During school year 2016-2017, the International Rescue Committee (IRC) delivered Learning in a Healing Classroom after-school programming to support Syrian refugee children’s learning outcomes and retention in Lebanese public schools. We found that access to Healing Classrooms programming significantly improved students’ reading and math skills, as well as reduced the likelihood of interpreting interactions with peers as hostile in intent, after the first four months of program implementation.
The international community made a promise to children in the Sustainable Development Goals: that all will have the opportunity not only to attend school, but also to learn. It is clear, however, that without a more robust evidence base for education in emergencies (EiE), stakeholders will lack the knowledge required to make sound decisions about the most effective programs and approaches in which to invest scarce time and resources. Without such evidence, decisions will continue to be based on intuition rather than knowledge, and most importantly, children in crisis contexts will continue to be denied the opportunity to receive a quality, safe education that we know builds the holistic skills they need to survive and thrive. Baseline data collected by Education in Emergencies: Evidence for Action (3EA) in fall 2016, for example, showed that 30 percent of Syrian refugee students ages 5-16 in our sample (N = 4,348) received a score of zero on all subtests of the Early Grade Reading Assessment (EGRA), a test designed specifically for use in low-income countries.1

With the support of Dubai Cares, PRM, and an anonymous private donor, during school year 2016-2017 the International Rescue Committee (IRC) delivered Learning in a Healing Classroom (Healing Classrooms) programming to support Syrian refugee children’s learning and retention in Lebanese public schools, in accordance with the Ministry of Education and Higher Education’s (MEHE) Reaching All Children with Education policy. New York University’s Global TIES for Children (TIES/NYU) conducted an experimental evaluation of the program in order to provide the first rigorous evidence of whether and how non-formal, “complementary” education programs can bolster refugee children’s ability to succeed in formal education systems.

**KEY FINDINGS**

- Access to Healing Classrooms retention support programming significantly improved Syrian refugee students’ Arabic reading and math skills after four months of implementation. Two randomized trials have now provided evidence that the IRC’s Learning in a Healing Classroom model of social-emotional learning-infused teacher training and curriculum works across delivery modes and contexts to improve children’s academic skills in crisis contexts.2

- Syrian refugee children who are enrolled in Lebanese public schools and have access to Healing Classrooms programming, when compared to children who only have access to Lebanese public schools, are less likely to view interactions with peers as hostile in intent. Research in the United States has identified such hostile attribution bias as a common and debilitating consequence of exposure to violence and bullying, and a major risk factor for developing conduct problems and disruptive disorders.3

- However, Healing Classrooms programming did not significantly improve children’s mental health after the first program cycle. Additional analyses will be conducted to determine whether mental health symptoms improved after a full year of programming.
The Background

Children living in crisis contexts are at a double disadvantage. First, children in such contexts have often experienced unspeakable adversities, exposure to which can lead to a physiological “toxic stress” response that disrupts healthy brain development and affects short- and long-term behavior, health, relationships and the ability to learn. Second, stakeholders working in emergency contexts have failed to provide children with evidence-based education opportunities that we know work to promote recovery, resilience and learning. Indeed, despite a global trend towards the evaluation of education programs via experimental trials, a review of education interventions in conflict-affected contexts identified only six studies that assessed the impact of such programs on children’s access to and/or quality of learning via the use of a randomly assigned control group. As it currently stands, stakeholders are implementing programs based on a gamble—with children’s chances of becoming healthy and productive citizens at stake.

The limited research that does exist has assumed an “either/or” approach to formal and non-formal education strategies in crisis-affected contexts. That is, it assumes that children in crisis-affected countries either 1) do not have access to formal education systems, and therefore asks, “Can non-formal, community-based schools improve access to education?”; or (2) have access to low-quality formal school systems, and asks, “What strategies can improve the quality of formal schools?” We are aware of no rigorous research to date, however, that examines whether and how non-formal education strategies—like remedial support or accelerated learning programs—can support children’s retention and learning in formal school systems. Yet given the significant social, economic and political barriers that lead refugee children to drop out of host country formal school systems, as well as the benefits that certification from a formal system can provide refugee children, such research on how to retain children in formal education and improve their academic outcomes is imperative for informing politically- and resource- viable education strategies in crisis-affected contexts. This is particularly pressing in countries affected by the Syrian refugee crisis—including Lebanon, Turkey, Iraq and Jordan—that have opened up space in their public school systems for Syrian children, but are currently struggling to ensure that children advance in their learning and remain in the schools.

In addition, children in crisis-affected countries struggle with social-emotional and mental health barriers that prevent them from attending or remaining in school. The director of Lebanon’s Mental Health unit in the Ministry of Health, for example, cited the psychological impact of conflict as one of the primary factors hampering refugee children’s learning and social development. Research from high-income countries indicates that social-emotional learning (SEL) programs that teach children to understand and manage their emotions, establish and maintain positive relationships, and make responsible decisions can significantly improve school-aged children’s foundational social-emotional skills (Effect Size (ES) = .57), as well as longer term outcomes such as emotional distress (ES = .24), conduct problems (ES=.22) and academic performance (.27). Yet we know very little about whether this holds true for—or how to implement such interventions in—conflict and crisis settings.

