\* or rape\* or surviv\* or victim\*)).ti,ab,kf.  
 18 (displac\* adj1 (forced or mass)).ti,ab,kf.  
 19 (postconflict\* or post conflict\*).ti,ab,kf.  
 20 (Medecin? San? Front\* or Red Cross or Red Crescent).mp.  
 21 or/10-20  
 22 human migration/ or "emigration and immigration"/  
 23 (migration or immigrat\* or emigrat\*).ti,ab,kf.  
 24 (alien? or foreig\* or non-indigenous\*).mp.  
 25 ((host or receiving) adj (countr\* or nation\*)).ti,ab,kf.  
 26 acculturation.mp.  
 27 (resettl\* or re-settl\* or relocat\* or re-locat\* or flee\* or fled\*).ti,ab,kf.  
 28 or/22-27  
 29 (9 or (21 and 28))  
 30 ADOLESCENT/ or CHILD/ or CHILD, PRESCHOOL/  
 31 (infant? or child\* or adolesc\* or paediatr\* or pediater\*).hw,jn.  
 32 (infant\* or preschool\* or toddler\* or child\* or boy or boys or girl or girls or juvenile\* or minors or pediatric\* or paediatric\* or adolescen\* or prepubescent\* or pre-pubescent\* or pubescent\* or students or teens or teenager\* or young or youth or family or families or school? or classroom? or nursery or nurseries or kindergarten?).ti,ab,kf.  
 33 kiddie?.mp.  
 34 or/30-33  
 35 controlled clinical trial.pt.  
 36 randomized controlled trial.pt.  
 37 clinical trials as topic/  
 38 (randomi#ed or randomi#ation or randomi#ing).ti,ab,kf.  
 39 (RCT or "at random" or (random\* adj3 (administ\* or allocat\* or assign\* or class\* or cluster or crossover or cross-over or control\* or determine\* or divide\* or division or distribut\* or expose\* or fashion or number\* or place\* or pragmatic or quasi or recruit\* or split or substitut\* or treat\*))).ti,ab,kf.  
 40 placebo.ab,ti,kf.  
 41 trial.ti.  
 42 (control\* adj3 group\*).ab.  
 43 (control\* and (trial or study or group\*) and (waitlist\* or wait\* list\* or ((treatment or care) adj2 usual))).ti,ab,kf,hw.  
 44 ((single or double or triple or treble) adj2 (blind\* or mask\* or dummy)).ti,ab,kf.  
 45 double-blind method/ or random allocation/ or single-blind method/  
 46 or/35-45  
 47 exp animals/ not humans.sh.  
 48 (46 not 47)  
 49 (29 and 34 and 48)

