# **Scoping Review**

**Open Access** 



# Successful Educational Practices for Teaching Refugee Children with Mental Health Challenges: A Scoping Review

Gelan Hesham Abdo Ahmed\*

University of Wisconsin, Whitewater, USA

\*Correspondence to: Gelan Hesham Abdo Ahmed, University of Wisconsin, Whitewater, USA; Email: <a href="mailto:ahmedg@uww.edu">ahmedg@uww.edu</a>

Abstract: Refugee children experience a wide range of life-threatening events during three life stages: premigration, in-transit, and post-migration. Generally, life-threatening events can trigger an array of mental health disorders, including conduct disorder, emotional distress, depression, emotional and behavioral disorder, anxiety, and post-traumatic stress disorder. Consequently, these mental health disorders can bring about adverse academic outcomes for refugee children in host country schools, such as truancy, low school grades and grade point averages (GPAs), and school dropouts. To better improve the academic outcomes of refugee children with mental health disorders, teachers in host country schools need to implement successful educational practices. Thus, the aim of this scoping review paper was to identify and map successful educational practices that improved the academic outcomes of refugee children experiencing mental health disorders as a result of forced migration. An electronic literature search was conducted using nine databases: PubMed, Scopus, ERIC, Web of Science, EBSCO, Medline, Google Scholar, APA PsycArticles, and APA PsycINFO. A total of 14 articles met the inclusion criteria and were analyzed. In fact, these articles implemented a wide range of successful educational practices, including interventions, curricula, workshops, programs, and teaching strategies, designed to ameliorate the academic outcomes of refugee children in host country schools.

**Keywords:** Refugee children; Mental health disorders; Scoping review; Academic outcomes; Educational practices; Interventions; Teaching strategies; Programs; Workshops; Curricula

## 1. Introduction

ccording to the United Nations (2025), a refugee is a person who escaped their countries of origin due to war, persecution, or human rights violations. By the end of 2023, there were around 47 million refugee children worldwide (United Nations International Children's Emergency Fund [UNICEF], 2025). Generally, these children can face life-

threatening events during three different life stages: (a) pre-migration, (b) in-transit, and (c) post-migration (Kirmayer et al., 2011; Wessels, 2014). Pre-migration is the stage in which refugees are preparing to leave their countries of origin. In this stage, refugees can be subjected to violence, rape, torture, and sexual assault (Fazel & Stein, 2022; Kirmayer et al., 2011). Intransit is the stage in which refugees live in camps for

© The Author(s) 2025. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, sharing, adaptation, distribution and reproduction in any medium or format, for any purpose, even commercially, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

around nine months prior to initiating their journeys to a host country. In this stage, refugees can be exposed to sexual violence, epidemics, and separation from family members (Wessels, 2014). Post-migration is the stage in which refugees resettle in a host country. In this stage, refugees can experience loss of community cultures, social isolation, identity crisis, discrimination, and bullying (Fazel & Stein, 2022).

As refugee children can face life-threatening events during these three life stages, a sizeable proportion have developed mental health disorders (Bamford et al., 2021; Blackmore et al., 2020; Bronstein & Montgomery, 2011; Dangmann et al., 2022; Daniel-Calveras et al., 2022; Gadermann et al., 2021; Kien et al., 2018; McEwen et al., 2023; Schumacher et al., 2024). To explain, McEwen et al. (2023) found that, among 1,591 Syrian refugee children who lived in a Lebanese settlement, 47.8% met the diagnostic criteria for anxiety, 29.6% posttraumatic stress disorder (PTSD), 26.9% for conduct disorder, and 20.1% for depression. Further, in a study of 779 Middle Eastern refugee children who resettled in Germany, Malaysia, Sweden, and Turkey, Blackmore et al. (2020) found that 22.71% had PTSD, 13.81% had depression, and 15.77% had anxiety. Finally, Daniel-Calveras et al. (2022) reported that 55% to 72% of 80,651 refugee children from Afghanistan, Iraq, Eritrea, Syria, and Somalia who resettled in France, Greece, Norway, Switzerland, Denmark, Sweden, and the Netherlands had emotional distress, 32.6% to 38.2% had anxiety, 4.6% to 43% had PTSD, 4% to 14.3% had emotional and behavioral problems, and 2.9% to 61.6% had depression.

These mental health disorders, in turn, can have adverse effects on the academic outcomes of refugee children in host country schools (Blackwell & Melzak, 2000). According to Moeck and colleagues (2022), academic outcomes are measures used to capture students' success in education, including achievement indicators (e.g., grades, course completion, and graduation rates), measures of persistence (e.g., attendance), and ratings of academic function (e.g., participation). Kaplan and colleagues (2015) reported that refugee children with mental health disorders experienced learning challenges and had weak academic outcomes. While research linking mental health and academic outcomes among refugee children remains scarce, many studies involving non-refugee populations have established similar patterns (e.g., Agnafors et al., 2020; Desocio et al., 2004; Graf et al., 2019; Larson et al., 2017; Schulte-Korne, 2016). For example, children with mental health disorders, like conduct disorder, PTSD, anxiety, depression, suicidal ideation, and internalizing and externalizing problem behaviors, were reported to have weak academic functioning and poor school attendance (Desocio et al., 2004); to perform below grade levels (Agnafors et al., 2020); to repeat grade levels and drop out of schools (Schulte-Korne, 2016); to have low grade point averages (GPAs) (Larson et al., 2017); and to have poor school grades (Graf et al., 2019).

To better support the academic outcomes of refugee children with mental health disorders, teachers in host country schools need to implement successful educational practices (Larson et al., 2017). Successful educational practices are interventions, programs, curricula, teaching strategies, workshops, or activities that have been found to improve students' academic outcomes (National Education Association, 2025). While many systematic literature reviews have investigated mental health interventions designed to ameliorate refugee children's well-being (e.g., Hettich et al., 2020; Hutchinson et al., 2022; Lawton & Spencer, 2021; Sullivan & Simonson, 2023), none have focused on exploring successful educational practices that improve refugee children's academic outcomes. Identifying successful educational practices will enable teachers in host country schools to address the poor academic outcomes often observed among refugee students (Sirin & Rogers-Sirin, 2015). So, the aim of this scoping review paper was to identify and map successful educational practices that improved the academic outcomes of refugee children experiencing mental health disorders as a result of forced migration.

