



3EA

EDUCATION IN EMERGENCIES
EVIDENCE FOR ACTION



GLOBAL BRIEF

The Impacts of Tutoring Informed by Social-Emotional Learning: An Analysis Across Crisis Contexts

EDUCATION IN EMERGENCIES: EVIDENCE FOR ACTION (3EA)

The International Rescue Committee (IRC) and NYU Global TIES for Children (NYU-TIES) have a strategic research-practice partnership that brings together quality education programs with rigorous research to provide the humanitarian field with a deeper, evidence-based understanding of efforts to improve academic and social-emotional learning (SEL) outcomes for children in fragile contexts. This partnership strives to build evidence about what works, for whom, under what conditions and at what cost.

As part of the Education in Emergencies: Evidence for Action (3EA) initiative, with start-up funding from Dubai Cares, we worked to develop, provide and evaluate complementary education programs to children enrolled in public schools in Lebanon, Niger and Sierra Leone.

3EA's education model is centered around combining academic instruction with SEL principles and practices. Instruction comes in the form of remedial tutoring, which is a common educational approach throughout the world and has a strong evidence base for supporting improvements to academic outcomes in stable contexts but has been under-researched in fragile and crisis-affected contexts.¹

Students who have experienced displacement have often also had their educations disrupted. Our *Healing Classrooms* remedial tutoring (referred to as HCT throughout this brief) provides them with the academic and social-emotional support they need to catch up and develop the literacy and numeracy skills necessary to succeed in school and eventually lead stable and productive lives.



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Key Takeaways

- There is now evidence across multiple conflict and crisis contexts that IRC's *Healing Classrooms* approach to both formal education and tutoring is an effective strategy to increase children's basic literacy and numeracy skills.
- There is also evidence that adding Mindfulness to *Healing Classrooms* tutoring provides a boost in improving academic and some social-emotional outcomes when compared to students enrolled in public school alone.
- While the SEL activities did not achieve all the desired outcomes, we hypothesize that with improved design and implementation, SEL activities could become even more impactful in driving meaningful improvements to children's holistic learning outcomes.

THE GLOBAL CONTEXT

Across the globe, an estimated 7.1 million refugees are school-aged children.² Many of these children have experienced severe and prolonged adversity that can have long-lasting impacts on their learning and development. We know from science that early experiences with adversity can lead to a toxic stress response, with short- and long-term impacts on children's behavior, physical and mental health, and cognitive abilities. These impacts can be mitigated, however, through quality education that includes SEL.

The number of refugees worldwide continues to grow. And unlike in previous eras, refugee children and their families are now increasingly likely to stay in their host countries for protracted periods. The vast majority of refugees are now displaced for five years or longer.³ A growing number are also more likely to live in established cities and towns instead of isolated and separate camps or settlements with the refugee children often enrolling in under-resourced public school systems. While the global community is increasingly supporting integration, this must be coupled with providing the right support to the schools now tasked with absorbing significant numbers of refugee children with distinct needs.



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THE LEBANESE AND NIGERIAN CONTEXTS

Lebanon and Niger are two profoundly distinct societies but share several key characteristics. Notably, both societies experienced a surge in the number of refugee and otherwise displaced children they host over the past decade and both societies struggled with overburdened school systems even before experiencing that recent surge.

There are currently 488,000 school-aged Syrian refugee children in Lebanon.⁴ To put that figure into perspective: an estimated one in 14 people living in Lebanon is a school-aged Syrian refugee.⁵ Lebanese policymakers have responded admirably, opening the doors of their public schools to these hundreds of thousands of vulnerable children. But Lebanese public schools were already stretched thin and grappling with chronic under-investment before the Syrian conflict began, and Syrian refugee children face many barriers to learning and remaining in school even with policies that facilitate their access. Syrian refugee children in Lebanese public schools demonstrate alarming gaps in their academic and SEL skills. More than one in three of those surveyed could not correctly identify four different letters or numbers.⁶ Their teachers reported that 43 percent of these students rarely or never exhibited key executive function skills such as self-control or working memory.⁷ The urgent need for programming that could effectively support the development of these skills was clear.