\*\*\*\*\*

Search-1

Cochrane Library, Issue 8 of 12, 2020

Searched: 24 August 2020

#1 MeSH descriptor: [Refugees] this term only

#2 asylum:ti,ab,kw  
 #3 refugee\*:ti,ab,kw  
 #4 MeSH descriptor: [Emigrants and Immigrants] explode all trees  
 #5 MeSH descriptor: ["transients and migrants"] this term only  
 #6 (migrant\* or immigrant\* or emigrant\*):ti,ab,kw  
 #7 (displac\* near/2 (person\* or people\* or population\*)):ti,ab,kw  
 #8 ((post or after) next migrat\*):ti,ab,kw  
 #9 (#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8)  
 #10 MeSH descriptor: ["Warfare and Armed Conflicts"] explode all trees  
 #11 MeSH descriptor: [Torture] this term only  
 #12 MeSH descriptor: [Disasters] explode all trees  
 #13 (humanitarian near/3 (aid or affair\* or agenc\* or assistance or catastrophe\* or crisis or crises or disaster\* or effort\* or emergenc\* or evacuation\* or integration or reintegration or mission or organization\* or organisation\* or program\* or relief or setting\* or support\* or "task force" or work\*)):ti,ab,kw  
 #14 (genocide or (armed next conflict\*) or (mass next execution\*) or "mass violence"):ti,ab,kw  
 #15 (cataclysmic or catastroph\* or (natural next disaster\*) or drought\* or earthquake\* or (mass next evacuation\*) or famine\* or flood or floods or hurricane or cyclone\* or landslide\* or (land next slide\*) or (mass next casual\*) or tsunami\* or (tidal next wave\*) or volcano\*):ti,ab,kw  
 #16 (torture\* or (politic\* near/2 (detention or detainee\* or persecut\* or prison\* or imprison\* or violen\*)):ti,ab,kw  
 #17 ((war or wars or warfare) near (affected or abuse\* or crime\* or expose\* or rape\* or surviv\* or victim\*)):ti,ab,kw  
 #18 (displac\* near/2 (forced or mass)):ti,ab,kw  
 #19 (postconflict\* or (post next conflict\*)):ti,ab,kw  
 #20 (Medecin\* San\* Front\* or "Red Cross" or "Red Crescent"):ti,ab,kw  
 #21 (#10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19 or #20)  
 #22 MeSH descriptor: [Human Migration] explode all trees  
 #23 (migration or immigrat\* or emigrat\*):ti,ab,kw  
 #24 (alien or aliens or foreign\* or non-indigenous\*):ti,ab,kw  
 #25 ((host or receiving) next (countr\* or nation\*)):ti,ab,kw  
 #26 acculturation:ti,ab,kw  
 #27 (resettl\* or re-settl\* or relocat\* or re-locat\* or flee\* or fled\*):ti,ab,kw  
 #28 (#22 or #23 or #24 or #25 or #26 or #27)  
 #29 (#9 or (#21 and #28))  
 #30 MeSH descriptor: [Adolescent] this term only  
 #31 MeSH descriptor: [Child] explode all trees  
 #32 (infant\* or preschool\* or toddler\* or child\* or boy or boys or girl or girls or juvenile\* or minors or pediatric\* or paediatric\* or adolescen\* or prepubescent\* or pre-pubescent\* or pubescent\* or students or teens or teenager\* or young or youth or family or families or school\* or classroom\* or nursery or nurseries or kindergarten\* or kids or kiddie\*):ti,ab,kw  
 #33 (#30 or #31 or #32)  
 #34 (#29 and #33) n=753

\*\*\*\*\*

## Appendix 2. Cochrane Specialized Register

### Cochrane Common Mental Disorders Controlled Trials Register (CCMDCTR)

The Cochrane Common Mental Disorders Group maintains an archived, specialised register of randomised controlled trials, the CCMDCTR. This register contains over 40,000 reference records (reports of randomised controlled trials (RCTs)) for anxiety and depressive disorders, bipolar disorder, eating disorders, self-harm and other mental disorders within the scope of this group. The CCMDCTR is a partially studies-based register with more than 50% of the reference records tagged to c12,600 individually PICO-coded study records. Reports of trials for inclusion in the register were collated from (weekly) generic searches of key bibliographic databases to June 2016, which included 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 were also sourced from international trial registries, drug companies, the hand-searching of key journals, conference proceedings and other (non-Cochrane) systematic reviews and meta-analyses. Details of [CCMD's core search strategies](#) (used to identify RCTs) can be found on the group's website.

### Electronic searches

#### CCMDCTR-Studies and References

For this review, an information specialist with the Cochrane Common Mental Disorders Group cross-searched the CCMDCTR using the following terms (*population* only):

#1 (refugee\* or asylum or migrant\* or immigrant\* or emigrant\* or (displac\* adj1 (person\* or people\* or population\*)) or ((post or after) adj migrat\*))

