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What Works to Improve Social-Emotional Skills in Conflict and Crisis Settings: Evidence from a Meta-Analysis of Education Interventions

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WHAT WORKS TO IMPROVE SOCIAL-EMOTIONAL SKILLS IN CONFLICT AND CRISIS SETTINGS: EVIDENCE FROM A META-ANALYSIS OF EDUCATION INTERVENTIONS

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ABSTRACT

In this meta-analysis, we synthesize findings from 20 rigorous evaluations of seven types of education interventions in multiple conflict and protracted crisis settings. We assess their effects on children's social-emotional learning (SEL) outcomes in the social, emotional, cognitive, values, perspectives, and identity domains: mental health and psychosocial support, academic support with positive school climate practices, SEL-targeted practices, comprehensive SEL curricula, remote academic support through EdTech, multicomponent interventions, and peace education. We estimate a pooled impact of 0.10 standard deviations (SD) that reflect medium, positive, and statistically significant effects. Domain-specific analyses show medium, positive, and significant effects in the emotional (0.13 SD), social (0.09 SD), and perspectives (0.07) domains, but limited evidence and null effects in the cognitive, values, and identity domains. Academic interventions that integrate SEL components—through positive school climate, practices targeting SEL skills, or comprehensive SEL curricula—show significant small-to-medium effects (0.05 to 0.13 SD) across intervention types; mental health and psychosocial support interventions exhibit the largest effects (0.16 SD), but they are not statistically significant, given the high variability. An analysis that combines cost with impact data suggests that, while education interventions can improve SEL, their cost-effectiveness varies considerably, and many are not cost-effective. Compared to high- and middle-income contexts, smaller effect sizes in conflict and protracted crisis settings may reflect challenges in implementation, contextual fit, and measurement. This study underscores the importance of designing interventions to support SEL outcomes in humanitarian settings that are, from the outset, developmentally appropriate, contextually grounded, and scalable.

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INTRODUCTION

More than 234 million school-age children worldwide are affected by conflicts and protracted crises (Education Cannot Wait 2025), with devastating consequences for their education, wellbeing, and long-term development (Burde et al. 2017; UNESCO 2011). Many live in contexts shaped by war and violence, economic shocks and poverty, pandemics, climate change, environmental disasters, and forced displacement (Falk et al. 2024). Of these children, 85 million are not in school; an additional 149 million are in school but not learning: 83 percent are not meeting the minimum reading proficiency by the end of primary school (Education Cannot Wait 2025). These children face significant barriers to accessing safe and quality education environments while also experiencing great adversity, including poverty, instability, disruptions in their education, loss, and trauma. This can produce a toxic-stress response that negatively affects their learning, psychosocial wellbeing, and long-term development (Shonkoff and Garner 2012).

In conflict and protracted crisis settings, education can serve as a protective and stabilizing force (Nicolai and Triplehorn 2003; INEE 2010). However, education budgets in humanitarian settings are extremely limited, and investment in education is challenged by competing priorities such as food, shelter, and protection (UNESCO 2012). For this reason, policymakers and donors require rigorous, comparative evidence to inform decisions about fund allocations. Impact evaluations are particularly helpful because they can help identify the degree to which interventions are improving children's learning, wellbeing, and development, including their social and emotional learning (SEL). However, the available evidence remains fragmented and difficult to compare across intervention types, which limits its usefulness for informing decisions on the allocation of scarce resources (Kim et al. 2026).

In this study, we address this gap by systematically synthesizing and comparing the effectiveness of different types of education interventions in improving children's SEL outcomes in conflict and protracted crisis settings. It is the first meta-analysis in humanitarian settings that quantifies the impact of education interventions on children's SEL. In doing so, it moves beyond prior meta-analytic work focused on SEL programming in primarily stable, high-income settings (Cipriano et al. 2023; Durlak et al. 2011), and on the wellbeing outcomes of SEL programming in conflict and crisis settings (Burde et al. 2023), to examine a broader range of education interventions—including academic, psychosocial, and multicomponent approaches—and identify which are most effective, for which SEL domains, and under what conditions. We also link impact estimates with cost data to generate preliminary insights on cost-effectiveness.

SEL IN CONFLICT AND PROTRACTED CRISIS SETTINGS

According to CASEL, social and emotional learning refers to the process through which young people and adults acquire and apply the knowledge, skills, and attitudes needed to develop healthy identities, manage emotions, build relationships and make responsible and caring decisions (CASEL n.d). There is robust evidence that SEL can enhance children's holistic development and academic performance, reduce behavioral problems and drug abuse (Durlak et al. 2011; Durlak, Mahoney, and Boyle 2022; Jones, Greenberg, and Crawley 2015), promote social cohesion through tolerance and inclusion across social and cultural divides (INEE 2016; Davies 2010), and strengthen workforce and civic readiness through ethical reasoning and civic engagement (OECD 2015; Berkowitz 2007; Selman 2008; Haste 2023; Levinson 2013).

In conflict and protracted crisis settings, SEL can protect children from the negative effects of trauma, helping them to become resilient in the face of adversity, strengthening their relationships and networks of support, and providing a sense of safety and belonging (Jones and Kahn 2017; INEE 2016). These benefits are particularly important, given evidence from longitudinal studies showing that SEL skills developed during childhood are associated with better mental health, steady employment, and stable relationships (Jones, Greenberg, and Crawley 2015; Moffit et al. 2011).

Despite this promise, most evidence on the impact education interventions have on SEL skills come from high-income settings, or from low- and middle-income settings that are stable; few come from settings of conflict and protracted crisis. Moreover, existing meta-analyses have largely focused on estimating the impact SEL programming has on a range of outcomes, rather than on identifying which types of interventions are more effective at improving SEL skills. For example, meta-analyses of universal school-based SEL programs in high-income and stable contexts find consistent, positive effects on a range of outcomes, including children's SEL competence, behavioral functioning, mental health, and academic achievement. Cipriano et al. (2023) report average effect sizes ranging from 0.11 standard deviations (SD) to 0.29 SD across the emotional, behavioral, and academic domains, while Durlak, Mahoney, and Boyle (2022) emphasize the robust and replicable benefits of SEL programming when implemented with fidelity and cultural alignment. Evidence from humanitarian settings is more limited, but it suggests that SEL programming has the potential to reduce depression and posttraumatic stress (Burde et al. 2023). However, these studies focus on the effects of SEL programming on a range of learning and developmental outcomes, such as mental health. As a result, there is still a limited understanding of what works to improve children's SEL across different types of education interventions in conflict and protracted crisis settings.

While interest in SEL skills is growing in these settings and an increasing number of education programs aim to support the development of children's SEL outcomes and explore their impact on these skills (Burde et al. 2023; Deitz, Lahmann, and Thompson 2021; Kim, Deitz, and Aber 2024), the evidence remains fragmented and siloed by disciplines (Kim et al. 2026). Moreover, there currently are no meta-analytic insights into the effectiveness of education interventions on children's SEL outcomes across different programs in conflict and protracted crisis settings. Overall, the field lacks synthesized and rigorous evidence on what works, how, for whom, at what cost, and under what conditions to improve the SEL skills of children in these settings.

Lack of Coherence in SEL Measurement and a Taxonomy of SEL Domain and Skills

A challenge when synthesizing evidence on SEL is the lack of coherence in how SEL constructs are defined and measured across studies—particularly in conflict- and crisis-affected contexts (Temko et al. 2023; Harvard EASEL Lab and INEE 2022). Similar skills may be labeled differently across interventions (e.g., "self-control" vs. "behavioral regulation") and, conversely, identical terms (self-regulation) may reference substantively different constructs (e.g., ability to manage emotions and cope with stress vs. attention control or task persistence). This variation undermines efforts to compare outcomes, track progress, and derive generalizable conclusions from impact evaluations and creates difficulties measuring SEL outcomes (Diazgranados et al. 2024).

To address this issue in the present study, we adopted the inventory of SEL domains and skills outlined in the PSS-SEL toolbox (Temko et al. 2023). The toolbox was developed by the Harvard EASEL Lab and the Inter-agency Network for Education in Emergencies (INEE) to support stakeholders who provide psychosocial support and SEL in conflict and crisis settings, and to increase coherence in the field. The cognitive domain includes skills and competencies required to manage and direct behavior to achieve a goal, including those related to executive function, self-regulation, decisionmaking, and problem-solving. The emotional domain includes skills children use to identify, express, and manage their emotions, and to understand and feel empathy for others. The social domain includes skills that enable children to understand others' behaviors and navigate social situations, such as prosocial skills and conflict-resolution skills. The values domain includes values, habits, and character strengths that help children become productive members of a particular community, and includes their ethical, civic, and performance values, among others. The perspectives domain includes attitudes, mindsets, and outlooks that influence how children interpret and respond to events and interactions, such as hope, optimism, and gratitude. The identity domain includes the attitudes and perceptions children have about themselves and their abilities, such as their knowledge and beliefs about who they are and their ability to learn and grow.