Niger is a staggeringly fragile and challenging context and in recent years has experienced high levels of displaced families and education system breakdown.⁸ As of late 2019, there were an estimated 191,902 internally displaced peoples (IDPs) and 180,006 refugees living in Niger.⁹ More than half of the school-aged children and youth in Niger are out-of-school (OOS), with recent survey data showing more than half of boys and nearly 70 percent of girls aged 15-24 are illiterate.^{10 11}

A survey of crisis-affected students in Niger made it clear that they were in dire need of support: half of these students could not correctly identify four letters in French, the language of instruction in Niger, and nearly four in ten of these students could not correctly identify four numbers in a range of one through nine.¹²

In both Lebanon and Niger, displaced children have specific traumas and needs that their local school systems are often poorly positioned to address. With the right complementary programs, students can catch up and the burden on schools can be lessened.



PHOTO CREDIT: THE IRC

3EA IN SIERRA LEONE

Beginning in the early 1990s and for more than a decade, a brutal civil war devastated Sierra Leone. The country was also buffeted by the 2014 Ebola outbreak in West Africa, which claimed nearly 4,000 lives in that country and shuttered a school system already struggling to instill basic academic skills in Sierra Leone's population.¹³ A recent survey showed that more than half of the adult population in the country is illiterate.¹⁴

The IRC and NYU-TIES partnership reached 5,700 students in Sierra Leone through the Learn Safe program, which sought to strengthen teacher instructional practices around literacy and SEL. Researchers then conducted a rigorous study of the implementation of this program. This study did not evaluate the impacts of 3EA programs, as we conducted in Lebanon and Niger. Instead, this research focused on the implementation of 3EA in Sierra Leone.

This focus on implementation yielded useful insights for programs, such as the need for rigorous measurement tools that observe teacher performance to help inform professional development and ensure quality program implementation more broadly. Similar to our research in Niger and Lebanon, this study also underscored how crucial both teacher and student attendance is for program implementation, how low or inconsistent attendance can impact program dosage and the ways digitization and other efficient methods of data collection can further the cause of building a reliable and bigger base of evidence about education in fragile contexts.

WHAT 3EA DID AND ASKED

At the heart of our remedial tutoring approach is the *Healing Classrooms* model, which focuses on providing the resources and professional development support that teachers and caregivers need to establish safe, nurturing and predictable learning environments. These features of learning environments are crucial for children who have experienced serious and prolonged adversity to be best-positioned to heal, learn and grow.

The inclusion of SEL support into our approach—both integrated within HCT and as skill-targeted activities—holds potential to help crisis-affected children catch up, recover, learn and succeed in school and beyond. A significant body of evidence from more stable contexts shows that in addition to supporting student well-being, strengthened social-emotional skills can also help drive improved academic outcomes.¹⁵

The skill-targeted SEL programs that we developed, delivered and evaluated to supplement HCT were:

- i. **Mindfulness:** activities focused on stress and emotion management and regulation and were designed to be implemented during transition break times between academic subject lessons. Students receiving Mindfulness engage in guided mind-body activities including deep-breathing, body scan and mindful movement.
- ii. **Brain Games:** a series of game-based activities that help children develop their executive function skills, including focused attention, short-term (working) memory and self-control. Each game lasts between five to 10 minutes and is designed to be played during breaks such as transitions within educational programming.
- iii. **5-component SEL:** a curriculum comprised of 30-minute daily lessons that focus on the development and strengthening of the five core SEL skills of brain building, emotional regulation, positive social skills, conflict resolution skills and perseverance. This curriculum was implemented in Lebanon but not Niger.

The different program models implemented and tested were informed by the specific needs and challenges within each context.

Over the course of these rigorous studies, the IRC and NYU-TIES set out to ask: can providing HCT or a combination of HCT with different skill-targeted SEL activities improve outcomes for students attending public school in fragile contexts?

Our research questions for Lebanon and Niger included:

- i. Does access to HCT have an impact on the academic and SEL outcomes of refugee Syrian children, refugee Nigerian children and IDP Nigerien children when compared to those with access to public school alone?
- ii. Does access to a combination of HCT + skill-targeted SEL have an impact on the academic and SEL outcomes of students in Lebanese and Nigerien public schools when compared to those with access to public school alone?
- iii. Does access to a combination of HCT + skill-targeted SEL have an impact on the academic and SEL outcomes of students in Lebanese and Nigerien public school when compared to students with access to HCT?