#### 2. Methods

This scoping review paper was guided by Arksey's and O'Malley's (2005) methodological framework. This framework enables researchers in the education arena to locate relevant literature, to identify research gaps, and to draw conclusions from existing literature. As such, this framework includes the following steps: developing a research question, identifying relevant studies, selecting studies, charting data, and reporting and synthesizing results.

#### **Developing Research Question**

The following research question guided this scoping review paper:

What successful educational practices were employed in host countries to ameliorate the academic outcomes for refugee children experiencing mental health disorders due to forced migration?

### **Identifying Relevant Studies**

An electronic literature search was conducted using these nine databases: PubMed, Scopus, Web of Science, APA PsycArticles, APA PsycINFO, EBSCO, Medline, Google Scholar, and ERIC. These databases were accessed through Indiana University (IU) to ensure the retrieval of full-text articles. Also, the search strategy used the following Boolean terms: ("refugee child" OR "refugee student" OR "refugee youth") AND ("mental health" OR "trauma" OR "PTSD" OR "anxiety" OR "depression") AND ("education" OR "schools" OR "classrooms" OR "learning" OR "academic"). The search was restricted to peer-reviewed journal articles and book chapters published in English between January 2000 and May 2025.

#### **Selecting Studies**

Articles were included in this scoping review paper if they used a curriculum, instructional activity, intervention, teaching strategy, or program that aimed to improve the academic outcomes of refugee children; involved refugee children or youth aged 5 to 18 who were experiencing mental health disorders because of forced migration; utilized a quantitative, qualitative, or mixed-methods research design; measured academic outcomes (e.g., graduation) or included qualitative data (e.g., teachers' perspectives) that connected an educational practice

to students' academic outcomes; and reported positive academic outcomes.

Articles were excluded from this scoping review paper if they did not measure an academic outcome for refugee students following the implementation of a curriculum, instructional activity, intervention, teaching strategy, or program; did not address or imply the presence of mental health disorders among refugee students; were not peer-reviewed and empirical (e.g., systematic reviews, literature reviews, capstone projects, course papers, dissertations, and practitioner commentaries); involved research participants younger than 5 or older than 18 years of age; and reported negative or inconclusive results about the effect of an educational practice on students' academic outcomes.

#### **Charting Data**

Two data extraction tables were created to organize information from the included articles. **Table 1** highlights key study characteristics, including article citation, country of implementation, participant characteristics, reference to mental health disorders, and research design. Further, **Table 2** summarizes the core features of the educational practices, such as the type of educational practice implemented, educational setting (e.g., classrooms), duration, outcome measures, and results.

To ensure consistency in the data extraction process, the author and a coder independently extracted the data from all the selected articles using an Excel sheet. Then, the author and the coder compared the extracted data together and resolved disagreements through discussion until reaching consensus.

Table 1. Characteristics of Selected Articles				
Citation	Country	Participant Characteristics Mental Health Reference		Study Design
McBrien (2006)	USA	Refugee youth aged 9-18	Mental health risks due to forced migration	Mixed methods
Li and Que (2020)	Canada	Refugee youth aged 14-18	ed 14-18 Mental health risks due to forced migration	
Accurso et al. (2021)	USA	Refugee youth aged 14-17	Trauma due to forced migration	Qualitative
Ayalon and Ayalon (2019)	Greece	Refugee youth aged 14-17	Trauma due to forced migration	Qualitative
Barber (2024)	Canada	Refugee children with disabilities aged 7-9	Trauma due to forced migration	Qualitative
Meloche et al. (2020)	USA	Refugee children aged 11-14	Trauma due to forced migration	Quantitative
Rousseau et al. (2014)	Canada	Refugee youth aged 14-18	Mental health risks due to forced migration	Quantitative
Sarmini et al. (2020)	Turkey	Refugee children aged 11-14	Trauma due to forced migration	Qualitative
Sirin et al. (2018)	Turkey	Refugee children aged 9-14	Mental health risks due to forced migration	Quantitative

Table 1. Characteristics of Selected Articles

Continuation Table:

Citation	Country	Participant Characteristics	Mental Health Reference	Study Design
Symons and Ponzio (2019)	USA	Refugee children aged 11-13 and youth aged 14-18	Trauma due to forced migration	Qualitative
Cranitch (2010)	Australia	Refugee children with and without disabilities aged 13-14	Trauma and depression due to forced migration	Qualitative
Huang et al. (2025)	USA	Refugee youth aged 14-17	Psychological stressors due to forced migration	Qualitative
Creagh (2023)	Australia	Refugee youth aged 14-17	Trauma due to forced migration	Quantitative
Jacobson (2021)	Canada	Refugee youth aged 14-17	Trauma due to forced migration	Qualitative