The Present Study

For this study, we conducted a review of 24 impact evaluations of education interventions for school-age children, and a meta-analysis of a subset of 20 of those studies, using a structured framework of SEL domains. Our goal was to identify the strength of the evidence for different types of interventions and the overall effects education interventions have on SEL outcomes, and to examine which domains and interventions show the most promise in conflict and crisis settings. We also examined the extent to which there was evidence of cost-effectiveness, using a subset of six studies that reported cost estimates.

METHOD

We used meta-analysis to statistically combine the results of multiple impact evaluations and estimate average impacts on SEL outcomes. Unlike traditional evidence reviews, which summarize findings qualitatively, meta-analysis applies statistical techniques to weight studies by sample size, effect size, and standard errors (Lipsey and Wilson 2001). This approach allows the estimation of overall effect sizes and detection of patterns that may not be evident from individual studies. Meta-analysis increases statistical power and reduces the influence of outliers by aggregating data across a broad range of interventions and contexts, producing a more precise and nuanced understanding of what works to improve SEL in crisis and conflict settings.

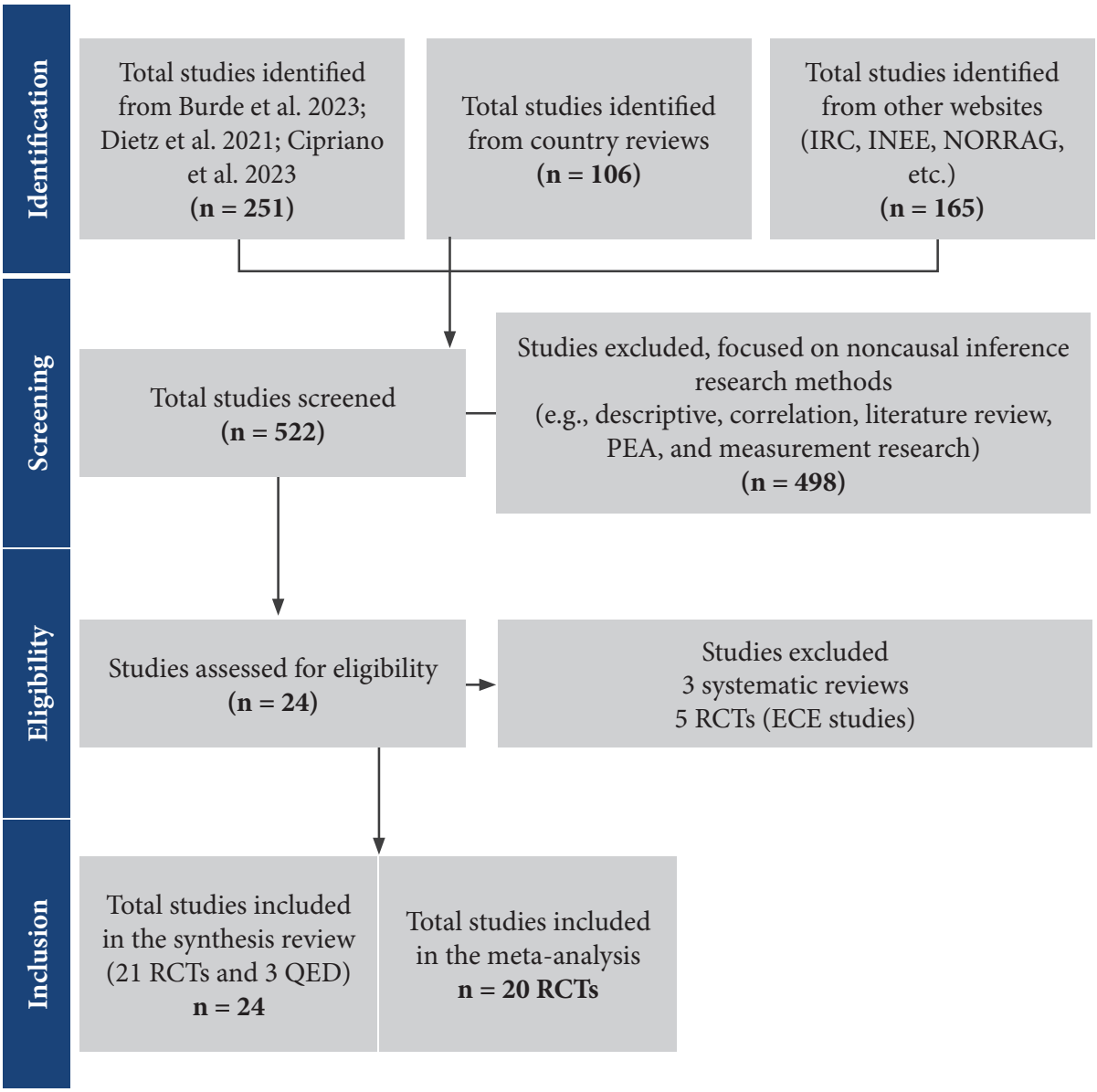
Data

We identified 24 impact evaluations that assess the causal effect of education interventions on the SEL outcomes of school-age children (6-18) in conflict-affected settings. The search strategy focused on studies conducted between 2000 and December 2024 in conflict and crisis settings. We defined these settings as those experiencing violence, forced displacement, epidemics and pandemics, economic shocks and poverty, climate-related and environmental disasters, as well as governance crises, including fragile, failed, or authoritarian states (Falk et al. 2024). We used three strategies. First, we used snowballing from systematic reviews in conflict-affected settings (Burde et al. 2015, 2023) or with a focus on SEL (Deitz et al. 2021; Cipriano et al. 2023). Second, we conducted academic searches and drew from systematic country-level evidence reviews (Rauschenberger and Sabella 2023; Mishra et al. 2023; Saha et al. 2023; Akar et al. 2024; Brun et al. 2024; Wagner et al. 2024; Rinehart et al. 2024). Third, we identified studies through expert input and searches of organization websites, such as INEE and the International Rescue Committee's Airbel Impact Lab.

We included impact evaluations of education interventions targeting school-age children (6-18) that aimed to influence SEL outcomes across the emotional, social, cognitive, identity, values, and perspectives domains. Impact evaluations assess the changes in outcomes that can be attributed to a particular project, program, or policy; as such, they use causal inference methods to determine what would have happened to participants if the intervention had not occurred (Murnane and Willet 2011). Eligible studies employed causal inference methods, such as experimental (e.g., randomized controlled trials) or quasi-experimental designs (e.g., difference-in-differences, propensity score matching, regression discontinuity, instrumental variables, or pre-post designs with a comparison group). Studies were required to be conducted in settings of conflict and protracted crisis, including those affected by violence, forced displacement, epidemics or pandemics, economic shocks and poverty, climate-related or environmental disasters, or governance crises (e.g., fragile or authoritarian settings) (Falk et al. 2024). All education interventions that reported effect sizes on SEL outcomes and met the inclusion criteria were retained, regardless of whether improving SEL outcomes was an explicit or primary objective of the intervention.

We excluded studies that did not meet these criteria or that lacked sufficient methodological detail (e.g., research questions, sample, instruments, and analytic approach). Interventions targeting early childhood were also excluded, given that SEL outcomes for the 0-5 age group are typically measured differently than those for school-age children (i.e., through parent or caregiver reports instead of self-reports or standardized SEL scales), which made comparability difficult; however, they are addressed in a separate review (Diazgranados, Murphy, and Thuo 2026). We used systematic reviews and prior meta-analysis to identify studies.

Figure 1: Identification, Screening, and Inclusion of Studies



Procedure

Following the study selection, we manually extracted information on study characteristics, intervention features, and outcome data into a standardized Excel template. For each study, we recorded bibliographic information, intervention characteristics, causal inference method, sample size, and all reported estimates of impact. For the meta-analysis, we extracted effect sizes, corresponding standard errors, and sample sizes for all relevant outcomes. When studies reported multiple estimates, we extracted and retained all eligible effect sizes. We coded outcome data across domains, including enrollment, attainment, academic outcomes, SEL outcomes, mental health outcomes, caregiver and teacher-level outcomes, etc. While the broader database includes many domains, the present analysis focuses exclusively on SEL outcomes.

To harmonize outcome measures, we coded SEL outcomes according to how they were defined and operationalized in the primary studies and then mapped them onto broader SEL domains. This approach enabled us to harmonize diverse outcome measures while preserving conceptual distinctions across SEL constructs. For meta-analytic purposes, we used an inventory of SEL skills and domains from the PSS-SEL toolbox (Harvard EASEL Lab and INEE 2022) to recode discrete SEL skills into six SEL domains: cognitive, social, emotional, values, perspectives, and identity. We classified the interventions through an inductive coding process. The initial coding captured how interventions were described in the primary studies. Interventions were then iteratively grouped into broader categories based on their explicit or implicit underlying mechanism for promoting SEL. For meta-analytic purposes, we clustered the interventions into conceptually coherent groups that reflected shared strategies, even when they were labeled differently in the original studies. For example, a remedial program using SEL-targeted practices was coded as academic support with SEL-targeted practices. This two-step process—coding based on study descriptions, followed by clustering based on underlying mechanisms—enabled us to develop a typology grounded in the empirical literature while ensuring comparability across studies.

