switchboard
connecting resettlement experts

EVIDENCE SUMMARY
JUNE 2020 | UPDATED APRIL 2022

What works to improve mental health of refugee children and adults?

There is very strong evidence that numerous interventions are effective in improving the mental health of child and adult refugees. Specifically, cognitive behavioral therapy (CBT), trauma-focused interventions (TF), and psycho-education (PE) have been shown to improve symptoms related to anxiety, depression, post-traumatic stress disorder, and/or general distress in refugee populations. School-based and group programs for refugee children and high-support living environments for unaccompanied minors have been shown to improve children's mental health. A number of additional interventions for refugee adults and children have inconclusive effects or moderate support. Finally, digital technologies including telehealth, online interventions, and video games show promising results for increasing access to care as well as improving outcomes.

Purpose of this summary

This evidence summary aims to identify effective strategies for improving mental health among resettled refugees. The intended audience is U.S. refugee service providers and other interested stakeholders. This evidence summary seeks to answer the following questions:

- What interventions are effective in treating mental health conditions among refugees?
- What mental health interventions need further evidence of effectiveness?
- What is the evidence base for emerging mental health digital technologies?

What is meant by "mental health"?

According to the World Health Organization, mental health is a state of well-being in which individuals realize their own abilities, can cope with the normal stresses of life, can work productively, and are able to make a contribution to their community.[1] However, the research literature adopts a narrower definition: mental health is the absence of a diagnosable psychiatric condition or symptoms of distress. This evidence summary includes the following conditions and symptoms of distress: anxiety, depression, post-traumatic stress disorder (PTSD), and general distress.

[1] World Health Organization (2018). Mental health: strengthening our response.

What does the evidence show?

There is very strong evidence that several interventions have positive impact for refugee adults and children.

- Evidence related to the effectiveness of mental health interventions for refugee adults and children has grown vastly in the 21st century. **This evidence summary identified nearly 40 systematic reviews and meta-analyses** published since 2000. **Such studies aggregate the findings of dozens of individual studies, yielding very strong evidence.**

- The overall findings of these systematic reviews and meta-analyses generally concur that **several mental health interventions are effective in improving symptoms of anxiety, depression, PTSD, and/or general distress among refugees. Cognitive behavioral therapy (CBT), trauma-focused interventions (TFI), and psycho-education (PE) have very strong evidence of effectiveness** (Table 1). (See Appendices A and B for further details).

Table 1. Evidence-Based Interventions for Refugee Mental Health

	Anxiety	Depression	PTSD	General Distress
Cognitive Behavioral Therapy (CBT)	+	+	+	
Trauma-Focused Interventions (TFI)		+	+	
Psycho-education (PE)		+		+

Legend: + indicates positive impact

Several additional interventions have very strong evidence of effectiveness for refugee children.

- **Parenting classes** have a positive impact on the general distress of children in refugee families. Mental health **school-based and group programs** have a positive effect on depression and PTSD. Classroom interventions can be delivered by teachers or trained health care professionals (Brown et al., 2017) For unaccompanied refugee minors, **high-support living environments** such as foster care and small group homes positively impact the children's depression, anxiety, and PTSD compared to institutional residential settings (see Appendix C).

Numerous mental health interventions for refugee adults and children need additional research on effectiveness.

- The systematic reviews, and meta-analyses generally concur that **there is insufficient evidence on the effectiveness of numerous interventions.** Some of these are well-established interventions with strong evidence of effectiveness among the general population, but their evidence base for refugee populations is inconclusive. This is due to one of three reasons: (1) only one study on a given intervention is available; (2) available studies have high risk of bias; or (3) there are conflicting results among studies. See Appendix D for a detailed analysis.

- The interventions that need further research on their effectiveness in improving refugees' anxiety, depression, PTSD, and/or general distress include:

  - Complementary/alternative medicine
  - Dynamic therapies
  - Expressive therapies
  - Family intervention
  - Interpersonal psychotherapy (IPT)
  - Logotherapy
  - Meditation
  - Multimodal/multidisciplinary approaches
  - Relaxation music
  - Stress inoculation training
  - Testimony therapy

Digital technologies show promising results.