Table 2. Educational Practice Details

Citation	Type of Educational Practice	Setting	Duration	Outcome Measures	Results
McBrien (2006)	Special Services for Youth (SSY) Program	Refugee Organization	4 months	Participation in Class Activities	Data revealed that students' participation in class activities increased following program implementation.
Li and Que (2020)	Supports and Services Program	High school	1 year	English Literacy and Numeracy	Data revealed that students' literacy and numeracy skills improved following program implementation.
Accurso et al. (2021)	Milltown Multimodal Multiliteracies (MMM) Teaching Strategy	High school	2 years	English Literacy	Data revealed that students were able to produce longer texts, use varied sentence structure, combine sentence clauses, utilize a wide range of verbs, and integrate tenses consistently following strategy implementation.
Ayalon and Ayalon (2019)	English Language Curriculum	Refugee camp	3 weeks	English Literacy	Data revealed that students were more comfortable with reading and writing following curriculum implementation.
Barber (2024)	Blended Art Workshop	Elementary school	7 weeks	English Language	Data revealed that students were motivated to use English to discuss their artwork with their peers and understood oral texts at grade level following workshop implementation.
Meloche et al. (2020)	Community School Services Program	Middle school	2 years	English, Math, Social Studies, and Science	Data revealed that students who participated in the program scored higher in English, math, social studies, and science compared to their peers who were not enrolled in the program.
Rousseau et al. (2014)	Tutoring Intervention	High school	8 months	French and Math	Data revealed that students who received tutoring services scored higher in French and math compared to their peers who received another intervention.
Sarmini et al. (2020)	Promoting Integration of Syrian Children into the Turkish Education System (PICTES) Program	High school	2 years	Turkish Language	Data revealed that students' Turkish language skills improved following program implementation.
Sirin et al. (2018)	Hope Intervention	Middle school	4 weeks	Turkish Language	Data revealed that students who received the intervention scored higher in Turkish language skills compared to their peers who did not receive the intervention.

Continuation Table:

Citation	Type of Educational Practice	Setting	Duration	Outcome Measures	Results
Symons and Ponzio (2019)	Gaining Learning Opportunities through Better English (GLOBE) Program	Middle and high school	6 weeks	English Language	Data revealed that students' English language skills improved following program implementation.
Cranitch (2010)	Literacy Transition Pilot (LTP) Program	Intensive English Center	1 year	English Language	Data revealed that students' English language skills improved following program implementation.
Huang et al. (2025)	Teen Response (TR) Program	High school	1 year	English Language	Data revealed that students' English language skills improved following program implementation.
Creagh (2023)	English Language Support (ELS) Program	High school	44 weeks	English Language	Data revealed that students' English language skills improved following program implementation.
Jacobson (2021)	Trauma-informed Teaching Strategy and Curriculum (TITSC)	High school	Not Reported	Course Completion and Attendance	Data revealed that students' course completion and attendance improved following TITSC implementation.

#### **Reporting and Synthesizing Results**

The electronic search yielded 2,938 articles. After removing duplicates, 1,998 articles were retrieved for title and abstract review. The author and the coder reviewed the titles and abstracts of all the articles independently. Any discrepancies between the author and the coder were addressed through discussion until

reaching consensus.

From these articles, 33 were selected for full-text review. In total, 19 articles were excluded for not measuring academic outcomes, not addressing mental health status, or not meeting the age criterion. Thus, 14 articles were included in this review (see **Figure 1**).

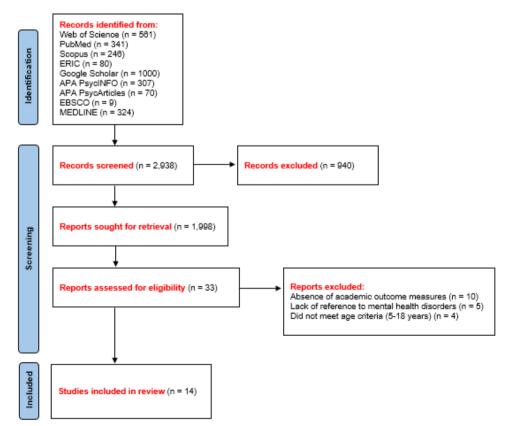


Figure 1. Flowchart of Search Results

This section synthesizes the educational practices described in the included articles. These practices were grouped into these categories: workshops, teaching strategies, programs, curricula, and interventions. In each category, educational practices were analyzed in terms of the country of implementation, participant characteristics, reference to mental health disorders, research design, duration and setting of the educational practice, academic outcomes measured, and overall results. This structure allowed for a thorough comparison of how various educational practices supported the academic outcomes of refugee children experiencing mental health disorders.

#### Workshops

Among the included articles, only one focused on workshops (Barber, 2024). This blended art workshop was developed for elementary school refugee students with disabilities who were at-risk of trauma because of forced migration. It was delivered in an elementary school in Canada for a duration of seven weeks. This study employed a qualitative research design to explore the effect of the workshop on elementary school refugee students' English language skills. Findings revealed that students were motivated to use English to discuss their artwork with their peers and understood oral texts at grade level following workshop implementation.

#### **Teaching Strategies**

Among the included articles, only two focused on teaching strategies (Accurso et al., 2021; Jacobson, 2021). These strategies included the Milton Multimodal Multiliteracies (Accurso et al., 2021) and traumainformed teaching (Jacobson, 2021). These strategies were employed with high school refugee students, who experienced trauma due to forced migration, in school settings.

Both articles utilized qualitative research designs to examine the impact of these strategies on disparate academic outcomes. Accurso et al.'s (2021) study, which was conducted in the USA, measured students' English language literacy skills. However, Jacobson's (2021) study, which took place in Canada, measured students' course completion and attendance. The duration of the Milton Multimodal Multiliteracies was 2 years, whereas the duration of the trauma-informed teaching was not reported.

Both articles reported positive academic outcomes for high school students after employing the teaching strategies. Accurso et al. (2021) found that students were able to produce longer texts, use varied sentence structure, combine sentence clauses, utilize a wide range of verbs, and integrate tenses consistently after using the Milton Multimodal Multiliteracies strategy. Similarly, Jacobson (2021) reported that students' course completion and attendance improved after using the trauma-informed teaching strategy.

#### **Programs**

Among the included articles, eight focused on academic programs (Cranitch, 2010; Creagh, 2023; Huang et al., 2025; Li & Oue, 2020; McBrien, 2006; Meloche et al., 2020; Sarmini et al., 2020; Symons & Ponzio, 2019). These programs were the literacy transition pilot (Cranitch, 2010), English language support (Creagh, 2023), teen response (Huang et al., 2025), supports and services (Li & Que, 2020), special services for youth (McBrien, 2006), community school service (Meloche et al., 2020), promoting integration of Syrian children into the Turkish education system (Sarmini et al., 2020), and gaining learning opportunities through better English (Symons & Ponzio, 2019). These programs were delivered in different countries, including Turkey (Sarmini et al., 2020), the USA (Huang et al., 2025; McBrien, 2006; Meloche et al., 2020; Symons & Ponzio, 2019), Canada (Li & Que, 2020), and Australia (Cranitch, 2010; Creagh, 2023).