Analytic Approach

We conducted a meta-analysis of 20 studies using a random effects inverse-variance model (the DerSimonian-Laird method) to account for expected heterogeneity across interventions, populations, and outcome measures. We calculated effect sizes as standardized mean differences (Hedges' *g*), which enabled us to make comparisons across diverse instruments, applying small-sample bias correction where appropriate. We weighted the studies using inverse-variance weighting, such that estimates with greater precision (i.e., smaller standard errors, typically from larger samples) contributed more to the pooled effect sizes. We assessed statistical heterogeneity using the I^2 statistic.

To assess the size of the impact, we departed from Cohen's *d* for social sciences (Cohen 1988) and used education-specific benchmarks proposed by Kraft (2020), where effect sizes below 0.05 SD are interpreted as small, values between 0.05 SD and 0.20 SD as medium, and values above 0.20 SD as large.

We did not estimate intervention costs directly, but instead extracted cost data as reported by each primary study. When studies reported costs in local currencies or in different years, we converted all figures to US dollars for 2024, using official exchange rates and inflation adjustments based on World Bank and International Monetary Fund consumer price indices. This allowed for greater comparability, although it should be noted that cost-reporting methods may have varied and were not verified by the authors.

To assess cost-effectiveness—defined as the cost per unit of learning gain—we extracted cost per child for each study, where available. All cost estimates were converted to a common currency—US dollars—and adjusted for inflation to 2024 values. We then linked these cost data to impact estimates, calculating the cost required to achieve a 0.20 SD improvement in SEL, a benchmark corresponding to a large effect size in education (Kraft 2020).

To facilitate comparisons across interventions, we categorized cost-effectiveness using terciles of the distribution of estimated costs. Interventions in the lowest tercile were classified as "more cost-effective," those in the middle tercile as "average cost-effectiveness," and those in the highest tercile as "less cost-effective." These categories were intended to support relative comparisons across interventions rather than to establish normative funding thresholds.

RESULTS

Which Education Interventions in Conflict Settings Have Rigorous Evidence of Impact on Children's SEL?

We found seven types of education interventions for which research evidence assessed their impact on children's SEL outcomes, including mental health and psychosocial support (MHPSS), academic support with SEL-informed school climate practices, academic support with skill-targeted SEL practices, comprehensive SEL curriculum, remote academic support through EdTech, peace education, and multicomponent interventions that combine SEL with caregiver and financial support. Table 1 provides details for each study on the particular intervention, research methods, effect sizes documenting impact on SEL outcomes, as well as the cost per child, when available. Below we describe the categories of interventions, grouped according to the strength of the evidence.

Mental Health and Psychosocial Support

MHPSS interventions aim to improve children's psychological wellbeing and social-emotional functioning by helping them cope with stress, trauma, and adversity. They are typically delivered in schools or nonformal learning spaces by trained facilitators, teachers, or paraprofessionals, and involve structured group sessions that include activities such as guided discussions, sociodrama, storytelling, creative arts, and cognitive-behavioral techniques. Sessions are usually delivered multiple times per week over a defined period and focus on building emotional awareness, emotional regulation, coping strategies, and interpersonal skills.

In conflict and crisis settings, MHPSS programs are among the most common approaches used to support SEL outcomes. The evidence shows that they have an overall positive impact on mental health and SEL outcomes (Ager et al. 2011; Barron, Abdallah, and Heltne 2016; Burde et al. 2017). We found evidence of nine MHPSS interventions implemented in Indonesia (Tol et al. 2008), Nepal (Jordans et al. 2010), Sri Lanka (Tol et al. 2012), Burundi (Tol et al. 2014), Democratic Republic of the Congo (O'Callaghan et al. 2014), and Sierra Leone (Betancourt et al. 2014), and three in Gaza (Forsberg and Schultz 2022; Peltonen et al. 2012; Punamaki et al. 2014). Across studies, MHPSS interventions showed the most consistent evidence of having an impact on SEL, with effects concentrated in the emotional, perspectives, and identity SEL domains. Several studies reported improvements in emotion regulation, hope, self-efficacy, and self-regulation, although the findings were heterogeneous and often varied by subgroup (e.g., age, gender, exposure to trauma). The evidence for social skills, such as prosocial behavior and peer relationships, was mixed, with many studies reporting null effects or delayed improvements. Impacts on the cognitive and values domains were largely absent. Overall, MHPSS appeared to be the most effective at strengthening emotional competencies, with less consistent effects on social skills.

Academic Support Interventions with Positive School Climate Practices

Academic support interventions that include positive school climate practices integrate SEL implicitly through the learning environment and instructional approach, rather than through dedicated SEL content. They emphasize the creation of safe, inclusive, and supportive classroom environments through strategies such as positive teacher-student relationships, collaborative learning, participatory pedagogy, and classroom management practices that promote respect and belonging. These approaches are commonly embedded within remedial education programs, accelerated learning programs, or other forms of flexible education delivery in conflict and crisis settings. While their primary focus remains academic recovery, they seek to influence students' SEL development indirectly by fostering a positive classroom climate that supports emotional wellbeing, social interaction, and engagement in learning. In conflict and protracted crisis settings, we found five studies that evaluated programs that integrated SEL-informed routines to improve the school and classroom climate (Aber et al. 2016; Torrente et al. 2019; Tubbs Dolan et al. 2022; Brown et al. 2022; Kim et al. 2023). Prior studies on the impact of Healing Classrooms (HC) in public schools in the Democratic Republic of the Congo (Aber et al. 2016; Torrente et al. 2019) and a remedial program in Niger (Brown et al. 2023) did not assess effects on SEL. Other programs that incorporated HC also included SEL-targeted activities; these are reported in the next section. In our review, we found only one randomized controlled trial (RCT) of a remedial program for Syrian refugees in Lebanon that integrated HC, which improved school perceptions but had limited impact on academic and SEL outcomes (Tubbs-Dolan et al. 2022).

Academic Support Interventions with Skill-Targeted SEL Activities

Academic support interventions with skill-targeted SEL activities combine instructional support in core academic subjects with explicit, structured activities to develop specific SEL skills. They include regular school classes for in-school children, remedial lessons for low-performing children, and accelerated learning programs for out-of-school children. In each case, short, skill-targeted SEL exercises focused on specific SEL skills such as emotional regulation, empathy, problem-solving, and interpersonal communication are integrated into academic instruction and delivered multiple times per day across subject areas.

The skill-targeted SEL activities are typically flexible and require minimal training. Teachers can choose from many options based on existing needs without the need for a specific sequence (Jones et al. 2018). Mindfulness is one example. It consists of brief practices such as breathing techniques and mindful movement to help children manage stress and regulate their emotional responses when facing stress or conflict. Brain Games similarly consist of short and simple games that use movement and playfulness to practice executive function skills, such as attention, working memory, and inhibitory control (Barnes, Bailey, and Jones 2021).

In our review, four studies examined the integration of SEL-targeted activities into academic programs. Two incorporated these activities into remedial programs in Lebanon (Tubbs et al. 2022) and Nigeria (Diazgranados, Lee, and Miheretu 2019), and two integrated SEL into accelerated programs for out-of-school children in Nigeria (Diazgranados et al. 2022) and Ethiopia (Hagos and Hagos 2024). Overall, these interventions yielded mixed and generally limited effects. While one accelerated learning program in Ethiopia reported improvements in prosocial behavior and social difficulties (Hagos and Hagos 2024), the other one reported reduced use of disengagement as a conflict-resolution strategy but found no additional impact on SEL skills (Diazgranados et al. 2022). Both remedial programs with skill-targeted SEL activities showed that they had no impact on SEL skills (Diazgranados, Lee, and Miheretu 2019; Tubbs-Dolan et al. 2022).

Additionally, one RCT in Lebanon disentangled the unique effect of adding 16 weeks of mindfulness practices into a remedial program for Syrian refugees (Tubbs-Dolan 2021). The study showed that adding mindfulness had marginal effects on SEL skills such as behavioral regulation, emotional regulation, and hostile attribution bias but resulted in medium, positive, and significant improvements in academic skills and perceptions of a supportive school environment. Adding 11 more weeks with Brain Games activities targeting executive function skills did not have any further impact (Tubbs-Dolan et al. 2022).

Comprehensive SEL Curriculum

SEL programming can be provided through a comprehensive SEL curriculum that includes structured lesson plans and dedicated time for instruction. In our review, we found evidence of two studies using an SEL curriculum. In Lebanon, an RCT evaluated the impact of adding a comprehensive SEL curriculum to a remedial program with Syrian refugees, but it did not find conclusive evidence of any impact on SEL skills. The cost of adding the SEL curriculum to a tutoring program was $531 per child (2018 US$) (Kim et al. 2023). In Liberia, an RCT evaluated the impact of a gender-transformative SEL and life-skills curriculum to girls affected by conflict and crisis. The program did not improve girls' self-esteem or attitudes about gender (Ozler et al. 2020).