- A few studies have examined the use of **digital technology** in refugee mental health care. An **online intervention to reduce stigma** about mental health and help-seeking among adult refugee men with PTSD found moderate evidence of positive effects (Nickerson et al., 2020). Finally, a **digital game-based learning curriculum** for refugee children found moderate support for a reduction in the children's general distress (Sirin et al., 2019).

Summary of 2022 Updates

This evidence search was repeated in February 2022 to capture new articles published since the last search in June 2020. Fifteen additional systematic reviews/meta-analyses, two impact studies, and one suggestive study were identified. As a result, the following conclusions were revised:

- Trauma-focused therapies, including narrative exposure therapy (NET), written exposure therapy, trauma-focused cognitive behavioral therapy (TF-CBT), meta-cognitive therapy, cognitive processing therapy, and eye movement desensitization and reprocessing (EMDR), have all been shown effective in decreasing PTSD and complex PTSD symptomatology as well depression and possibly anxiety comorbidities. Formerly, only NET had strong evidence.
- Cognitive-behavioral interventions have been upgraded from inconclusive impact to positive impact for depression and PTSD due to the addition of several studies (Kip et al., 2020; Lawton, 2021; Sambucini et al., 2020).
- A new intervention category, psycho-education, has been added. Psycho-education has been found to decrease depression and psychological distress in one systematic review (Peterson et al., 2020).
- For children, school-based/group interventions have been upgraded from inconclusive impact to positive impact for PTSD.

What are the implications for practice and research?

Mental health practitioners have substantial choice in selecting and adapting strong evidence-based interventions with refugees.

- **Very strong evidence indicates that contextually adapted cognitive-behavioral therapy, trauma-focused interventions, and psycho-education effectively improve symptoms of anxiety, depression, PTSD, and/or general distress among refugee populations. These should be used as first-line interventions.** Refugee service providers should connect clients experiencing these conditions to mental health clinicians who provide these specific therapies. Given the very strong evidence for these approaches, at this time, other mental health interventions should only be used when there is a compelling rationale to do so based on client, context, and/or practitioner characteristics and circumstances.

- A wide variety of trauma-informed interventions have been determined to be effective for refugees' PTSD and depression, allowing practitioners a meaningful choice among approaches to best fit clients' preferences and practitioners' expertise.

Digital technologies for refugee mental health interventions can help overcome traditional barriers to care and show promise of effectiveness.

- The handful of existing studies on the use of digital technologies in refugee mental health all report positive findings. The delivery of services remotely has the potential to reach many refugees who otherwise have limited access due to transportation, child care, work, linguistic, and contextual stigma barriers. Continued research is needed on access to and effects of technology in refugee mental health.

A national database of licensed mental health providers who offer telehealth services in refugees' languages should be established.

- Given the recent expansion of telehealth and its predicted growth in the future, a national registry of telehealth providers with various language skills has potential to substantially increase refugees' access to mental health services.

Interpreters will continue to play a critical role.

- The number of licensed mental health providers who speak a particular language may be small or nonexistent, even nationally. Therefore, interpreters will continue to play a critical role in mental health service delivery, whether in-person or via telehealth. These roles must continue to be supported, and further research should be conducted on the role of interpretation in refugee mental health outcomes.

How did we identify evidence for this summary?

Included Studies

The Switchboard evidence database includes the following types of studies, categorized by their strength of evidence:

Strong Evidence

Meta-analyses: systematic analyses of sets of existing evaluations of similar programs

Systematic reviews: syntheses of the best available evidence on specific research questions that use narrative synthesis focused on evaluations of the impacts of at least one specific policy, program, or intervention.

Moderate Evidence

Published individual **impact evaluations** using randomized controlled trials (RCTs/C-RCTs), natural experiments, quasi-experimental techniques such as difference-in-difference (DID), instrumental variables (IV), regression discontinuity design (RDD), propensity score matching (PSM) or other forms of synthetic matching, as well as fixed effects techniques with interaction terms.