These programs targeted refugee students in different educational levels and with different abilities, such as middle school students without disabilities (McBrien, 2006; Meloche et al., 2020; Symons & Ponzio, 2019), high school students with disabilities (Cranitch, 2010), and high school students without disabilities (Cranitch, 2010; Creagh, 2023; Huang et al., 2025; Li & Que, 2020; McBrien, 2006; Sarmini et al., 2020; Symons & Ponzio, 2019). Moreover, these students were at-risk of varied mental health disorders, like psychological stressors (Huang et al., 2025), depression (Cranitch, 2010), and trauma (Cranitch, 2010; Creagh, 2023; Meloche et al., 2020; Sarmini et al., 2020; Symons & Ponzio, 2019). However, two articles did not explicitly reference students' mental health disorders (McBrien, 2006; Li & Que, 2020).

These programs were delivered in different settings, including a high school (Creagh, 2023; Haugh et al., 2025; Li & Que, 2020; Sarmini et al., 2020; Symons

& Ponzio, 2019), English center (Cranitch, 2010), refugee organization (McBrien, 2006), and middle school (Meloche et al., 2020; Symons & Ponzio, 2019). Further, the duration of these programs differed across articles, ranging from multiple weeks (McBrien, 2006; Symons & Ponzio, 2019) to a year or more (Cranitch, 2010; Creagh, 2023; Huang et al., 2025; Li & Que, 2020; Meloche et al., 2020; Sarmini et al., 2020).

A wide range of academic outcomes were measured, including numeracy (Li & Que, 2020; Meloche et al., 2020), English language skills (Cranitch, 2010; Creagh, 2023; Haugh et al., 2025; Li & Que, 2020; Meloche et al., 2020; Symons & Ponzio, 2019), Turkish language skills (Sarmini et al., 2020), science and social studies (Meloche et al., 2020), and participation in class activities (McBrien, 2006). Also, the articles used different research designs, including qualitative (Cranitch, 2010; Creagh, 2023; Haugh et al., 2025; Li & Que, 2020; Sarmini et al., 2020; Symons & Ponzio, 2019), quantitative (Meloche et al., 2020), and mixedmethods (McBrien, 2006).

All articles reported positive academic outcomes for middle and high school students who participated in these programs. These positive outcomes were increased participation in classroom activities (McBrien, 2006), enriched literacy and numeracy skills (Li & Que, 2020; Meloche et al., 2020), stronger Turkish (Sarmini et al., 2020) and English language skills (Cranitch, 2010; Creagh, 2023; Huang et al., 2025; Symons & Ponzio, 2019), and higher scores in social studies and science (Meloche et al., 2020).

## Curricula

Among the included articles, only two focused on educational curricula (Ayalon & Ayalon, 2019; Jacobson, 2021). These curricula were composed of an English language curriculum (Ayalon & Ayalon, 2019) and a trauma-informed curriculum (Jacobson, 2021). Both curricula were created for high school refugee students who experienced trauma as a result of forced migration. Yet, they were delivered in different settings; the English language curriculum was implemented in a refugee camp in Greece (Ayalon & Ayalon, 2019), while the trauma-informed curriculum was delivered in a high school in Canada (Jacobson, 2021).

Both articles utilized qualitative research designs to explore the effect of these curricula on varied academic outcomes. Ayalon and Ayalon (2019) assessed improvements in English language literacy skills, whereas Jacobson (2021) evaluated course completion and attendance. The duration of the English language curriculum was 3 weeks (Ayalon & Ayalon, 2019), and the duration of the trauma-informed curriculum was not reported (Jacobson, 2021).

Both articles reported positive academic outcomes for high school students after delivering the curricula. Ayalon and Ayalon (2019) reported that students were more comfortable with reading and writing in English following the implementation of the English language curriculum. Jacobson (2021) found that students' course completion and attendance improved after the trauma-informed curriculum was delivered.

#### Interventions

Among the included articles, only two focused on academic interventions (Rousseau et al., 2014; Sirin et al., 2018). These interventions were the tutoring intervention (Rousseau et al., 2014) and hope intervention (Sirin et al., 2018). Both articles used quantitative research designs to assess the effects of these interventions on distinct academic outcomes. The tutoring intervention focused on enriching the French language and math skills of high school refugee students who were at-risk of mental health disorders due to forced migration. The duration of the intervention was 8 months, and it was administered in a high school in Canada. Results indicated that students who participated in the tutoring intervention scored higher in French and math than those who did not (Rousseau et al., 2014).

The hope intervention focused on developing the Turkish language skills of middle school refugee students who were at-risk of mental health disorders due to forced migration. The duration of the intervention was 4 weeks, and it was delivered in a middle school in Turkey. Results revealed that students who received the intervention achieved higher scores in Turkish language skills than those who did not (Sirin et al., 2018).

#### 3. Discussion

The aim of this scoping review was to identify and map the successful educational practices employed with refugee children who experienced mental health disorders due to forced migration. A total of 14 articles met the inclusion criteria and were analyzed.

The discussion below examines key themes across these articles, including countries of implementation, participant characteristics, references to mental health disorders, research design, types and duration of educational practices, and measured academic outcomes.