Remote Academic Support through EdTech

Remote academic support provided by EdTech interventions primarily aim to strengthen foundational skills such as literacy and numeracy, while also supporting selected SEL outcomes such as motivation, perseverance, and engagement. They are typically delivered through low-tech or remote modalities, including SMS messages, phone calls, interactive voice response, or simple digital platforms. They often combine instructional content with behavioral nudges, goal-setting prompts, and engagement strategies for caregivers. While SEL is not always the primary objective, these interventions may influence children's perspectives and attitudes toward learning, particularly in contexts where schooling has been disrupted. This meta-analysis included seven RCTs on EdTech interventions, including five RCTs that examined the impact of SMS, or SMS paired with phone tutoring calls in Kenya, India, Nepal, Uganda, and the Philippines (Angrist et al. 2023); an RCT of interactive voice-response systems in Bangladesh (Islam et al. 2022); and an RCT of software with academic games in Sudan (Brown et al. 2023).

Across the studies, remote academic support delivered through EdTech showed inconsistent effects across SEL domains. SMS with academic content showed no impact on perspectives (e.g., perseverance, ambition) or social skills (e.g., communication), but modest improvements emerged when SMS was paired with tutoring via phone calls (Angrist et al. 2023). One interactive voice response study suggested isolated gains in leadership but none in communication or planning (Islam et al. 2022). Software with academic games did not affect hope (Brown et al. 2023). There was no information on the effects of EdTech interventions on the emotional, cognitive, or values domains. Overall, EdTech interventions appear to have a limited impact on the identity and perspectives domains.

Multicomponent Interventions

Multicomponent interventions aim to improve children's and adolescents' SEL outcomes by combining SEL or life-skills programming with additional components that address broader structural and contextual constraints, such as poverty, gender norms, and limited caregiver support. Rather than focusing solely on skill development, these interventions integrate multiple pathways—including mentoring, household engagement, and economic support—to influence wellbeing, agency, and social behavior. SEL is typically delivered through structured life-skills sessions or group-based activities, often in safe spaces, but it functions as one component within a broader package of supports.

In this review, we found one multicomponent intervention, Girl Empower, a program in Liberia that provided adolescent girls with weekly life-skills sessions through mentoring in safe spaces. The program also featured caregiver discussion groups and financial support. A variant included offering conditional cash transfers to caregivers to incentivize participation. The intervention aimed to improve girls' social-emotional skills, agency, and wellbeing by addressing both individual competencies and structural barriers to empowerment. Girl Empower showed improvements in life skills related to the cognitive (e.g., decisionmaking and problem-solving), identity (e.g., self-efficacy), and values (e.g., gender attitudes) domains but didn't improve wellbeing outcomes or examine the impacts on the emotional or social domains (Ozler et al. 2024).

Peace Education

These interventions aim to promote social cohesion, nonviolent conflict resolution, and positive intergroup relations in contexts affected by conflict and division. They are typically delivered through structured sessions that engage learners in dialogue, reflection, and discussions about identity, inclusion and exclusion, historical narratives, justice, and coexistence. Activities often include perspective-taking exercises, group discussions, and collaborative problem-solving. By encouraging critical reflection on social relationships and conflict dynamics, they aim to strengthen SEL competencies such as empathy, respect, conflict resolution, and ethical reasoning, particularly across lines of difference such as ethnicity, religion, nationality, political affiliation, or other identities that may contribute to social division and conflict.

In our review, Rosen and Salomon (2011) explored Pathways into Reconciliation, an intervention that engaged Israeli Jewish and Israeli Palestinian tenth grade students in biweekly, 90-minute school-based sessions to discuss equality, liberty, majority-minority group relations, and groups' historical narratives. The intervention focused on improving students' understanding of the other group's beliefs and perspectives. A quasi-experimental study used a pre-test and two waves of post-test data to identify and assess changes in core beliefs about security, justness, victimization, and delegitimization, and

in peripheral beliefs about the conflict. Results showed that the intervention influenced peripheral beliefs about the adversary but did not change core beliefs.

Table 1 summarizes the evidence for different education interventions for school age-children in conflict settings, including the number of studies and citations, geographies, and range of impacts.

Table 1: Summary of Evidence on Education Interventions for School-Age Children in Conflict- and Crisis-Affected Settings: Study Coverage, Geographic Distribution, and Impacts

Intervention Category	Citation	Intervention Name	Program Description	Method	Impact on SEL Skills	Geography
MHPSS	Tol et al. 2008	MHPSS group sessions	15-session intervention over 5 weeks combining trauma processing, cooperative play, and creative-expressive activities, delivered by trained paraprofessionals	Clustered RCT; n = 495 children ages 8-10 in 14 schools	Improved hope (d = 0.38); also improved PTSD but no other mental health effects	Indonesia
	Jordans et al. 2010	School-based psychosocial intervention	School-based, group PSS intervention (15 sessions, 5 weeks) combining Cognitive Behavioral Techniques (CBT), creative expression, and group activities (e.g., sociodrama, drawing, cooperative play) to address trauma, promote resilience, hope, and prosocial behavior	Clustered RCT; n = 325 children ages 11-14 in 8 schools	No impacts on main outcomes, but gendered effects, with improvements for girls in prosocial skills and increased hope for older children (no effect sizes provided)	Nepal
	Tol et al. 2013	School-based preventive mental health intervention	School-based group intervention (15 sessions, 5 weeks) combining CBT (psychoeducation, coping, guided trauma exposure) and creative expressive activities (games, drama, music) to reduce distress and strengthen coping and social functioning among war-affected children	Clustered RCT; n = 399 children ages 9-14 in 24 schools	No impact on prosocial skills, but improvements for young children only. No effects on primary mental health outcomes (PTSD, depression, anxiety)	Sri Lanka
	Tol et al. 2014	School-based intervention (CBI) – school-based psychosocial program	School-based group intervention (15 sessions, 5 weeks) combining CBT (psychoeducation, coping, guided trauma exposure) and creative expressive activities (games, drama, music) to reduce distress and strengthen coping and social functioning among war-affected children	Clustered RCT; n = 329 children ages 8-17 in 14 schools	No main effects on mental health outcomes (PTSD, depression, anxiety, hope, functioning), but improvements in hope for younger children and children with lower trauma exposure	Burundi
	Peltonen et al. 2012	School Mediation Intervention	8 month peer mediation and conflict resolution and dialogue skills training, focused on caring for peers and preventing disruptive and aggressive behavior	QED; n = 225 children ages 10-14 in 2 schools	No impacts on mental health, quality of friendships, prosocial behavior, and aggressiveness, but treatment prevented deterioration of friendships (no effect sizes reported)	Gaza

Intervention Category	Citation	Intervention Name	Program Description	Method	Impact on SEL Skills	Geography
MHPSS	O'Callaghan et al. 2014	Family focused, community based PSS	Group-based psychosocial intervention (8 sessions) delivered to children and caregivers, combining life skills training (communication, conflict resolution), relaxation techniques, and community-based activities (e.g., mobile cinema) to strengthen coping, family relationships, and community cohesion	RCT; n = 159 children ages 7-18	Moderate reduction in PTSD symptoms (d = 0.40); no significant effects on prosocial behavior or conduct problems at post-test; improvements in prosocial behavior and conduct problems observed at follow-up without a control group	Democratic Republic of the Congo
	Betancourt et al. 2014	Youth Readiness Intervention	Group-based cognitive-behavioral psychosocial intervention (10 sessions) for war-affected youth, combining skills in emotion regulation, interpersonal communication, problem-solving, and cognitive restructuring, delivered by trained lay facilitators	RCT; n = 436 children and youth ages 15-24	Significant improvements at post-intervention in emotion regulation (d = 0.31), prosocial behavior (d = 0.39), social support (d = 0.29), and functional impairment (d = −0.32); no effects on psychological distress or PTSD; effects were not sustained at 6-month follow-up	Sierra Leone
	Forsberg and Schultz 2022	Better Learning Program – Level 2 (BLP-2)	School-based, teacher-led psychosocial intervention targeting academic underachievement, combining academic support with activities to improve emotional regulation, self-efficacy, and coping with stress	Clustered RCT; n = 300 students ages 9-16 in 30 schools	Significant improvements in self-regulation (d = 0.99), self-efficacy (d = 0.78), executive function (d = 0.79), and hope (d = 0.53), reductions in stress-related symptoms at post-intervention; some effects (e.g., self-regulation, self-efficacy) sustained at 5-month follow-up, while others diminished	Gaza
	Punamäki et al. 2014	Teaching Recovery Techniques	School-based, group PSS intervention based on CBT principles (TRT), delivered over 4 weeks (2 sessions per week), using narrative, relaxation, and coping exercises to help children regulate emotions and process trauma	Clustered RCT; n = 482 children ages 10-13 in 4 schools	No significant effects on emotion regulation, but improvements on mental health outcomes (reduced PTSD, depression, distress; increased wellbeing)	Gaza