In both Lebanon and Niger, researchers conducted a series of randomized controlled trials (RCTs) over the course of two years. In Lebanon, program sites were randomized (cluster randomization); and in Niger randomization occurred at two levels (at school and student levels). In both countries the comparison was between two treatment arms (HCT and HCT + SEL) and a control group (public schools).

Please see Appendix I for information on our research design.



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WHAT 3EA LEARNED

Through this series of RCTs, it became clear that the combination of HCT and skill-targeted SEL activities (especially Mindfulness) has demonstrated that it can improve academic and SEL outcomes for crisis-affected students. Several of the specific findings from these studies included:

The impact of HCT

- In Lebanon, children who received half an academic year of HCT showed improved behavior regulation and more positive perceptions of their school and remedial program environments when compared to students with access to public school alone.
- In Niger, children with access to a full academic year of HCT showed improved literacy and numeracy skills when compared to students with access to public school alone.



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The impact of HCT + Mindfulness

- In Lebanon:
 - » After half an academic year of HCT + Mindfulness, students demonstrated improvements in specific literacy and numeracy skills and in specific SEL skills as compared to students with access to public school alone. In particular, the following skills improved:
 - Literacy skills: letter recognition, grapheme identification and word dictation.
 - Numeracy skills: number identification, addition and subtraction.
 - SEL skills: behavioral regulation, anger dysregulation, sadness dysregulation and hostile attribution bias.
 - » However, school stress increased for students with access to HCT + Mindfulness compared to students with access to public school alone. More research is needed to determine what this means and how or why this occurred.
 - » Students who received HCT + Mindfulness showed no difference in their academic or SEL skills as compared to students who received HCT without Mindfulness.
- In Niger:
 - » A comparison of students who received HCT + Mindfulness with students who had access to public school alone is not available due to the research design.
 - » Students who received HCT + Mindfulness improved their ability to manage sadness when compared to students who had access to HCT without Mindfulness. These students also showed marginally significant reductions in aggressive reaction to social situations when compared to students who received HCT without Mindfulness.

When considering the two comparisons of HCT + Mindfulness vs. public school alone and HCT + Mindfulness vs. HCT, these findings suggest that a combination of HCT + Mindfulness can have a significant, positive impact on the literacy, numeracy and some SEL skills for the students who receive it.



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The impact of HCT + Brain Games

- The studies were not able to be designed to understand the impact of HCT + Brain Games alone in Lebanon. For the purposes of this analysis, the only students who received Brain Games in Lebanon did so after receiving Mindfulness.
- In Niger:
 - » During Year 2, HCT + Brain Games was implemented for HCT + SEL group. These students improved their school grades when compared to students who had access to HCT without Brain Games.
 - » However, these students did not demonstrate difference in literacy or numeracy skills when compared to students with access to HCT without Brain Games.

This measurable improvement to school grades but not to specific literacy and numeracy skills suggests that the combined package of HCT + Brain Games may have positive impacts which contributed to student learning and personal comportment in their public school classrooms in ways that are not otherwise detected by measures of changes to specific literacy, numeracy and SEL outcomes.

The impact of HCT plus a combination of Mindfulness + Brain Games

- In Lebanon:
 - » After a full year in which students received a cycle of HCT + Mindfulness followed by a cycle of HCT + Brain Games, these students demonstrated no improvements to their academic and SEL skills beyond the level of improvement of students who received HCT without Mindfulness and Brain Games.
- In Niger:
 - » During the full Year 1, students who received HCT + Mindfulness followed by HCT + Brain Games demonstrated improved school grades when compared to students who received HCT without Mindfulness and Brain Games.

The impact of 5-component SEL

- In Lebanon:
 - » During Year 2, about half of our participants received HCT + 5-component SEL. These students showed no detectable changes in their academic or SEL outcomes when compared to students who received HCT alone.
- In Niger 5-component SEL was not implemented.