First, the articles included in this scoping review were conducted across a range of national contexts. To illustrate, 35.7% of the articles were conducted in the USA, 28.6% in Canada, 14.3% in Turkey, 14.3% in Australia, and 7.1% in Greece. These percentages highlight a concentration of research in high-income countries, particularly in North America. Even though Turkey is regarded one of the largest refugee-hosting nations (UNHCR, 2025), it was represented by only two articles. Additionally, other major refugee-hosting nations, such as Sudan, Germany, Uganda, Bangladesh, Iran, Pakistan, Ethiopia, and Lebanon, were absent from the included literature. This suggests that much of the current literature on successful educational practices for refugee children is shaped by Western educational systems and contexts, which may not be generalizable to settings with fewer resources or with different educational infrastructure. Future research should consider developing and implementing educational practices for refugee children experiencing mental health disorders due to forced migration, particularly in major refugee-hosting countries.

Second, 14.3% of the included articles involved refugee children with disabilities. In effect, this represents a notable gap since existing research indicates that a sizeable proportion of refugee children experience a range of disabilities, such as intellectual disabilities (Barber, 2025; Cranitch, 2010; Crea et al., 2022) and physical disabilities (Crea et al., 2022). The challenges associated with these disabilities are often aggravated by mental health disorders, limited access to support services in home and host countries, and interrupted schooling (Dryden-Peterson, 2015). Furthermore, the Convention on the Rights of Persons with Disabilities asserts that all students with disabilities are entitled to an inclusive education which offers proper accommodations and individualized supports to maximize their academic and social development and foster life-long learning (United Nations Human Rights [UNHR], 2025). Yet, the limited representation of this population in research shows that

their educational needs remain largely unmet. Future research should consider developing and implementing inclusive educational practices that meet the learning needs of refugee children with disabilities.

Third, 28.6% of the included articles did not explicitly reference the mental health disorders experienced by refugee children as a result of forced migration. However, research has consistently shown that refugee children are at heightened risk for mental health disorders, such as depression, anxiety, PTSD and conduct disorder (Blackmore et al., 2020; Daniel-Calveras et al. 2022; McEwen et al., 2023), and suicidal ideation and emotional distress (Daniel-Calveras et al. 2022). Albeit the prevalence and severity of these disorders, many refugee children remain undiagnosed because of several barriers in host countries, such as service delays, lack of culturally sensitive screening tools and unreliable referral processes (Al-Soleiti et al., 2021), and absence of interpreters, long waiting lists, lack of trust in mental health professionals and absence of culturally acceptable mental health services (Place et al., 2021). If unaddressed, these mental health disorders can substantially impair students' academic outcomes (Blackwell & Melzak, 2000). Future research should screen refugee students' mental health before designing an educational practice to ensure that their psychological and academic needs are adequately met and supported.

Fourth, 64.3% of the included articles used a qualitative research design, 28.6% employed a quantitative research design, and only 7.1% utilized a mixed-methods research design. Although mixed-methods research was the least utilized among the included articles, it offers key advantages in educational research; it provides a complete and nuanced understanding of complex phenomena (Wasti et al., 2022), enhances the strengths of inferences, provides a thorough grasp of the research problem and supports wide-reaching conclusions (Sharma et al., 2023), and enables researchers to examine research questions from multiple perspectives and combines the interpretive insights and depth of qualitative inquiry with the generalizable results of quantitative analysis (Regnault et al., 2018). Future research should incorporate mixed-methods research designs to evaluate educational practices for refugee children given that these approaches to inquiry enable a thorough examination of the effectiveness of a practice as well as the experiential realities of the populations they aim to serve.

Fifth, only 14.3% of the included articles implemented academic interventions. This scant representation uncovers a substantial gap in the empirical evaluation of interventions designed for refugee students. Generally, intervention studies employ pre-and post-intervention assessments to identify whether observed changes can be attributed to the intervention itself (Campbell & Stanley, 2000). Further, randomized controlled trials (RCTs), which are considered the "gold standard" for establishing causal relationships in educational research, provide structured opportunities to assess how an intervention impacts measurable outcomes in real-world settings (Durlak & Dupre, 2008). By randomly assigning participants to intervention and control groups (Salvin, 2002), RCTs reduce selection bias, strengthen internal validity, and improve the credibility of the results (What Works Clearinghouse [WWC], 2022). RCTs also play a main role in determining whether an intervention is categorized as evidence-based, a requirement for inclusion in major databases, including WWC. Future research should employ RCTs to build an evidencebased foundation for interventions that target refugee students experiencing mental health disorders.

Sixth, only 14.3% of the included articles focused on developing numeracy skills in refugee children. This limited focus is alarming, as recent research reports that many refugee children enter host country schools with gaps in numeracy due to interrupted schooling in their countries of origin or refugee camps (Lussenhop & Kaiser, 2020). These gaps are usually compounded by challenges in adapting to host countries' curricula, which may differ in content and pedagogy. As highlighted by Lussenhop and Kaiser, numeracy is an essential tool for decision-making and social integration. Everyday tasks, such as comparing prices or paying bills, require a level of numeracy that exceeds basic literacy in a host country's language. When these skills are lacking, innumeracy can become a barrier that hinders refugee students' civic engagement, economic security, and well-being. Also, strong numeracy skills are associated with higher academic achievement and increased likelihood of postsecondary education enrollment (Davis-Kean et al., 2021). Future research should consider designing educational practices that address numeracy skills to ensure refugee children's academic advancement and social participation.

Last, 78.6% of the educational practices were implemented in formal school settings, while 21.4% took place in informal settings, including refugee organizations, refugee camps, and centers. According to Dryden-Peterson (2011), schools serve not only as sites for academic instruction but also as protective environments that provide routine, psychological support, and a stable space for recovery from trauma associated with forced migration. Yet, informal settings may face limitations in curriculum alignment, access to experienced teachers, and continuity of instruction, despite their critical role in emergency education contexts. In terms of duration, 42.8% of educational practices lasted between 1 to 2 years, while 57.1% lasted between 3 to 44 weeks. The duration of educational practices plays a major role in its potential impact, particularly for refugee students who often face wide gaps in their foundational learning due to interrupted schooling and limited academic support prior to resettlement (Sirin & Rogers-Sirin, 2015). In fact, long-term educational practices provide the support necessary to rebuild foundational academic skills, to strengthen language development, and to establish trusting relationships between students and their teachers. Future research should implement longterm educational practices in formal school settings to support refugee children's well-being and academic success.