Suggestive Evidence

Published studies using methods including non-systematic literature review, uncontrolled before and after tests, post-test only, interrupted time series (ITS), cross-sectional regressions, longitudinal panels, cohort and case-controls, as well as purely qualitative techniques.

Excluded Studies

The Switchboard evidence database excludes case studies, unpublished suggestive research, opinion papers, descriptive studies, and unpublished literature reviews.

Search Protocol

Studies included in the database focused on high-income or upper middle-income countries, including but not limited to the United States. Studies included must have been published since 2000. To identify evidence, we searched the following websites and databases using the following population, methodology, and target problem terms:

Websites and Databases	Population Terms	Methodology Terms	Target Problem Terms
Campbell Collaboration Cochrane Collaboration Mathematica Policy Research Evidence Aid Urban Institute Migration Policy Institute HHS OPRE ASSIA Social Services Abstracts Social Work Abstracts	refugee OR immigrant OR “unaccompanied minor” OR asylee OR “temporary protected	evaluation OR impact OR program OR intervention OR policy OR	“mental health” OR depression OR anxiety OR “post-traumatic stress disorder” OR PTSD

PsycInfo CINAHL PILOTS	status” OR “victims of traffick*” OR “traffick* victims” OR T-Visa OR U-Visa OR Cuban OR Haitian OR Amerasian	project OR train* OR therapy OR treatment OR counseling OR workshop OR review OR meta-analysis OR synthesis	

For databases or websites that permitted only basic searches, free-text terms and limited term combinations were selected out of the lists above, and all resultant studies were reviewed for relevance. Conversely, for databases or websites with advanced search capability, we made use of relevant filters available. All search terms were searched in the title and abstract fields only in order to exclude studies that made only passing mention of the topic under consideration.

After initial screening, Switchboard evidence mapping is prioritized as follows: First priority is given to meta-analyses and systematic reviews, followed by individual impact evaluations when no meta-analyses or systematic reviews are available. Evaluations that are rated as impact evidence are considered before those rated as suggestive, with the latter only being included for outcomes where no evidence is available from the former.

Studies Included

June 2020: 1838 studies were identified through database and website searching. After removing duplicates, 1311 studies were then screened. Of these, 1082 were determined to be irrelevant to this search. 229 full-text articles were assessed for eligibility. 199 full-text articles were excluded due to not meeting one or more of the inclusion criteria pertaining to resettlement country, year of publication, population, methodology, or target problem. 22 studies were eligible for inclusion.

February 2022: The search was repeated for studies published since the last search. 1176 studies were identified through database and website searching. After removing duplicates, 889 studies were then screened. Of these, 821 were determined to be irrelevant to this search. 68 full-text articles were assessed for eligibility. 53 full-text articles were excluded due to not meeting one or more of the inclusion criteria pertaining to resettlement country, year of publication, population, methodology, or target problem. 11 studies were eligible for inclusion.

The list of studies included may be found below, with hyperlinks to the abstracts or full text (when available).

Meta-Analyses and Systematic Reviews

None

Brown, R. C., Witt, A., Fegert, J. M., Keller, F., Rassenhofer, M., & Plener, P. L. (2017). Psychosocial interventions for children and adolescents after man-made and natural disasters: A meta-analysis and systematic review. Psychological Medicine, 47(11), 1893-1905. Full text.

Charbonneau, S., deLeyer-Tiarks, J., Caterino, L. C., & Bray, M. (2021). A meta-analysis of school-based interventions for student refugees, migrants, and immigrants. Journal of Prevention & Intervention in the Community, 1-16. Full text.

Coventry, P. A., Meader, N., Melton, H., Temple, M., Dale, H., Wright, K., ... & Gilbody, S. (2020). Psychological and pharmacological interventions for posttraumatic stress disorder and comorbid mental health problems following complex traumatic events: Systematic review and component network meta-analysis. PLoS Medicine, 17(8), e1003262. Full Text.

El Sount, C. R. O., Windthorst, P., Denkinger, J., Ziser, K., Nikendei, C., Kindermann, D., ... & Junne, F. (2019). Chronic pain in refugees with posttraumatic stress disorder (PTSD): A systematic review on patients' characteristics and specific interventions. Journal of Psychosomatic Research, 118, 83-97. Abstract.