Discussion

The HCT model is on its way to becoming the evidence-based standard for providing remedial tutoring in humanitarian contexts. The combination of HCT with Mindfulness in particular has now demonstrated across multiple contexts that it has the potential to strengthen academic and SEL outcomes for students in conflict-affected settings. Given the global shift towards refugee integration in host community schools, this evidence-based solution provides an important model for governments, donors and implementing partners to guide how resources can best ensure that refugees not only access formal schools but are equipped to learn and succeed within them.

Nevertheless, improvements are needed to program design and implementation to impact a more comprehensive set of social-emotional skills in crisis-affected children. We have several hypotheses about why we did not achieve all of the outcomes we hoped. These include limited dosage (programs being too short, attendance being too low) and challenges with implementation, particularly given the fact that SEL is culturally dependent and seems to be more challenging to understand in content and relevance than literacy and numeracy programs. Future efforts in our SEL programming will ensure concepts and activities are developed with communities more closely to ensure alignment with local understanding and practices.

Implementation lessons revealed that teachers had difficulty implementing SEL content in the classroom. This posed a clear challenge to the faithful implementation of the entire program since SEL was such a core component of it. One way to address this challenge would be to invest more in the professional development and training necessary for teachers to become subject matter experts comfortable with delivering SEL activities and applying SEL principles in the classroom.

Teachers who understand SEL so well that they can approach fostering it with confidence will be more effective while implementing a program in which SEL is a key component. Conversely, when teachers do not have this level of understanding to start, they may not implement the program faithfully and as a result, core program objectives may not be met. Teacher professional development plays an important role here: pre- and in-service training, coaching and teacher learning circles should be adjusted in a way that can help them develop the subject matter expertise they need to implement programs faithfully.

For true understanding and successful implementation, both teaching and learning materials must be adapted so they are suited to and relatable within the given context. This requires a collaborative approach that directly involves teachers and other community members in the development of curricular and professional development content to ensure it is reflective of local values and norms.



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Recommendations

For hosting governments:

- Support the access and learning of refugee and internally displaced children in formal and complementary nonformal programs as needed.
 - » Include refugee and IDP children in education sector plans; define and monitor progress towards their access and learning outcomes.
 - » Support complementary programs such as remedial tutoring, focused on both academic and SEL instruction and implemented by trusted partners.
 - » Put teachers at the center of program development. Teachers must be involved in a collaborative way and to a meaningful extent with education planning and program development. This will help ensure that program content is clear, culturally appropriate and feasible to convey in the classroom. When teachers are equipped with curricular content that is aligned with their skill-level, classroom priorities and cultural values they are more likely to teach that content well.
 - » Collect quality data. Develop education management information systems (EMIS) that can generate the data needed to improve the quality of education services and drive improved learning outcomes for students and ensure all stakeholders within the system use EMIS.
 - » Monitor and develop strategies to improve attendance. Enrollment is important, particularly in contexts with many OOS students, but is an insufficient marker. Strategies that facilitate stronger, consistent attendance and monitor and address attendance challenges should be incorporated throughout each school term.

For donors:

- Fund rigorous research as part of education programs in crisis contexts in an impactful way.
 - » Create and uphold a culture of learning and quality improvement by funding education programs plus research in crises both quickly and for multi-year periods. Multi-year funding is necessary to drive innovation and to support program design, implementation and research.
 - » Invest in research that includes qualitative and quantitative evaluations that ask and answer what works, how, for whom, under what conditions and at what cost guided by the following principles:
 - Dosage impacts delivery. Professional development for teachers, especially as it relates to the development of subject matter expertise is a time-consuming and resource-intensive endeavor. Gathering enough data to form big picture understandings of what helps teachers master their craft requires investment, but that investment often provides significant benefits downstream. While it is not assured that a larger dosage of any program component will mean stronger effects from it, understanding the precise relationship between dosage and impact is crucial.
 - Measurement matters. SEL is difficult to measure. To yield trustworthy data about SEL and other outcomes, greater investment is needed to support the measurement research that will ensure valid, reliable and feasible instruments are available.
 - Commit to costing. Cost considerations should be included in every stage of program development and research. Accounting for cost during the design phase of a program can help identify scalable solutions that could be subsequently piloted and rigorously tested. Cost efficiency analysis during implementation illuminates what it costs to achieve certain outcomes and cost-effectiveness research during evaluations can provide key information about what is needed to better scale interventions.
- Prepare to partner: research-practice partnerships are key. Investing in and becoming a part of these partnerships whenever feasible is a powerful way to contribute to the response to these global crises. Use your position, resources and platform to inspire others to understand and invest in the power of research-practice partnerships.