#### 4. Limitations

Although this review offers valuable insights into the successful educational practices used with refugee children experiencing mental health disorders to ameliorate their academic outcomes, it has some limitations that should be highlighted. To begin, the electronic search was restricted to articles published in English. While this decision was made due to the constraints associated with translating non-English literature, it may have led to the exclusion of articles that implemented an array of successful educational practices in non-English-speaking refugee-hosting countries. Next, this review focused on refugee children aged 5-18 years only, thereby eliminating any educational practices developed for children under the age of 5. Although early childhood education is critical for cognitive and emotional development, infantfocused educational practices were not within the scope of this review. Finally, the electronic search was restricted to peer-reviewed articles, thereby excluding any existing grey literature that may have implemented successful educational practices for refugee children experiencing mental health disorders due to forced migration.

## 5. Conclusion

This scoping review paper aimed to identify and map successful educational practices used with refugee children experiencing mental health disorders because of forced migration. A total of 14 articles were included in this review. These articles incorporated different research designs and implemented a range of educational practices, including workshops, curricula, programs, teaching strategies, and interventions. These practices targeted various academic outcomes, such as English language skills, Turkish language skills, French language skills, numeracy, science, social studies, course completion, attendance, and participation in class activities. Also, these practices took place in different settings and varied in duration. Future research should consider developing educational practices for refugee children in major refugee-hosting countries; designing practices that meet the learning needs of refugee children with disabilities; screening refugee children's mental health and well-being before designing educational practices; employing mixedmethods research designs to evaluate the effectiveness of practices; implementing RCTs to build an evidencebased foundation for interventions; developing practices that address numeracy skills; and implementing long-term practices in formal school settings.

# **Funding Statement**

This research received no grant from any funding agency.

# Acknowledgement

I would like to thank Seleem for extracting and charting the data from the selected articles.

#### References

- [1] Accurso, K., Gebhard, M., Harris, G., & Schuetz, J. (2021). Implications of genre pedagogy for refugee youth with limited or interrupted formal schooling. *Educational Linguistics*, 50, 57-78. https://doi.org/10.1007/978-3-030-79470-5\_4
- [2] Agnafors, S., Barmark, M., & Sydsjo, G. (2020).

- Mental health and academic performance: A study on selection and causation effects from childhood to early adulthood. *Social Psychiatry and Psychiatric Epidemiology*, *56*(5), 857-866. https://doi.org/10.1007/s00127-020-01934-5
- [3] Al-Soleiti, M., Abu Adi, M., Nashwan, A., & Rafla-Yuan, E. (2021). Barriers and opportunities for refugee mental health services: Clinician recommendations from Jordan. *Global Mental Health*, 8(38), 1-6. https://doi.org/10.1017/gmh.2021.36
- [4] Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a Methodological Framework. *International Journal of Social Research Methodology*, 8(1), 19-32. https://doi.org/10.1080/1364557032000119616
- [5] Ayalon, A., & Ayalon, M. (2019). Saving the children: The challenges of educating refugee youth. Bilingualism and Bilingual Education: Politics, Policies and Practices in a Globalized Society, 5, 253-267. https://doi.org/10.1007/978-3-030-05496-0 12
- [6] Bamford, J., Fletcher, M., & Leavey, G. (2021). Mental health outcomes of unaccompanied refugee minors: A rapid review of recent research. *Current Psychiatry Reports*, 23(8), 45-56. https://doi.org/10.1007/s11920-021-01262-8
- [7] Barber, S. (2025). From silence to academic engagement: How refugee children with disabilities access learning through inclusive "artful" schools in Canada. *British Educational Research Journal*, 2, 1-31. https://doi.org/10.1002/berj.4148
- [8] Blackmore, R., Gray, K. M., Boyle, J. A., Fazel, M., Ranasinha, S., Fitzgerald, G., Misso, M., & Gibson-Helm, M. (2020). Systematic review and meta-analysis: The prevalence of mental illness in child and adolescent refugees and asylum seekers. *Journal of the American Academy of Child & Adolescent Psychiatry*, 59(6), 705-714. <a href="https://doi.org/10.1016/j.jaac.2019.11.011">https://doi.org/10.1016/j.jaac.2019.11.011</a>
- [9] Blackwell, D., & Melzak, S. (2000). Far from the battle but still at war: Troubled Refugee children in school. Child Psychotherapy Trust.
- [10] Bronstein, I., & Montgomery, P. (2011). Psychological distress in refugee children: A systematic review. Clinical Child and Family

- *Psychology Review, 14*(1), 44-56. https://doi.org/10.1007/s10567-010-0081-0
- [11] Campbell, D. T., & Stanley, J. C. (2000). Experimental and quasi-experimental designs for research. Houghton.
- [12] Cranitch, M. (2010). Developing language and literacy skills to support refugee students in the transition from primary to secondary school. *The Australian Journal of Language and Literacy*, 33(3), 255-267.

https://doi.org/10.1007/bf03651838

- [13] Creagh, S. (2023). Measuring the academic progress of newly arrived migrant and refugee youth: An Australian school-based longitudinal study. In H. Pinson, N. Bunar, & D. Devine (Eds.), Research handbook on migration and education (pp. 157-172). Edward Elgar.
- [14] Crea, T. M., Klein, E. K., Okunoren, O., Jimenez, M. P., Arnold, G. St., Kirior, T., Velandria, E., & Bruni, D. (2022). Inclusive education in a refugee camp for children with disabilities: How are school setting and children's behavioral functioning related? *Conflict & Health*, 16(1), 1-10.