Intervention Category	Citation	Intervention Name	Program Description	Method	Impact on SEL Skills	Geography
Academic Support through EdTech	Angrist et al. 2023	ConnectEd: SMS only and SMS + phone calls	Weekly SMS calls with math content plus reminders to support numeracy and motivation. A second treatment arm added 20-minute tutoring calls tailored to level	5 RCTs; India, Kenya n = 1,985 children, Phillipines n = 2,316 children, Uganda n = 1,308 children	SMS intervention did not have impacts on perseverance or ambition; SMS + phone calls improved perseverance and ambition	India, Kenya, Nepal, Uganda, Philippines
	Islam et al. 2022	IVR Bangladesh	During COVID-19 school closures, caregivers dial toll-free number to access up to 75 prerecorded audio lessons for 15 weeks, with content on literacy, numeracy, and a noncognitive module on SEL	Clustered RCT with three treatment arms; 1,763 children ages 5-10 in 90 villages	Improved leadership; no effect on communication/planning	Bangladesh
	Brown et al. 2023	Software with Academic Games	Digital, game-based learning program providing personalized, curriculum-aligned literacy and numeracy instruction for out-of-school children	Quasi-experimental, mixed-methods evaluation; n = 221 children ages 7-9	No effect on hope; improvements on psychological wellbeing	Sudan
Academic Support with School Climate Routines	Tubbs-Dolan et al. 2021	Remedial with Healing Classrooms	Healing Classroom Tutoring (HCT) is a nonformal remedial program. Delivered 3 times per week, 2.67 hours per day, 16 weeks, providing structured literacy and numeracy instruction infused with SEL-informed school climate practices	Clustered RCT; n = 4,994 children in grades 2-4 in 87 public schools	No impacts on SEL outcomes, but impacts on perceptions of the school	Lebanon
Academic Support with SEL-Targeted Practices	Tubbs-Dolan et al. 2021	Remedial with Healing Classrooms and targeted SEL	HCT+ Mindfulness builds on HCT by adding three 10-minute sessions targeting emotional regulation over 16 weeks		No impacts on SEL outcomes, but impacts on perceptions of the school	Lebanon
		Mindfulness and Brain Games	Unique effect of adding 16 weeks of brief mindfulness practices such as breathing and mindful movement to manage stress and regulate emotions, and 11 weeks of Brain Games to support executive	Clustered RCT with 3 arms; n = 4,598 children ages 5 to 15 in public schools	Mindfulness had marginal SEL effects, adding Brain Games had no additional impact	Lebanon
	Diazgranados et al. 2022	ALP with Healing Classrooms	Accelerated learning program for out-of-school children 3 hours per day, 5 days per week for 7 months; including math, literacy, and SEL	Clustered RCT; n = 2,244 out-of-school children, ages 9-14 in 80 nonformal centers	Reduced disengagement; no other effects on SEL (prosocial skills, aggression, emotional regulation)	Nigeria
	Hagos and Hagos 2024	ALP with SEL	ALP with SEL and trauma healing	RCT	Reduced social difficulties; improved prosocial behavior	Ethiopia
	Diazgranados et al. 2019	Remedial with Healing Classrooms and SEL	After-school group remedial sessions (3 times per week, 2.5 hours per day, 21 weeks; 157 hours) that integrate learning in healing classrooms and focus on literacy, numeracy, and SEL	Clustered RCT, n = 1,175 children ages 9-14 in 80 public schools	No impacts on SEL outcomes (emotional regulation, conflict resolution)	Nigeria
SEL Comprehensive Curriculum	Kim et al. 2023	SEL Curriculum	Adding a universal, comprehensive SEL curriculum to a remedial program that already integrated Learning in a Healing Classroom approach	Clustered RCT with 3 arms; n = 4,289 children ages 5-15 in 57 public schools	No impacts on SEL outcomes, including emotional regulation, prosocial skills, conflict resolution, and hostile attribution bias	Lebanon

Intervention Category	Citation	Intervention Name	Program Description	Method	Impact on SEL Skills	Geography
Multicomponent SEL Intervention	Ozler et al. 2020	Girl Empower (GE) Girl Empower + Cash (GE+)	Multicomponent, gender-transformative program combining SEL/life skills curriculum, mentoring, caregiver engagement. Second treatment arm also added financial support with cash transfers	Clustered RCT with 3 arms: GE, GE+; n = 1,216 girls ages 13-14 across 84 villages	No significant effects on psychosocial wellbeing; positive impacts on life skills (GE: 0.22 SD; GE+: 0.29 SD) and gender attitudes (GE: 0.20 SD; GE+: 0.23 SD)	Liberia
Peace Education	Rosen and Salomon 2012	Peace Education	Dialogue sessions on identity and conflict	QED	Changed peripheral beliefs about other group, but not central beliefs	Israel, Palestine

Meta-Analysis Results: Evidence on the Impact of Education Interventions on SEL

Above we provided a narrative synthesis of existing evidence on the impact education interventions have on SEL outcomes in crisis- and conflict-affected settings. We highlighted the strength of the evidence for different types of interventions. This overview, however, did not account for the relative magnitude or consistency of effects across interventions. In this section, we present the findings from a meta-analysis that pooled data across studies to generate overall effect estimates and explore variations in impact. This quantitative approach provides a rigorous assessment of what works to improve SEL across diverse humanitarian contexts to reveal insights that may not be evident from individual studies alone.

The analysis covered five intervention types: MHPSS, academic support with positive school climate practices, academic support with targeted SEL, standalone SEL programming, and academic support through EdTech. We excluded peace education interventions because the only study in this category did not provide standard errors.

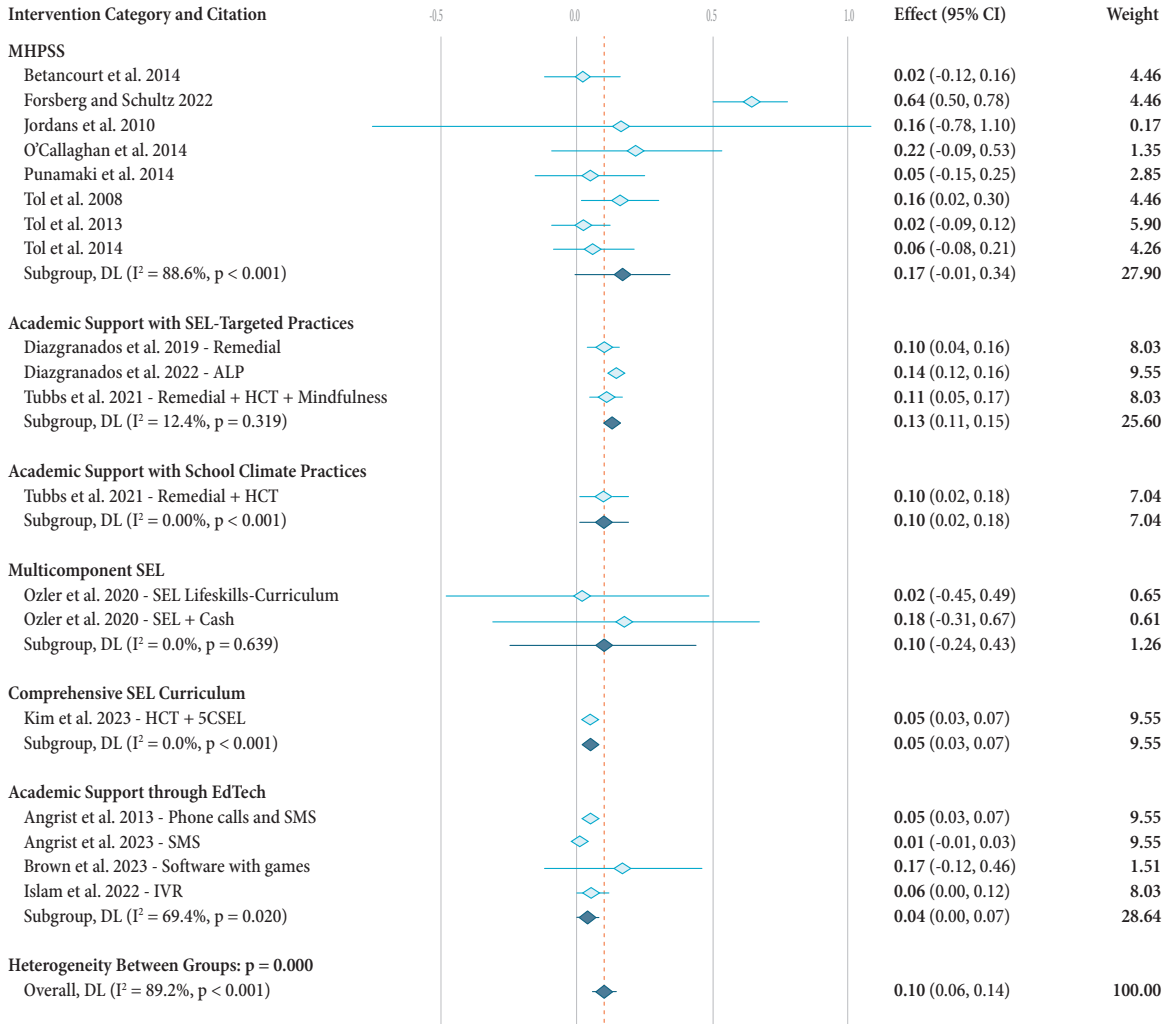
The meta-analysis yielded a pooled effect size of 0.10 [95% CI: 0.06, 0.14], which is statistically significant ($p < 0.001$). This indicates that, overall, the interventions included in the analysis produced a moderate positive effect on SEL outcomes. However, the heterogeneity across studies was high ($I^2 = 89.2\%$, $p < 0.001$), which indicates substantial variability in effect sizes. The test for differences between intervention categories was statistically significant ($Q = 15.63$, $p = 0.01$), which suggests that variation in effect sizes across intervention types and SEL domains explains a meaningful portion of the observed variability.