Fazel, M., & Betancourt, T. S. (2018). Preventive mental health interventions for refugee children and adolescents in high-income settings. The Lancet Child & Adolescent Health, 2(2), 121-132. Full text.

Jericho, B., Luo, A., & Berle, D. (2022). Trauma-focused psychotherapies for post-traumatic stress disorder: A systematic review and network meta-analysis. Acta Psychiatrica Scandinavica, 145(2), 132-155. Full text.

Kinzie, J. D. (2011). Guidelines for psychiatric care of torture survivors. Torture, 21(1), 18-26. Full text.

Kip, A., Priebe, S., Holling, H., & Morina, N. (2020). Psychological interventions for posttraumatic stress disorder and depression in refugees: A meta-analysis of randomized controlled trials. Clinical Psychology & Psychotherapy, 27(4), 489-503. Full text.

Lawton, K., & Spencer, A. (2021). A full systematic review on the effects of cognitive behavioural therapy for mental health symptoms in child refugees. Journal of Immigrant and Minority Health, 23(3), 624-639. Full text.

Lely, J. C., Smid, G. E., Jongedijk, R. A., W. Knipscheer, J., & Kleber, R. J. (2019). The effectiveness of narrative exposure therapy: A review, meta-analysis and meta-regression analysis. European Journal of Psychotraumatology, 10(1), 1550344. Full text.

McFarlane, C. A., & Kaplan, I. (2012). Evidence-based psychological interventions for adult survivors of torture and trauma: a 30-year review. Transcultural Psychiatry, 49(3-4), 539-567. Abstract.

Mckenna Longacre, M. M., Silver-Highfield, E., Lama, P., & Grodin, M. A. (2012). Complementary and alternative medicine in the treatment of refugees and survivors of torture: A review and proposal for action. Torture, 22(1), 38-57. Full text.

McLean, C. P., Levy, H. C., Miller, M. L., & Tolin, D. F. (2021). Exposure therapy for PTSD: A meta-analysis. Clinical Psychology Review, 102115. Full text.

Mitra, R., & Hodes, M. (2019). Prevention of psychological distress and promotion of resilience amongst unaccompanied refugee minors in resettlement countries. Child: Care, Health and Development, 45(2), 198-215. Full text.

Nakeyar, C., & Frewen, P. A. (2016). Evidence-based care for Iraqi, Kurdish, and Syrian asylum seekers and refugees of the Syrian civil war: A systematic review. Canadian Psychology/Psychologie Canadienne, 57(4), 233. Full text.

Niemeyer, H., Lorbeer, N., Mohr, J., Baer, E., & Knaevelsrud, C. (2021). Evidence-based individual psychotherapy for complex posttraumatic stress disorder and at-risk groups for complex traumatization: A meta-review. Journal of Affective Disorders. Full text.

Nocon, A., Eberle-Sejari, R., Unterhitzenberger, J., & Rosner, R. (2017). The effectiveness of psychosocial interventions in war-traumatized refugee and internally displaced minors: Systematic review and meta-analysis. European Journal of Psychotraumatology, 8(sup2), 1388709. Full text.

Peterson, C., Poudel-Tandukar, K., Sanger, K., & Jacelon, C. S. (2020). Improving mental health in refugee populations: A review of intervention studies conducted in the United States. Issues in Mental Health Nursing, 41(4), 271-282. Full text.

Rafieifar, M., & Macgowan, M. J. (2022). A meta-analysis of group interventions for trauma and depression among immigrant and refugee children. Research on Social Work Practice, 32, 13-31. Full text.

Raghuraman, S., Stuttard, N., & Hunt, N. (2021). Evaluating narrative exposure therapy for post-traumatic stress disorder and depression symptoms: A meta-analysis of the evidence base. Clinical Psychology & Psychotherapy, 28(1), 1-23. Full text.