https://doi.org/10.1186/s13031-022-00486-6

- [15] Dangmann, C., Solberg, O., & Dybdahl, R. (2022). Mental health in refugee children. *Current Opinion in Psychology*, 48, 1-7. https://doi.org/10.1016/j.copsyc.2022.101460
- [16] Daniel-Calveras, A., Baldaqui, N., & Baeza, I. (2022). Mental health of unaccompanied refugee minors in Europe: A systematic review. *Child Abuse & Neglect*, 133, 1-18.

https://doi.org/10.1016/j.chiabu.2022.105865

- [17] Davis-Kean, P. E., Domina, T., Kuhfeld, M., Ellis, A., & Gershoff, E. T. (2021). It matters how you start: Early numeracy mastery predicts high school math course-taking and college attendance. *Infant and Child Development*, 31(2), 1-8. https://doi.org/10.1002/icd.2281
- [18] DeSocio, J., & Hootman, J. (2004). Children's mental health and school success. *The Journal of School Nursing*, 20(4), 189-196. https://doi.org/10.1177/10598405040200040201
- [19] Dryden-Peterson, S. (2011). Refugee education: A global review.

  https://www.unhcr.org/research/evalreports/4fe317589/refugee-education-global-

- review-sarah-dryden-peterson-november-2011.html
- [20] Dryden-Peterson, S. (2015). The educational experiences of refugee children in asylum countries.

  https://www.migrationpolicy.org/research/educational experiences refugee children.
  - https://www.migrationpolicy.org/research/educational-experiences-refugee-children-countries-asylum
- [21] Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology*, 41(4), 327-350.

https://doi.org/10.1007/s10464-008-9165-0

- [22] Fazel, M., & Stein, A. (2002). The mental health of refugee children. *Archives of Disease in Childhood*, 87, 366-370.
- [23] Fazel, M., Wheeler, J., & Danesh, J. (2005). Prevalence of serious mental disorder in 7000 refugees resettled in western countries: A systematic review. *The Lancet*, 365, 1309-1314. <a href="https://doi.org/10.1016/s0140-6736(05)61027-6">https://doi.org/10.1016/s0140-6736(05)61027-6</a>
- [24] Gadermann, A. M., Gagne-Petteni, M., Janus, M., Puyat, J. H., Guhn, M., & Georgiades, K. (2022). Prevalence of mental health disorders among immigrant, refugee, and nonimmigrant children and youth in British Columbia, Canada. *JAMA Network Open, 5*(2), 1-12.

https://doi.org/10.1001/jamanetworkopen.2021.44934

- [25] Graf, C., Hoffmann, I., Diefenbach, C., Konig, J., Schmidt, M. F., Schnick-Vollmer, K., Huss, M., & Urschitz, M. S. (2019). Mental health problems and school performance in first graders: results of the prospective cohort study. *European Child & Adolescent Psychiatry*, 28(10), 1341-1352. https://doi.org/10.1007/s00787-019-01296-7
- [26] Hettich, N., Zehetmair, C., Lebiger-Vogel, J., & Titz, C. (2020). Psychosocial interventions for newly arrived adolescent refugees: A systematic review. *Current Psychology*, 41, 2690-2704. <a href="https://doi.org/10.1007/s40894-020-00134-1">https://doi.org/10.1007/s40894-020-00134-1</a>
- [27] Huang, G. H. C., Marsh, M. M., & Paul, N. A. (2025). In their words: Effective strategies for supporting newly resettled refugee background adolescents in a community-based program. *Child & Youth Care Forum*, 2, 1-16. https://doi.org/10.1007/s10566-024-09848-y

[28] Hutchinson, C., Barrett, P. M., & Safren, S. A. (2022). Group interventions for refugee minors: A systematic review. *International Journal of Social Psychiatry*, 68(1), 60-75.

https://doi.org/10.1177/00207640211057727

[29] Jacobson, M. R. (2020). An exploratory analysis of the necessity and utility of trauma-informed practices in education. *Preventing School Failure: Alternative Education for Children and Youth,* 65(2), 124-134.

https://doi.org/10.1080/1045988x.2020.1848776

- [30] Kaplan, I., Stolk, Y., Valibhoy, M., Tucker, A., & Baker, J. (2015). Cognitive assessment of refugee children: Effects of trauma and new language acquisition. *Transcultural Psychiatry*, *53*(1), 81-109. https://doi.org/10.1177/1363461515612933
- [31] Kien, C., Sommer, I., Faustmann, A., Gibson, L., Schneider, M., Krczal, E., Jank, R., Klerings, I., Szelag, M., Kerschner, B., Brattstrom, P., & Gartlehner, G. (2018). Prevalence of mental disorders in young refugees and asylum seekers in European Countries: A systematic review. European Child & Adolescent Psychiatry, 28(10), 1295-1310.

https://doi.org/10.1007/s00787-018-1215-z

[32] Kirmayer, L. J., Narasiah, L., Munoz, M., Rashid, M., Ryder, A. G., Guzder, J., Hassan, G., Rousseau, C., & Pottie, K. (2011). Common mental health problems in immigrants and refugees: General approach in primary care. *Canadian Medical Association Journal*, 183(12), 959-967. https://doi.org/10.1503/cmaj.090292

[33] Larson, S., Chapman, S., Spetz, J., & Brindis, C. D. (2017). Chronic childhood trauma, mental health, academic achievement, and school-based health center mental health services. *Journal of School Health*, 87(9), 675-686.

https://doi.org/10.1111/josh.12541

[34] Lawton, A., & Spencer, R. (2021). Cognitive behavioral therapy for child refugees: A systematic review. *Journal of Immigrant and Minority Health*, 24, 118-128.

https://doi.org/10.1007/s10903-021-01151-5

[35] Li, X., & Que, H. (2020). Support for refugee students in a Newfoundland high school. *Education in the North*, 27(1), 5-20. https://doi.org/10.26203/wfjh-v278

[36] Lussenhop, M., & Kaiser, G. (2019). Refugees and numeracy: What can we learn from international large-scale assessments, especially from TIMSS? *ZDM*, *52*, 541-555. https://doi.org/10.1007/s11858-019-01111-2