#2 (war or wars or warfare or “armed conflict\*” or torture or (politic\* adj2 (detention or detainee\* or persecut\* or prison\* or imprison\* or violen\*)) or disaster or disasters or (humanitarian adj3 (aid or affair\* or agenc\* or assistance or catastrophe\* or crisis or crises or disaster or disasters or effort\* or emergenc\* or evacuation\* or integration or reintegration or mission or organization\* or organisation\* or program\* or relief or setting\* or support\* or “task force” or work\*)) or genocide\* or “mass execution\*” or “mass violence” or cataclysmic or catastroph\* or drought\* or earthquake\* or “mass evacuation\*” or famine\* or flood or floods or hurricane or cyclone\* or landslide\* or “land slide\*” or “mass casualt\*” or tsunami\* or “tidal wave\*” or volcano\* or (displac\* adj1 (forced or mass)) or postconflict\* or “post conflict\*” or “Medecin\* San\* Front\*” or “Red Cross” or “Red Crescent”) AND (fled or flee\* or surviv\* or migrat\* or emigrat\* or immigrat\* or alien\* or foreig\* or non-indigenous\* or ((host or receiving) adj (countr\* or nation\*)) or accultur\* or resettl\* or re-settl\* or relocat\* or re-locat\*)

#3 (#1 OR #2)

[The CCMDCTR (studies and references register) is current to 14 June 2016 only. The rationale of maintaining a comprehensive specialised register was reviewed when the editorial group moved from the University of Bristol to the University of York in June 2016. At this time, the Group decided to archive the CCMDCTR and return to searching the medical and psychological literature directly, on a review-by-review basis.]

### Appendix 3. Description of 35 non-randomised studies identified through the literature search

#### Study design

We found non-randomised controlled trials (Demott 2017; Ehntholt 2005; Fazel 2009; Quinlan 2016; Scheiber 2019; Stæhr 2001); quasi-randomised trials (Foka 2021); prospective and retrospective cohort studies (Birman 2008; Samec 2006); pre–post intervention studies (Boose 2019; Dura-Vila 2013; Ellis 2013; Fox 2005; Garoff 2019; Grasser 2019; Hurn 2018; Kowitt 2016; Mohlen 2005; Mom 2019; O’Shea 2000; Rowe 2017; Sarkadi 2018; Unterhitzberger 2019); qualitative studies (Akthar 2019; Bujorbarua 2021; Crawford 2020; de Freitas 2020; Lampa 2021; Momartin 2018); case-control studies (Barrett 2000); and case studies (Crawford 2017; Jackson 2006; Millar 2019; Unterhitzberger 2016).

There were six qualitative studies (Akthar 2019; Bujorbarua 2021; Crawford 2020; de Freitas 2020; Lampa 2021; Momartin 2018). One study used phenomenology as a theoretical framework (Akthar 2019). Methods for data collection included interviews (Akthar 2019; Bujorbarua 2021; Crawford 2020; Lampa 2021; Momartin 2018); field notes and observations (Bujorbarua 2021; de Freitas 2020; de Freitas 2020); and focus groups (de Freitas 2020). Methods for analyses included thematic analysis (Crawford 2020; de Freitas 2020; Momartin 2018); and content analysis (Lampa 2021).

Four quantitative studies included a qualitative component such as a process evaluation of the intervention or programme (Garoff 2019; Hurn 2018; Kowitt 2016; Sarkadi 2018).

#### Geographical location

Six studies were conducted in the UK (Akthar 2019; Dura-Vila 2013; Ehntholt 2005; Fazel 2009; Hurn 2018; O’Shea 2000); nine in North America (Birman 2008; Boose 2019; Bujorbarua 2021; de Freitas 2020; Ellis 2013; Fox 2005; Grasser 2019; Kowitt 2016; Rowe 2017); seven in Australia (Barrett 2000; Crawford 2017; Crawford 2020; Jackson 2006; Mom 2019; Momartin 2018; Quinlan 2016); three in Germany (Mohlen 2005; Unterhitzberger 2016; Unterhitzberger 2019); three in Sweden (Lampa 2021; Samec 2006; Sarkadi 2018); two in Greece (Foka 2021; Millar 2019); one in Austria (Scheiber 2019); one in Finland (Garoff 2019); one in Denmark (Stæhr 2001); and one in Norway (Demott 2017).