Sambucini, D., Aceto, P., Begotaraj, E., & Lai, C. (2020). Efficacy of psychological interventions on depression anxiety and somatization in migrants: a meta-analysis. Journal of Immigrant and Minority Health, 22(6), 1320-1346. Full text.

Sandahl, H., Jennum, P., Baandrup, L., Lykke Mortensen, E., & Carlsson, J. (2021). Imagery rehearsal therapy and/or mianserin in treatment of refugees diagnosed with PTSD: Results from a randomized controlled trial. Journal of Sleep Research, 30(4), e13276. Full text.

Sandahl, H., Vindbjerg, E., & Carlsson, J. (2017). Treatment of sleep disturbances in refugees suffering from post-traumatic stress disorder. Transcultural Psychiatry, 54(5-6), 806-823. Abstract.

ter Heide, F. J. J. T., Mooren, T. M., & Kleber, R. J. (2016). Complex PTSD and phased treatment in refugees: A debate piece. European Journal of Psychotraumatology, 7(1), 28687. Full text.

Thompson, C. T., Vidgen, A., & Roberts, N. P. (2018). Psychological interventions for post-traumatic stress disorder in refugees and asylum seekers: A systematic review and meta-analysis. Clinical Psychology Review, 63, 66-79. Abstract.

Turrini, G., Purgato, M., Ballette, F., Nosè, M., Ostuzzi, G., & Barbui, C. (2017). Common mental disorders in asylum seekers and refugees: Umbrella review of prevalence and intervention studies. International Journal of Mental Health Systems, 11(1), 51. Full text.

Turrini, G., Purgato, M., Acarturk, C., Anttila, M., Au, T., Ballette, F., ... & Hall, J. (2019). Efficacy and acceptability of psychosocial interventions in asylum seekers and refugees: Systematic review and meta-analysis. Epidemiology and Psychiatric Sciences, 28(4), 376-388. Full text.

Wei, Y., & Chen, S. (2021). Narrative exposure therapy for posttraumatic stress disorder: A meta-analysis of randomized controlled trials. Psychological Trauma: Theory, Research, Practice, and Policy. Full text.

Impact Evaluations

Nickerson, A., Byrow, Y., Pajak, R., McMahon, T., Bryant, R. A., Christensen, H., & Liddell, B. J. (2020). 'Tell Your Story': A randomized controlled trial of an online intervention to reduce mental health stigma and increase help-seeking in refugee men with posttraumatic stress. Psychological Medicine, 50(5), 781-792. Full text.

Purgato, M., Carswell, K., Tedeschi, F., Acarturk, C., Anttila, M., Au, T., ... & Barbui, C. (2021). Effectiveness of self-help plus in preventing mental disorders in refugees and asylum seekers in Western Europe: A multinational randomized controlled trial. Psychotherapy and Psychosomatics, 90(6), 403-414. Full text.

Sandahl, H., Jennum, P., Baandrup, L., Lykke Mortensen, E., & Carlsson, J. (2021). Imagery rehearsal therapy and/or mianserin in treatment of refugees diagnosed with PTSD: Results from a randomized controlled trial. Journal of Sleep Research, 30(4), e13276. Full text.

Sirin, S., Plass, J. L., Homer, B. D., Vatanartiran, S., & Tsai, T. (2018). Digital game-based education for Syrian refugee children: Project Hope. Vulnerable Children and Youth Studies, 13(1), 7-18. Full text.

Weinstein, N., Khabbaz, F., & Legate, N. (2016). Enhancing need satisfaction to reduce psychological distress in Syrian refugees. Journal of Consulting and Clinical Psychology, 84(7), 645. Full text.

Suggestive Studies

None

Appendix A

Glossary of mental health interventions

Cognitive-Behavioral Therapy (CBT): A type of psychotherapy based on a cognitive and a behavioral model. In CBT the emphasis is on cognitive evaluation of events that lead to specific emotions and behaviors as an outcome (Brown et al., 2017).

Complementary/alternative medicine: A group of diverse medical and healthcare systems, practices, and products that are not generally considered part of conventional medicine as practiced by holders of M.D. or D.O. and allied health professionals (Mckenna et al., 2012).