[37] McBrien, J. L. (2006). Serving the needs of at-risk refugee youth: A program evaluation. *Journal of School Public Relations*, 27(3), 326-341.

https://doi.org/10.3138/jspr.27.3.326

- [38] McEwen, F. S., Biazoli, C. E., Popham, C. M., Moghames, P., Saab, D., Fayyad, J., Karam, E., Bosqui, T., & Pluess, M. (2023). Prevalence and predictors of mental health problems in refugee children living in informal settlements in Lebanon. *Nature Mental Health, 1*(2), 135-144. https://doi.org/10.1038/s44220-023-00017-z
- [39] Meloche, A., Provinzano, K., Sondergeld, T., & Moy, M. (2020). Examining academic, non-academic, and college readiness outcomes of urban immigrant and refugee youth (IRY) in full-service community schools. *Children and Youth Services Review, 119*, 1-11.

https://doi.org/10.1016/j.childyouth.2020.105489

- [40] Moeck, E. K., Takarangi, M. K. T., & Wadham, B. (2022). Assessing student veterans' academic outcomes and wellbeing: A scoping review. *Journal of Veterans Studies*, 8(3), 104-119. https://doi.org/10.21061/jvs.v8i3.327
- [41] National Education Association. (2025). Whole student education.

  https://www.nea.org/professional-excellence/student-engagement/whole-student-education
- [42] Place, V., Nabb, B., Gubi, E., Assel, K., Ahlen, J., Hagstrom, A., Baarnhielm, S., Dalman, C., & Hollander, A. C. (2021). Perceived barriers to care for migrant children and young people with mental health problems and/or neurodevelopmental differences in high-income countries: A metaethnography. *BMJ Open, 11*(9), 1-18. https://doi.org/10.1136/bmjopen-2020-045923
- [43] Regnault, A., Willgoss, T., & Barbic, S. (2018). Towards the use of mixed methods inquiry as best practice in health outcomes research. *Journal of Patient-Reported Outcomes*, 2(1), 1-4. https://doi.org/10.1186/s41687-018-0043-8
- [44] Rousseau, C., Beauregard, C., Daignault, K., Petrakos, H., Thombs, B. D., Steele, R., Vasiliadis,

- H.-M., & Hechtman, L. (2014). A cluster randomized-controlled trial of a classroom-based drama workshop program to improve mental health outcomes among immigrant and refugee youth in special classes. *PLoS ONE*, *9*(8), 1-9. https://doi.org/10.1371/journal.pone.0104704
- [45] Sarmini, I., Topcu, E., & Scharbrodt, O. (2020). Integrating Syrian refugee children in Turkey: The role of Turkish language skills. *International Journal of Educational Research Open*, 1, 1-8. https://doi.org/10.1016/j.ijedro.2020.100007
- [46] Schulte-Korne, G. (2016). Mental health problems in a school setting in children and adolescents. *Deutsches Aerzteblatt Online, 113*(11), 183-190. https://doi.org/10.3238/arztebl.2016.0183
- [47] Schumacher, L., Jette Echterhoff, Zindler, A., & Barthel, D. (2024). Depression among refugee youth in an outpatient healthcare center: Prevalence and associated factors. Frontiers in Psychiatry, 15, 1-9. https://doi.org/10.3389/fpsyt.2024.1367799
- [48] Sharma, L. R., Bidari, S., Bidari, D., Neupane, S., & Sapkota, R. (2023). Exploring the mixed methods research design: Types, purposes, strengths, challenges, and criticisms. *Global Academic Journal of Linguistics and Literature*, 5(1), 3-12.
  - https://doi.org/10.36348/gajll.2023.v05i01.002
- [49] 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. https://doi.org/10.1080/17450128.2017.1412551
- [50] Sirin, S., & Rogers-Sirin, L. (2015). The educational and mental health needs of Syrian
  - refugee children.

    https://www.migrationpolicy.org/research/
    educational-and-mental-health-needs-syrianrefugee-children
- [51] Slavin, R. E. (2002). Evidence-based education

- policies: Transforming educational practice and research. *Educational Researcher*, *31*(7), 15-21. https://doi.org/10.3102/0013189X031007015
- [52] Sullivan, A., & Simonson, K. (2023). A systematic review of psychological interventions for refugee children. *BMC Psychiatry*, 23(1), 1-15.
- [53] Symons, C., & Ponzio, C. (2019). Schools cannot do it alone: A community-based approach to refugee youth's language development. *Journal of Research in Childhood Education*, 33(1), 98-118.
  - https://doi.org/10.1080/02568543.2018.1531450
- [54] UN. (2025). *Refugees*. https://www.un.org/en/global-issues/refugees
- [55] UNHCR. (2025). Refugee data.

  <a href="https://www.unhcr.org/refugee-statistics/download?url=bJt1">https://www.unhcr.org/refugee-statistics/download?url=bJt1</a>
- [56] UNHR. (2025). Convention on the rights of persons with disabilities.

  https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-persons-disabilities
- [57] UNICEF. (2025). Child displacement.

  https://data.unicef.org/topic/child-migrationand-displacement/displacement/#:~:text=Worl
  dwide%2C%20about%2047.2%20million%20
  children,less%20than%201%20in%2020
- [58] Wasti, S. P., Simkhada, P., Teijlingen, Van , Sathian, B., & Banerjee, I. (2022). The growing importance of mixed-methods research in health. Nepal Journal of Epidemiology, 12(1), 1175-1178. <a href="https://doi.org/10.3126/nje.v12i1.43633">https://doi.org/10.3126/nje.v12i1.43633</a>
- [59] Wessels, K. W. (2014). The refugee experience: Involving pre-migration, in transit, and post migration issues in social services [Master's thesis, St. Catherine University]. https://sophia.stkate.edu/msw\_papers/409
- [60] WWC. (2022). Procedures and standards handbook. https://ies.ed.gov/ncee/wwc/handbooks