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FOR MORE INFORMATION, PLEASE CONTACT:

Jamie Weiss-Yagoda

Senior Education Policy Advisor, IRC
jamie.weissyagoda@rescue.org

WRITTEN BY:

Alexander Tucciarone

Education Content Advisor, IRC
alexander.tucciarone@rescue.org

PRINCIPAL INVESTIGATORS:

J. Lawrence Aber

Willner Family Professor of Psychology and Public Policy
and University Professor Global TIES for Children, NYU
lawrence.aber@nyu.edu

Jeannie Annan

Chief Research & Innovation Officer Research &
Innovation, IRC
jeannie.annan@rescue.org

ENDNOTES

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APPENDICES

Appendix 1: Research Design for Lebanon

The first year of the study was divided into two sequential 16-week cycles. For year 1 cycle 1, the study was conducted in 87 school sites across the Akkar and Bekaa regions of Lebanon. These school sites first were stratified by region and then randomized within region into one of three treatment arms; 21 waitlist control sites (i.e. no tutoring), 33 HCT sites and 33 sites where students had access to HCT and Mindfulness activities.

For year 2, the student included 57 sites across the Akkar and Bekaa regions of Lebanon. Sites were randomly assigned to one of two conditions: 28 sites with access to HCT and 27 sites with access to HCT and 5-component SEL lessons.

Appendix 2: Research Design for Niger

Within each of the 15 pairs of very similar schools, we randomized each school in a pair to one of two group:

(1) Tutoring in a Healing Classroom (HCT); (2) HCT programming with skill-targeted social-emotional learning (SEL) activities: In Year 1, Mindfulness (Cycle 1) and Brain Games (Cycle 2).

In Niger Year 2, this initial randomization of schools to treatment conditions was preserved. However, because a previously participating school dropped from the study due to the security threats, the school paired with this school was also excluded from the study to maintain the integrity of randomization. As a result, the Year 2 research sample consists of 28 schools, 14 in each condition (HCT versus HCT + Brain Games).

Within each school, we identified all second through fourth grade students eligible to participate in remedial programming based on low scores (2 or lower, “emerging literacy/numeracy”) on both ASER French and ASER math screening tests (Year 1: N= 4,994; Year 2: N=5,915). Qualifying students were randomly assigned to access to one of two tutoring conditions (HCT or HCT + SEL depending on the condition of the school: Year 1: N = 1,800; Year 2: N = 2,022).

Eligible students who were not assigned to the tutoring programming conditions had access to their public school services only and served as the business-as-usual control condition for testing the impacts of HCT on academic outcomes. Students who were assigned to tutoring condition (HCT or HCT + SEL) participated in more extensive research data collection, which included a comprehensive set of SEL outcomes.

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Dubai Cares is a flagship partner of the 3EA initiative, a five-year program enabling global education actors to ensure that children in crisis-affected settings attend safe and predictable schools and gain the reading, math and social-emotional skills they need to thrive and succeed in school and life. Since its inception, Dubai Cares, part of Mohammed bin Rashid Al Maktoum Global Initiatives, has been working towards providing children and youth in developing countries with equitable access to quality education and learning opportunities through the design and funding of programs that aim to be integrated, impactful, sustainable and scalable. As a result, the UAE-based global philanthropic organization has successfully launched education programs reaching over 20 million beneficiaries in 60 developing countries.

Dubai Cares is playing a key role in helping achieve the United Nations Sustainable Development Goal (SDG) 4, which aims to ensure inclusive and quality education for all and promote lifelong learning by 2030, by supporting programs in early childhood development, access to quality primary and secondary education, technical and vocational education and training for youth as well as a particular focus on education in emergencies and protracted crises. Dubai Cares also funds research-oriented programs and establishes pilot initiatives that provide meaningful and valuable evidence for governments, policymakers, and civil society, to support them in defining an educational framework for the future.