Exposure therapy: Treatment that encourages the systematic confrontation of feared stimuli, which can be external (e.g., feared objects, activities, situations) or internal (e.g., feared thoughts, physical sensations). The aim of exposure therapy is to reduce the person's fearful reaction to the stimulus.[2]

Expressive therapies: The use of art, music, dance/movement, drama, poetry/creative writing, play, and sandtray within the context of psychotherapy, counseling, rehabilitation, or health care.[3]

Eye Movement Desensitization and Reprocessing (EMDR): A psychological trauma-focused treatment in which clients recall traumatic memories with the help of the therapist, while simultaneously making horizontal eye movements. In this process, survivors gradually learn that the signals that are primarily linked to trauma no longer exist (Brown et al, 2017).

Interpersonal Psychotherapy (IPT): A time-bound, dynamically informed, and structured psychotherapy treatment. IPT aims to reduce distress and improve clients' interpersonal functioning, and help them to maintain or recruit social support.[4]

Logotherapy: Therapy based on the premise that humans have freedom to find meaning in what they do

[2] Kaplan, J. S., & Tolin, D. F. (2011). Exposure therapy for anxiety disorders. *Psychiatric Times.*
[3] Malchiodi, C. A. (Ed.). (2013). *Expressive therapies*. Guilford Publications.
[4] Cuijpers, P., Geraedts, A. S., van Oppen, P., Andersson, G., Markowitz, J. C., & van Straten, A. (2011). Interpersonal psychotherapy for depression: a meta-analysis. *American Journal of Psychiatry*, 168(6), 581-592.

and experience, or at least in the stand they take when faced with a situation of unchangeable suffering.[5]

Meditation: A variety of mindfulness and relaxation techniques. One is transcendental meditation, which begins with silence and is followed by a mantra, which is a sound without meaning.[6]

Narrative Exposure Therapy (NET): A psychotherapeutic approach based on the principles of testimony therapy and cognitive behavioral exposure therapy. In NET, the client is asked to recall in detail previous traumatic experiences while going through all associated emotions, but the therapist emphasizes the time and place in which the traumatic experiences occurred. During the NET sessions, therapists record a reconstruction of the client's life events. The resulting note is signed in a ritualized manner and given to the client to serve as a personal therapeutic tool or social and political document recording human rights abuse (Lely et al, 2019).

Psycho-education: An intervention with systematic, structured, and didactic knowledge transfer for an illness and its treatment, integrating emotional and motivational aspects to enable clients to cope with the illness and to improve its treatment adherence and efficacy.[7]

Stepped trauma treatment: A multi-tiered program including prevention and community resilience building for the community at large, school-based early intervention groups for at-risk students, and direct intervention using trauma systems therapy for those with significant psychological distress.[8]

Stress inoculation training: A non-trauma-focused anxiety management program that involves teaching coping skills to manage stress.[9]

Testimony therapy: Twelve sessions in which patients tell their life stories, including their traumatic experiences. The narrative is reflected in a written document that can be read to family and friends or be sent to a historical archive.[10]

Trauma-focused interventions (TFI): Interventions for helping participants process and cope with specific trauma memories and associated symptoms, including CBT, trauma-focused CBT (TF-CBT), NET, written exposure therapy, and EMDR (Jericho et al., 2021).

[5] Victor Frankl Institute of Logotherapy (n.d.). Logotherapy.
[6] Sedlmeier, P., Eberth, J., Schwarz, M., Zimmermann, D., Haarig, F., Jaeger, S., & Kunze, S. (2012). The psychological effects of meditation: a meta-analysis. *Psychological Bulletin*, 138(6), 1139.
[7] Ekhtiari, H., Rezapour, T., Aupperle, R. L., & Paulus, M. P. (2017). Neuroscience-informed psychoeducation for addiction medicine: A neurocognitive perspective. *Progress in Brain Research*, *235*, 239-264.
[8] Ellis, B. H., Miller, A. B., Abdi, S., Barrett, C., Blood, E. A., & Betancourt, T. S. (2013). Multi-tier mental health program for refugee youth. *Journal of Consulting and Clinical Psychology*, *81*(1), 129.
[9] Psychological Health Center of Excellence (2019). Stress Inoculation Training for Posttraumatic Stress Disorder.
[10] van Dijk JA, Schoutrop MJ, Spinhoven P. Testimony therapy: treatment method for traumatized victims of organized violence. *Am J Psychother*. 2003;57(3):361-373.