A key finding of the meta-analysis is that many interventions showing null effects in individual studies appeared to have small and statistically significant effects when results were aggregated in the meta-analysis. This suggests that these interventions may generate diffuse, low-intensity changes that are difficult to detect in single studies but become more visible when statistical power increases.

Meta-Analysis by Intervention Type

We conducted a meta-analysis, grouping studies by six types of interventions. Figure 2 displays a forest plot with the results.

Figure 2: Forest Plot of Impacts of Education Interventions on SEL Outcomes in Conflict Settings



Note: Between subgroup heterogeneity tests are from random-effects model

MHPSS interventions yielded a larger estimated effect (ES = 0.166), although this result does not reach statistical significance (p = 0.065). The extremely high heterogeneity observed in this group (I^2 = 88.6%) indicates substantial inconsistency across studies, which suggests that the effectiveness of MHPSS interventions is highly context dependent, with some studies showing meaningful improvements while others report negligible or highly uncertain effects. The wide confidence intervals call for cautious interpretation.

Interventions providing academic support that integrate positive school climate components showed a pooled effect size of 0.10 [CI = 0.02, 0.17], which is statistically significant (p = 0.01). However, this estimate is based on a single study, which limits the generalizability of the findings; further evidence is needed to confirm consistency across contexts.

Academic support interventions combined with SEL-targeted components yielded a pooled effect size of 0.13 [95% CI= 0.10, 0.15], which is statistically significant (p < 0.001). The low level of heterogeneity (I^2 = 12.4%) indicates that the effect is stable across studies.

Academic support delivered through educational technology yielded a pooled effect size of 0.05 [95% CI = 0.03, 0.07], which is statistically significant (p < 0.007). As with the school climate subgroup, this is driven by a single study and should be interpreted with caution.

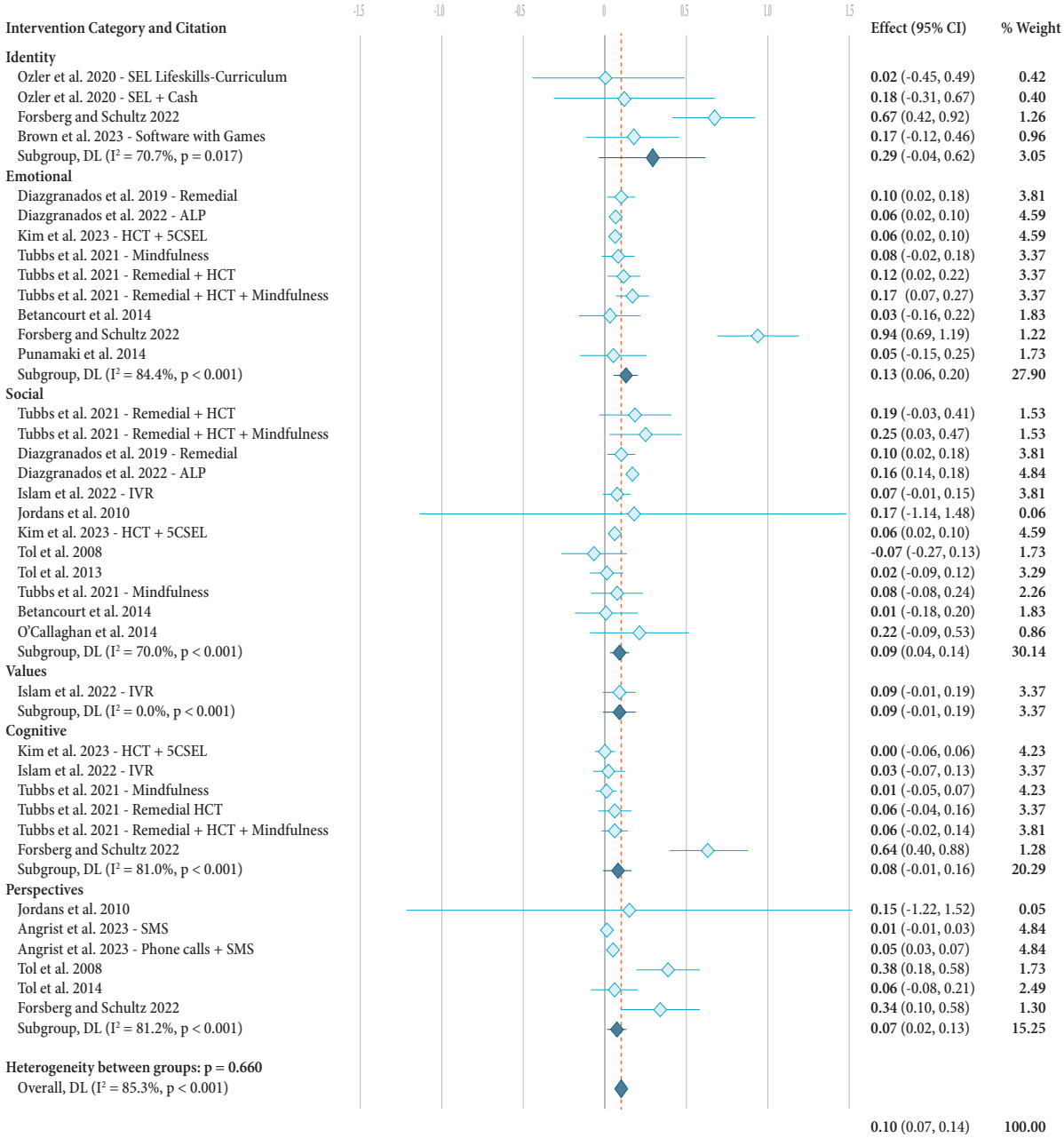
Multicomponent SEL interventions presented a small (ES = 0.095, [95% CI = -0.243, 0.433]) and nonsignificant effect (p = 0.580), with no observed heterogeneity (I^2 = 0.0%). The wide confidence interval indicates low precision and insufficient evidence to draw firm conclusions.

In sum, the meta-analysis indicates that several intervention categories yielded positive, moderate, and statistically significant effects on SEL outcomes. Academic support interventions that integrate SEL-targeted activities and school climate components, as well as standalone SEL programming such as a comprehensive SEL curriculum, showed significant effects in the range of 0.05 SD to 0.13 SD, while MHPSS interventions presented the largest estimated effect size but did not reach statistical significance and show high heterogeneity. Remote academic supports delivered through EdTech had a small effect on SEL outcomes within the perspectives domain (e.g., ambition and perseverance). Multicomponent SEL interventions showed small, nonsignificant effects with wide confidence intervals, reflecting limited precision in the available evidence.

Meta-Analysis by SEL Domain

We also conducted a meta-analysis to identify patterns of impacts by SEL domain. Whereas the previous section showed the impacts that different types of education interventions had on SEL outcomes, this section highlights which SEL domains were most influenced by the education interventions in our sample. Figure 3 displays a forest plot with the impact of studies on SEL competencies, clustered on SEL domains, according to Harvard EASEL Lab's SEL taxonomy (Bailey et al. 2021).

Figure 3: Forest Plot of Impacts of Education Interventions on SEL Domains



Note: Between subgroup heterogeneity tests are from random-effects model

The emotional domain showed a pooled effect size of 0.13 [95% CI = 0.061, 0.203], which is statistically significant ($p < 0.001$) and represents one of the largest effects across domains. However, heterogeneity was very high ($I^2 = 84.4\%$, $p < 0.001$), which indicates considerable dispersion in effect sizes, including both moderate and large effects.

The social domain showed a pooled effect size of 0.09 [95% CI = 0.04, 0.14], which was statistically significant ($p < 0.001$). Heterogeneity was moderate to high ($I^2 = 70\%$, $p < 0.001$), with most estimates clustering around small positive values.

The perspectives domain showed a pooled effect size of 0.07 [95% CI = 0.01, 0.13], which was statistically significant ($p = 0.011$). However, heterogeneity was high ($I^2 = 81.2\%$, $p < 0.001$), with effect sizes ranging from near zero to moderate values, and some wide confidence intervals.