#### Sponsorship

A total of 14 studies received funding (Birman 2008; de Freitas 2020; Demott 2017; Dura-Vila 2013; Ellis 2013; Fazel 2009; Garoff 2019; Grasser 2019; Lampa 2021; Mohlen 2005; Momartin 2018; O’Shea 2000; Sarkadi 2018; Unterhitzberger 2019); while four studies received no funding (Crawford 2017; Crawford 2020; Millar 2019; Unterhitzberger 2016); and 16 studies did not report on funding (Akthar 2019; Barrett 2000; Boose 2019; Bujorbarua 2021; Ehntholt 2005; Foka 2021; Fox 2005; Hurn 2018; Jackson 2006; Kowitt 2016; Mom 2019; Quinlan 2016; Rowe 2017; Samec 2006; Scheiber 2019; Stæhr 2001).

#### Participants

##### Age

Four studies included children under 14 years old (Bujorbarua 2021; Hurn 2018; Jackson 2006; O’Shea 2000). Five studies included adolescents aged 14 years and older (Barrett 2000; Samec 2006; Sarkadi 2018; Scheiber 2019; Unterhitzberger 2019). Other studies included children and adolescents with a range of ages (Crawford 2017; de Freitas 2020; Foka 2021; Fox 2005; Garoff 2019; Grasser 2019; Kowitt 2016; Millar 2019; Mohlen 2005; Momartin 2018; Stæhr 2001). One study reported neither the age range nor the mean age (Lampa 2021).

## Sex

There were three all-male studies (Demott 2017; Scheiber 2019; Unterhitzberger 2019), and three all-female studies (Barrett 2000; Lampa 2021; Unterhitzberger 2016). Other studies included males and females and one study did not report sex (Samec 2006).

## Country of origin

Most studies had participants originating from multiple countries across Central/Eastern Europe, the Middle East, Africa, and Southeast Asia. There were seven studies where all the participants had the same country of origin (Barrett 2000; Bujorbarua 2021; Ellis 2013; Grasser 2019; Kowitt 2016; Stæhr 2001; Unterhitzberger 2016). Seven studies did not report the participants' countries of origin (de Freitas 2020; Foka 2021; Jackson 2006; Lampa 2021; Mom 2019; Rowe 2017; Sarkadi 2018).

## Country of settlement

For nearly all the included studies, the study authors' geographic location was the same as the participants' country of settlement, except for one study in which the study authors' geographic location was the UK while the participants' country of settlement was Greece (Foka 2021).

## Refugee status

All the studies included participants who were either refugees or asylum-seekers. Three studies did not specifically report on refugee status (Fox 2005; Momartin 2018; Samec 2006).

## Severity of condition

Sixteen studies did not specifically report on the severity of the condition (Akthar 2019; Barrett 2000; Boose 2019; Crawford 2017; Crawford 2020; de Freitas 2020; Ellis 2013; Fazel 2009; Fox 2005; Garoff 2019; Kowitt 2016; Lampa 2021; Millar 2019; Quinlan 2016; Samec 2006; Scheiber 2019).

Four studies reported that all or most of the participants had witnessed or experienced traumatic events (Demott 2017; Mom 2019; Momartin 2018; Rowe 2017).

Ten studies included participants with a post-traumatic stress disorder diagnosis (Birman 2008; Bujorbarua 2021; Grasser 2019; Hurn 2018; Jackson 2006; Mohlen 2005; O'Shea 2000; Pfeiffer 2017; Unterhitzberger 2016; Unterhitzberger 2019).

Five studies used a sample in which some participants experienced trauma-related symptoms or psychological distress (Dura-Vila 2013; Foka 2021; Hurn 2018; Sarkadi 2018; Stæhr 2001).

## Interventions

### Type of intervention

According to the IASC pyramid categories we used, eight studies classified interventions as community and family support (Akthar 2019; Bujorbarua 2021; Crawford 2020; Dura-Vila 2013; Grasser 2019; Jackson 2006; Mom 2019; O'Shea 2000). Ten studies included focused, non-specialist care (Crawford 2017; Demott 2017; Ehntholt 2005; Foka 2021; Fox 2005; Millar 2019; Mohlen 2005; Quinlan 2016; Samec 2006; Stæhr 2001). Twelve studies included specialised services (Barrett 2000; Birman 2008; Boose 2019; Garoff 2019; Kowitt 2016; Lampa 2021; Momartin 2018; Rowe 2017; Sarkadi 2018; Scheiber 2019; Unterhitzberger 2019; Unterhitzberger 2016). Four studies implemented multi-modal interventions (de Freitas 2020; Ellis 2013; Fazel 2009; Hurn 2018).