Appendix B

Interventions with very strong evidence for refugee adults and children

Mental Health Outcome →	Anxiety				Depression				PTSD				General Distress			
Intervention* →	CAI	CBT	TFI	PE	CAI	CBT	TFI	PE	CAI	CBT	TFI	PE	CAI	CBT	TFI	PE
Systematic Review ↓																
Brown 2017										+	+					
El Sount 2019										+	+					
Fazel 2018											+					
Lely 2019							+				+					
McFarlane 2012	+	+			+	+			+	+	?					
Madan 2011							?				?					
Mitra 2019										?				?		
Nakeyar 2016											+					
Nocon 2017										+	?					
ter Heide 2016									+	?	+					
Thompson 2018										0	+					

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Mental Health Outcome →	Anxiety				Depression				PTSD				General Distress			
Intervention* →	CAI	CBT	TFI	PE	CAI	CBT	TFI	PE	CAI	CBT	TFI	PE	CAI	CBT	TFI	PE
Systematic Review ↓																
Turrini 2019		+	0							+	0					
Turrini 2017	+	+	?		?	?	0		+	+	?					
Jericho 2021										+	+					
McLean 2022											+					
Raghuram 2021							?				?					
Sambucini 2020		?				+										
Wei 2021											?					
Kip 2020					+	+	+		+	+	+					
Lawton 2021		+				+				+						
Neimeyer 2021											+					
Coventry 2020			+				+				+					
Peterson 2020								+								+
Overall Conclusion**	+	+	?		+	+	+	+	+	+	+		+	?		+

Legend:
+ Positive Impact
? Inconclusive Impact
0 No impact

*Interventions: CAI=Culturally Adapted Evidence-Based Interventions; CBT=Cognitive Behavioral Therapy; TFI=Trauma-Focused Interventions; PE=Psycho-education.
**Overall conclusion is based on the preponderance of evidence from the systematic reviews.

Appendix C

Interventions with very strong evidence for refugee children

Mental Health Outcome →	**Anxiety**	**Depression**		**PTSD**		**General Distress**	
Intervention →	High-support residential environments	School-based/group interventions	High-support residential environments	School-based/group interventions	High-support residential environments	School-based/ group interventions	Parenting Classes
Systematic Review ↓							
Brown 2017				+			
Fazel 2018		+		?			+
Madan 2011						?	
Mitra 2019	+		+		+		
Rafieifar 2022		+		+			
Charbonneau 2021		+					
Overall Conclusion*	+	+	+	+	+	?	+

Legend:

+ Positive Impact
? Inconclusive Impact
0 No impact

*Overall conclusion is based on the preponderance of evidence from the systematic reviews.

Appendix D

Interventions with inconclusive evidence for refugee adults and/or children

	Alternative Medicine	Expressive Therapies	Family Therapy	Interpersonal Psycho-therapy (IPT)	Logotherapy	Meditation	Multimodal/ Multi-disciplinary	Relaxation Music	Stress Inoculation Training	Testimony Therapy
Systematic Review ↓										
Brown 2017										
Fazel 2018		+	?							
Kinzie 2011										
Mcfarlane 2012							?			
Mckenna 2012	?									
Nocon 2017		?		?		+				
Sandahl 2017								?		
ter Heide 2016										
Thompson 2018										
Turrini 2019										
Turrini 2017					?		?			?
Sambuccini 2020							+			
Reason for inconclusive results*	2	2	2	1	1	2	2	1	1	1

Legend:
+ Positive Impact
? Inconclusive Impact

***** Reason for inconclusive results:
1. Only one study identified by the systematic review(s).
2. High risk of bias in the studies identified by the systematic review(s).
3. Conflicting results among the studies identified by the systematic review(s).