The cognitive domain showed a pooled effect size of 0.07 [95% CI = -0.005, 0.15], which was not statistically significant ($p = 0.06$). Heterogeneity was high ($I^2 = 81\%$, $p < 0.001$), which indicates substantial variation across studies, including both negligible and larger positive effects.

The values domain included one study that yielded an effect size of 0.09 [95% CI = -0.008, 0.18], which was not statistically significant ($p = 0.07$). Heterogeneity could not be estimated.

Finally, the identity domain showed a pooled effect size of 0.29 [95% CI = -0.03, 0.62], which was not statistically significant ($p = 0.08$). The confidence interval was wide and included zero, which indicates high uncertainty. Heterogeneity was moderate to high ($I^2 = 70.7\%$, $p < 0.017$).

Overall, statistically significant effects were observed in the social, emotional, and perspective domains, while cognitive, values, and identity did not show statistically significant pooled effects. The largest point estimates were in the emotional and identity domains, although the latter was not statistically robust. High heterogeneity was present in most domains, indicating a substantial variability in intervention effects.

Cost-Effectiveness Evidence for Improving SEL

Drawing on evidence from the 11 interventions that reported cost data, we estimated that the average cost of education interventions with evidence of impact on SEL outcomes in conflict-affected settings was $211 per child (2024 US$) and ranged from $12 to $663 dollars.

Cost-effectiveness varied substantially across intervention types, reflecting differences in both implementation costs and effect sizes. When expressed as the cost required to achieve a 0.20 SD improvement in SEL, a remote phone-based tutoring intervention demonstrated a very low cost per child ($13), combined with a modest but statistically significant effect size (0.05 SD). This resulted in a cost of $52 per 0.20 SD improvement—the lowest among all interventions analyzed—but was limited to competencies in the perspectives SEL domain (i.e., perseverance and ambition).

Interventions that combined academic support with explicit SEL components demonstrated moderate cost-effectiveness. An accelerated learning program and a remedial program with a comprehensive SEL curriculum in Nigeria achieved one of the largest observed effect sizes (0.14 SD) at moderate cost, which resulted in a cost of $157 per 0.20 SD improvement for the accelerated learning programs, and $198 for the remedial program. Another remedial program that integrated SEL components in Lebanon showed lower cost-effectiveness, $636 per 0.20 SD improvement.

Standalone SEL programming showed mixed cost-effectiveness. While comprehensive SEL curricula produced statistically significant effects, they were less cost-effective than integrated academic-SEL approaches, which reflected smaller effect sizes relative to cost. Interventions with negligible or nonsignificant effects, such as SMS-only or mindfulness-only programs, could not be meaningfully assessed.

Table 2: Cost-Effectiveness of Education Interventions for Improving SEL Outcomes among School-Age Children in Conflict-Affected Settings

Intervention Category	Intervention and Reference	Context	Cost per Child (USD)	Effect Size (SD)	Significance	Cost per 0.20 SD (USD)	Cost-Effectiveness
Remote Academic Support through EdTech	SMS + phone calls (Angrist et al. 2024)	India, Kenya, Nepal, Uganda, Phillipines	$13.00	0.05	$p < 0.0001$	$52.00	Higher cost-effectiveness
	SMS (Angrist et al. 2024)	India, Kenya, Nepal, Uganda, Phillipines	$0.24	0.01	null	n/a	Not cost-effective
	IVR (Islam et al. 2022)	Bangladesh	$47.85	0.06	$p = 0.05$	$159.50	Medium cost-effectiveness
Academic Support with School Climate Practices	Remedial Lessons in Healing Classrooms (Tubbs et al. 2021)	Lebanon	$318.00	0.10	$p < 0.05$	$636.00	Lower cost-effectiveness

Intervention Category	Intervention and Reference	Context	Cost per Child (USD)	Effect Size (SD)	Significance	Cost per 0.20 SD (USD)	Cost-Effectiveness
Academic Support with SEL-Targeted Practices	Accelerated Learning Program with Comprehensive SEL Curriculum (Diazgranados et al. 2022)	Nigeria	$110.13	0.14	$p < 0.0001$	$157.33	Medium cost-effectiveness
	Remedial Lessons with Mindfulness and Brain Games (Tubbs et al. 2021)	Lebanon	$350.00	0.11	$p < 0.0001$	$636.36	Lower cost-effectiveness
	Remedial Lessons with Comprehensive SEL Curriculum and Mindfulness (Diazgranados et al. 2019)	Nigeria	$98.97	0.10	$p < 0.0001$	$197.94	Medium cost-effectiveness
SEL Programming	Mindfulness only (Tubbs et al. 2021)	Lebanon	$32.00	0.03	null	n/a	Not cost-effective
	Comprehensive SEL curriculum only (Kim et al. 2023)	Lebanon	$83.75	0.05	$p < 0.0001$	$335.00	Lower cost-effectiveness

DISCUSSION

This study provides the first meta-analytic evidence on the impact of education interventions on SEL outcomes in conflict and protracted crisis settings. Overall, the meta-analysis shows that education interventions in conflict-affected settings have an overall positive, moderate, and statistically significant impact, with a pooled effect size of 0.10 SD. This finding indicates that, despite highly constrained and disrupted environments, interventions can generate measurable improvement in children's SEL. However, these average effects mask substantial variation across both intervention types and SEL domains. Evidence on cost-effectiveness remains extremely limited, with few studies reporting costing data; among those that do, many do not demonstrate high cost-effectiveness.

At the intervention level, the findings highlight important variation across intervention types. Academic support interventions that integrate SEL-targeted practices showed statistically significant and consistent effects with relatively low heterogeneity, which suggests a more reliable and replicable pathway to impact. Interventions combining academic support with school climate components and those explicitly focused on

SEL through a comprehensive curriculum showed moderate effects, but they represent promising areas of programming, with evidence still emerging. Remote academic support delivered through EdTech also showed statistically significant but small effects, which likely reflects the fact that these interventions do not typically directly target SEL outcomes and instead influence them through indirect pathways. In contrast, MHPSS interventions presented the largest estimated effect size but did not reach statistical significance and exhibit substantial heterogeneity. This points to wide variations in implementation. Multicomponent interventions showed small and nonsignificant effects, with wide confidence intervals reflecting limited precision, making it difficult to draw firm conclusions about effectiveness.

Across SEL domains, the analysis reveals important differences. Statistically significant effects were observed in the emotional, social, and perspectives domains, with the largest and most consistent effects in the emotional domain. In contrast, effects in the cognitive, values, and identity domains were not statistically significant, and the evidence base for these domains remains limited. These findings suggest that some domains—particularly those related to emotional functioning and interpersonal skills—are more frequently targeted or more responsive to intervention in crisis contexts, while others remain underexplored. However, given the limited number of studies in several domains, these patterns should be interpreted cautiously.

These effects are consistent with benchmarks observed in international education research. In their review of more than 150 education interventions in low- and middle-income countries, Evans and Yuan (2022) found that median effect sizes tend to range between 0.05 SD and 0.10 SD, with few interventions demonstrating effects above 0.20 SD. According to education-specific benchmarks (Kraft 2020), an effect size of 0.10 SD constitutes a moderate effect size and may represent meaningful improvement in conflict and crisis settings, where learning environments are disrupted and children face multiple constraints on their development. As Kraft (2020) noted, the interpretation of effect sizes in education depends critically on context, intervention intensity, and scalability. Given the limited and heterogeneous evidence base, meta-analytic estimates should be interpreted as reflecting broad patterns rather than precise or universally generalizable effects.

Compared to estimates from the broader SEL literature, these effects are smaller. Cipriano et al. (2023) reported average effect sizes ranging from 0.11 SD to 0.29 SD across SEL and related domains, which suggests that interventions in conflict-affected settings may face additional implementation and contextual constraints. When compared to evidence on academic outcomes in conflict-affected settings, this estimate is also lower. A recent meta-analysis of interventions targeting foundational literacy and numeracy in conflict-affected contexts reported average effect sizes of 0.27 SD in literacy and 0.21 SD in numeracy, which indicates larger impacts on academic outcomes than those observed for SEL (Diazgranados and Thuo in press).

An interesting emerging pattern is the discrepancy between individual studies and pooled meta-analytic estimates. While many individual evaluations report null effects on SEL outcomes, the meta-analysis detects moderate and statistically significant impacts, suggesting that effects may be too small to detect in underpowered individual studies but become visible when evidence is aggregated. This pattern contrasts with findings from a meta-analysis of foundational learning in conflict-affected settings, where individual studies more consistently detect statistically significant impacts on academic outcomes (Diazgranados and Thuo in press). This suggests that SEL outcomes may be more difficult to shift, detect, or measure in the short term than academic outcomes.