### Target

Many studies did not clearly specify the target of the intervention as promotion, prevention, or treatment of mental health problems. Some of these mentioned 'treatment' without including participants diagnosed with a mental health problem. We categorised eight studies as prevention or treatment (or both) based on author descriptions of the intervention (Akthar 2019; Barrett 2000; Birman 2008; Dura-Vila 2013; Fazel 2009; Garoff 2019; Rowe 2017; Sarkadi 2018). We categorised five studies as prevention (Crawford 2017; de Freitas 2020; Mom 2019; Scheiber 2019; Stæhr 2001), and one as mental health promotion (Crawford 2020). Five studies evaluated either mental health prevention or promotion interventions (Ellis 2013; Foka 2021; Jackson 2006; Kowitt 2016; Millar 2019). Seventeen studies evaluated a mental health treatment (Baker 2006; Boose 2019; Bujorbarua 2021; Demott 2017; Ehntholt 2005; Grasser 2019; Fox 2005; Hurn 2018; Lampa 2021; Mohlen 2005; Momartin 2018; O'Shea 2000; Quinlan 2016; Rowe 2017; Samec 2006; Unterhitzberger 2016; Unterhitzberger 2019).

### Setting

Most included studies were conducted in school settings (Barrett 2000; Boose 2019; Crawford 2017; Crawford 2020; Dura-Vila 2013; Ehntholt 2005; Ellis 2013; Fazel 2009; Fox 2005; Jackson 2006; Kowitt 2016; Mom 2019; Momartin 2018; O'Shea 2000; Quinlan 2016; Rowe 2017; Samec 2006; Sarkadi 2018). Eight studies were conducted in temporary refugee shelters, camps, or accommodations (de Freitas 2020; Foka 2021; Millar 2019; Mohlen 2005; Sarkadi 2018; Scheiber 2019; Stæhr 2001; Unterhitzberger 2016). Other settings included community centres (Birman 2008; Bujorbarua 2021; Hurn 2018; Lampa 2021), arrival centres for refugees and asylum seekers (Demott 2017; Garoff 2019), universities (Grasser 2019; Unterhitzberger 2019), and the workplace (Akthar 2019).

### Format

Most interventions were group-based (Akthar 2019; Barrett 2000; Bujorbarua 2021; Crawford 2017; Crawford 2020; de Freitas 2020; Demott 2017; Ehntholt 2005; Ellis 2013; Foka 2021; Fox 2005; Garoff 2019; Grasser 2019; Hurn 2018; Jackson 2006; Mom 2019; Momartin 2018; Pfeiffer 2017; Quinlan 2016; Samec 2006; Scheiber 2019; Stæhr 2001; Unterhitzberger 2019). Four studies evaluated interventions delivered to individual participants in face-to-face sessions (Boose 2019; Dura-Vila 2013; Kowitt 2016; Unterhitzberger 2016). Eight studies evaluated an intervention with a mix of individual and group sessions (Birman 2008; Fazel 2009; Lampa 2021; Millar 2019; Mohlen 2005; O'Shea 2000; Rowe 2017; Sarkadi 2018).

### Number or duration of sessions

Five studies did not report the number of sessions (Akthar 2019; Crawford 2020; Jackson 2006; Momartin 2018; Stæhr 2001). In four other studies, the number and duration of sessions was variable and based on individual need (Birman 2008; Dura-Vila 2013; Fazel 2009; O'Shea 2000).

In eight studies, the intervention consisted of four to six sessions, lasting between one and three hours per session (Ehntholt 2005; Foka 2021; Hurn 2018; Lampa 2021; Millar 2019; Pfeiffer 2017; Sarkadi 2018; Scheiber 2019).

In nine studies, the intervention consisted of eight to 10 sessions, lasting between 30 and 90 minutes per session (Barrett 2000; Boose 2019; Bujorbarua 2021; Crawford 2017; Demott 2017; Fox 2005; Garoff 2019; Quinlan 2016; Samec 2006).

Nine interventions consisted of more than 10 sessions, often running weekly for a longer period of time, up to one year (de Freitas 2020; Ellis 2013; Grasser 2019; Kowitt 2016; Mohlen 2005; Mom 2019; Rowe 2017; Unterhitzberger 2016; Unterhitzberger 2019). Where reported, sessions lasted between 50 minutes and three hours (de Freitas 2020; Grasser 2019; Mohlen 2005; Mom 2019; Rowe 2017; Unterhitzberger 2019).

### Comparators

Studies with a control group used either a waiting list (Barrett 2000; Ehntholt 2005; Foka 2021; Scheiber 2019) or no treatment (Demott 2017; Fazel 2009; Quinlan 2016; Stæhr 2001) as a comparator.

### WHAT'S NEW

Date	Event	Description
26 June 2020	Amended	Acknowledgements updated

### HISTORY

Protocol first published: Issue 6, 2020

### CONTRIBUTIONS OF AUTHORS

FS: screening, data extraction, risk of bias assessments, synthesis, and writing of the manuscript.

DC: screening, data extraction, risk of bias assessments, and synthesis.

DM: data extraction, risk of bias assessments, synthesis, and writing of the manuscript.

MP: data extraction, risk of bias assessments, synthesis, and writing of the manuscript.

HT: screening, data extraction, synthesis, and writing of the manuscript.

LV: screening, data extraction, risk of bias assessments, synthesis, and writing of the manuscript.

CB: writing of the manuscript.

EU: screening, data extraction, risk of bias assessments, synthesis, and writing of the manuscript.

### DECLARATIONS OF INTEREST

FS: none.

DC: none.

DM: none.

MP: none.

HT: none.

LV: none.

CB: none.

EU: none.

## SOURCES OF SUPPORT

### Internal sources

- University of Verona, Italy

Allocated time for three members of staff to contribute to the review process.

### External sources

- National Institute for Health Research (NIHR), UK

EU contributions to the protocol were funded from Cochrane Infrastructure funding to the Common Mental Disorders Cochrane Review Group. EU received an NIHR ESP Incentive Award to complete this priority review (NIHR150877; GBP 8000).

## DIFFERENCES BETWEEN PROTOCOL AND REVIEW

We made the following changes from the published protocol ([Soltan 2020](#)).

1. We stated in the protocol that a description of all types of study designs, including non-randomised studies, would be included as part of objective 2 ("to comprehensively summarise evidence from non-randomised quantitative and qualitative studies on community-based interventions for mental health promotion and preventing and treating mental disorders among refugee children and adolescents in high-income countries"). However, this was found to be confusing as data on the efficacy of interventions were drawn from randomised studies only. Therefore, we removed methods and results relating to objective 2 to the appendix ([Appendix 3](#)), and we briefly described non-randomised studies in the discussion section.
2. We made small changes to the text of the methods section to clarify that no outcome data were extracted for non-randomised studies.
3. We had planned to search grey literature and international trial registries, but we did not have the resources available to conduct these searches.
4. We planned to conduct risk of bias assessments for all included studies. However, as we did not extract outcome data for non-randomised studies, it was not thought meaningful to conduct risk of bias assessments for these studies. As such, we only conducted risk of bias assessments for the three included RCTs.
5. We did not conduct subgroup analyses or sensitivity analyses as sufficient data were not available.
6. We stated in the protocol that risk of bias assessments would only be completed for the primary outcomes. However, because one included trial only reported on a secondary outcome, we decided to complete risk of bias assessments for all relevant outcomes in the three trials.
7. We planned to conduct meta-analyses if the obtained data would justify this approach. However, the included trials differed substantially in terms of the participants, target of the intervention (promotion, prevent, or treatment), and the working mechanisms of the intervention. Therefore, we decided that a narrative synthesis was most appropriate.

## INDEX TERMS

### Medical Subject Headings (MeSH)

Anxiety [diagnosis] [therapy]; Developed Countries; \*Mental Health; Quality of Life; \*Refugees

### MeSH check words

Adolescent; Child; Humans