Among studies reporting costing data, the average cost of education interventions that promote SEL outcomes is $211 per child (2024 US$), with substantial variation across programs, ranging from $13 to $350. When linking cost to impact, we find that education interventions have mixed cost-effectiveness, ranging from null impacts to improvements per 0.20 SD in SEL outcomes between $52 to $636 per child. A remote phone-based intervention delivered through EdTech appears to exhibit the highest cost-effectiveness, $52 per improvement in SEL. However, this finding should be interpreted with caution, as the intervention was primarily designed to improve academic outcomes rather than SEL, and cost-effectiveness is driven by very low delivery costs combined with small but significant effects on a narrow set of outcomes within the perspectives domain only (i.e., perseverance and ambition). Academic interventions that integrate SEL components—whether through school climate practices, targeted SEL strategies, or comprehensive SEL curricula—show mixed cost-effectiveness. Estimates range from no cost-effectiveness in cases of null impacts to between $157 and $636 per 0.20 SD improvement.

In contrast, evidence on the cost-effectiveness of education interventions targeting academic outcomes in conflict and crisis settings shows stronger and more consistent results, with costs per 0.20 SD improvement in literacy and numeracy ranging from $3 to $385. These findings are driven by a combination of lower delivery costs and larger impacts. Foundational learning interventions often achieve meaningful gains in academic outcomes at a relatively low cost, which reflects scalable delivery models and well-defined instructional approaches. The contrast suggests that, while interventions targeting academic outcomes have increasingly converged around cost-effective and scalable models, comparable optimization has not yet been achieved for SEL programming in conflict and crisis settings (Global Education Evidence Advisory Panel 2023). This underscores that cost-effectiveness is a function not only of delivery cost but of how interventions are designed to balance intensity, feasibility, and scale (Diazgranados, Guimond, and Annan 2026).

Overall, the meta-analytic and cost-effectiveness findings point to a broader challenge: despite the increasing prominence of SEL programming in humanitarian settings, SEL programs are not yet reliably improving children's SEL outcomes in cost-effective ways. Effects remain modest and uneven across intervention types and domains, and the limited cost data available suggests that many interventions do not achieve high cost-effectiveness. To explain these patterns, we identify three interrelated drivers of variation in SEL impacts and cost-effectiveness: (1) the nature and intensity of the mechanisms activated by interventions; (2) implementation conditions, including alignment with local contexts; and (3) adequate measurement of SEL outcomes. These drivers not only shape effectiveness, they also influence cost-effectiveness and scalability, as decisions about mechanisms, delivery models, and measurement systems influence both the magnitude of the impact and the resources required to achieve it. These factors likely interact, compounding their effects and contributing to the variability observed across studies. We discuss each of these below.

The first driver relates to the mechanisms that interventions use to influence SEL. Interventions with stronger and more consistent effects—particularly those integrating SEL into academic support—tend to combine structured opportunities for skill development with regular instructional engagement, which allows for repeated exposure and practice. This integration may also reduce opportunity costs and increase feasibility in resource-constrained settings, thus contributing to more consistent implementation. In contrast, interventions that rely on indirect or lower intensity pathways may influence SEL through narrower or less well-sustained mechanisms. MHPSS interventions, while designed to directly address psychosocial processes, show highly variable effects across contexts, which suggests that their effectiveness may depend on factors such as implementation quality, targeting, and alignment with local needs. This variability underscores the importance of understanding not only what interventions are delivered but how, for whom, and under what conditions. Prior systematic evidence has shown that SEL interventions are most effective when they are active, focused, and explicitly target specific competencies, rather than relying on diffuse or indirect approaches (Deitz et al. 2021).

The second driver relates to context and implementation conditions. Beyond differences in mechanisms, variation in effects is also closely linked to implementation conditions. SEL interventions are sensitive to context, culture, and implementation conditions, requiring design or adaptation that aligns with local norms, experiences, and learner needs. Emerging critiques of education programming in crisis settings (Shah and Dalrymple 2025) highlight a tendency to transfer or "import" SEL frameworks and curricula developed in high-income or stable contexts, rather than to engage in a process of codesign that prioritizes local knowledge. Such approaches may overlook how SEL competencies are defined, expressed, and valued across different cultural and conflict-affected settings. As a result, interventions may not fully align with learners' lived experiences or with locally relevant forms of social and emotional development, limiting

implementation uptake, quality, and impact. As prior research shows, interventions are less likely to produce intended outcomes when they do not resonate with local values and context (Durlak and DuPre 2008; Burns and Lawrie 2015; Puri et al. 2017). This is particularly relevant for SEL, where effectiveness depends on alignment with locally defined competencies and social norms (Deitz et al. 2021). Moreover, ensuring that programs are tailored to children's developmental needs is especially critical in humanitarian settings, where learners often have heightened vulnerabilities and diverse cognitive and emotional needs (Jones et al. 2017).

This highlights the need to sequence research and program development in ways that support iterative design, testing, and adaptation, which will ultimately enable the development of education interventions that are effective, scalable, and sustainable in crisis contexts (Diazgranados, Guimond, and Annan 2026). Addressing these challenges requires more systematic use of tools that support alignment between intervention design and local knowledge, values, and priorities. For example, the PSS-SEL toolbox provides localizing tools with structured guidance to help practitioners identify local needs and assets, prioritize relevant skills, and validate SEL frameworks and measurement tools in collaboration with local stakeholders (Harvard EASEL Lab and INEE 2022). These insights reinforce the importance of moving toward more participatory and contextually grounded approaches to SEL design, where local actors—including educators, communities, and learners—play a central role in shaping intervention content and delivery. Strengthening this alignment may help reduce variability in implementation and improve the consistency of observed effects across contexts.

The third driver relates to how SEL outcomes are measured. Limitations in SEL measurement may contribute to inconsistent evidence. Existing tools aiming to measure SEL outcomes vary widely in the constructs they capture, the domains they prioritize, and the terminology they use, which reflects a lack of conceptual standardization across the field (Jones et al. 2016). Many instruments have been developed outside of crisis-affected contexts and thus require substantial adaptation to ensure cultural relevance and validity (Diazgranados and Lee 2019). Fragmentation and limited contextual alignment can reduce the sensitivity of measurement tools and their ability to detect change and complicate comparisons across studies. Moreover, measurement tools are not always well aligned with the specific mechanisms targeted by interventions, and they often rely on self-reported outcomes that may be less responsive to short-term changes. These limitations may systematically attenuate observed effect sizes and contribute to null findings in individual studies. Addressing this requires strengthening the alignment between intervention design and measurement. Greater use of structured resources—such as the INEE Measurement Library (INEE n.d.) and the PSS-SEL toolbox (Harvard EASEL Lab and INEE 2022)—along with existing efforts to map SEL tools against SEL domains and subdomains (Jones et al. 2020; Diazgranados et al. n.d.) can help researchers and practitioners select instruments that more closely capture the skills targeted by the

interventions. Improving this alignment is critical for measuring accurately and for advancing cumulative and comparable evidence in the field.

These drivers help explain why some interventions are more cost-effective than others. Interventions that balance the intensity of mechanisms with feasible and scalable delivery models while maintaining alignment with local contexts and measurable outcomes are more likely to generate impact efficiently. In contrast, interventions that are intensive but difficult to scale, weakly aligned with context, or poorly matched to measurement systems may generate impact at a high cost or with limited efficiency. Interventions must also be designed to deliver impact in cost-effective and sustainable ways, at scale.

Limitations

This meta-analysis has several limitations. First, the evidence base for many intervention types is limited, with only a small number of eligible studies per category. This restricted the precision of pooled estimates and reduces confidence in cross-intervention comparisons. Second, insufficient disaggregation by key variables, such as geographic region, type of conflict or crisis, and implementation modality, limited our ability to explore sources of heterogeneity. Third, few studies reported cost or expenditure data, which prevented a systematic assessment of cost-effectiveness across interventions. Fourth, the synthesis relied on published and accessible evaluation reports, which may have introduced publication bias if studies with null or negative results were less likely to be disseminated. Finally, this analysis aggregated diverse interventions implemented in highly heterogeneous humanitarian and crisis-affected settings. While necessary for synthesis, aggregation may have masked important contextual differences that shaped effectiveness and transferability.

CONCLUSION

This study provides the first comparative, meta-analytic evidence on the effectiveness of education interventions in improving SEL outcomes in conflict and protracted crisis settings. The findings show that, while interventions can generate meaningful improvements, the effects are modest, uneven across domains, and highly variable across intervention types.

To explain this variation, we identified three interrelated drivers shaping SEL impacts: the nature and intensity of intervention mechanisms, the degree of alignment with local contexts and implementation conditions, and limitations in terms of how SEL outcomes are measured. These drivers highlight the fact that improving SEL outcomes in conflict and crisis settings requires not only identifying effective approaches but also strengthening coherence between intervention design, implementation, and measurement.

Advancing the field of education in conflict and protracted crisis will require greater investment in contextually grounded and developmentally appropriate program design, stronger alignment between intended outcomes and measurement tools, and more systematic attention to cost-effectiveness and scalability. Addressing these challenges is critical to generating reliable evidence on what works, for whom, and under what conditions to support the social and emotional development of children affected by conflict and crisis.

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