What are social-emotional skills?

Social-emotional skills are the skills, attitudes, and behaviors that help children effectively and positively manage daily responsibilities and challenges. Also referred to as non-cognitive or 21st century skills, social-emotional skills fall along three inter-related and dynamic domains of child development:

- **Emotional processes**: for example, emotion recognition and regulation, empathy, and perspective taking
- **Social and interpersonal processes**: for example, interpreting others’ behavior, communicating clearly, respecting others
- **Cognitive processes**: for example, working memory, inhibiting inappropriate responses, attention control, and higher-level executive functioning skills

Research in OECD contexts indicates that childhood social-emotional skills predict lifetime health, well-being, and prosperity: Over and above income and IQ, children with better social-emotional skills in childhood as rated by their preschool teachers have greater academic achievement in high school and college; higher earnings and financial stability in adulthood; and lower rates of obesity, substance use, incarceration and mental health disorders as adults.
**Healing Classrooms Retention Support Programming**

During the 2016-2017 school year, the IRC delivered one or two cycles of *Learning in a Healing Classroom* retention support programming to over 4,300 Syrian refugee children in Lebanon’s Bekaa and Akkar regions. As part of back-to-school campaigns coordinated with MEHE, the IRC identified and recruited children enrolled in Lebanese public schools for the program. At sites close to their homes and schools, students had access to eight hours per week of Arabic, math and second language (English or French) instruction designed to build the competencies needed to succeed in Lebanese public schools. Programming was delivered in two 16-week cycles, during which time three different versions of *Healing Classrooms* were tested. While we focus in this report on describing the impact of the two versions of Healing Classrooms programs—*Healing Classrooms* Basic and *Healing Classrooms* + Targeted SEL (Mindfulness)—delivered during the first cycle of implementation, we describe all three versions below:

**Healing Classrooms Basic (HC Basic)**

Teachers received a five-day training on the IRC’s *Learning in Healing Classrooms* approach, which integrates classroom SEL principles and practices—such as classroom management, critical thinking, and positive pedagogy—into Arabic literary, numeracy, and second language instruction. To provide ongoing support, all teachers received regular mentoring visits and attended monthly peer-support Teacher Learning Circles.

**Healing Classrooms + Targeted SEL (HC + Targeted SEL)**

In Cycle 1 of HC + Targeted SEL, students and teachers completed short, daily *mindfulness* exercises in between subject-matter transitions. In high-income countries, mindfulness-based practices—such as deep breathing exercises and attention to present sensations, thoughts and sounds—have been shown to buffer adults and children from physiological stress responses. No research to date, however, has tested the impact of mindfulness practices in crisis contexts. In Cycle 2, students played quick “Brain Games” that use movements and playfulness to build cognitive control in between subject-matter transitions. The games are designed to target core executive functioning skills—working memory, flexibility of attention, and inhibitory control—that research indicates provides the foundation for long-term social competence and achievement. Teachers who delivered HC + Targeted SEL received additional pre-service training and in-service mentoring to support their use of targeted SEL activities.

**The Evaluation**

Local communities (J=87) in which Syrian refugee children lived with their families were assigned to one of three intervention groups in Cycle 1 of the 2016-2017 school year: a “No Retention Support” wait-list group (J=21), a HC Basic group (J=33) and a HC + Targeted SEL group (J=33). Children were assessed at three points in time: baseline (before the start of programming); midline (after the first 16-week cycle); and endline (after the second 16-week cycle). We used this site randomized waitlist control design to answer causal questions:

1. Among Syrian refugee children enrolled in Lebanese public schools, what is the impact of access to complementary non-formal *Healing Classrooms* retention support on Syrian refugee children’s academic and social-emotional learning?
2. In Cycle 1, is there evidence that embedding targeted Mindfulness practices in the *Healing Classrooms* curriculum improved the impact of the *Healing Classrooms* program on children’s academic and social-emotional skills?
3. In Cycle 2, is there evidence that embedding targeted Brain Games in the *Healing Classrooms* curriculum improved the impact of the *Healing Classrooms* program on children’s academic and social-emotional skills?

In this brief, we report the results of research questions one and two. We will release an updated report with the results of research question 3 in winter 2017.

---

14 Because IRC did not have sufficient program funding to provide remedial support to all 87 communities, it decided to allocate access to remedial support by chance through a lottery. In cycle 2, the 20 no retention support sites were randomly assigned to either receive HC Basic or HC + Targeted SEL.
Measuring Our Impact

The impact evaluation used two measures to assess the impact of the intervention on reading and math skills: the Early Grade Reading Assessment (EGRA) and the Early Grade Math Assessment (EGMA). Given that many of the subtests were too difficult for a majority of the children sampled, TIES/NYU used a statistical technique called factor analysis that allows us to more reliably estimate students’ literacy and numeracy competence levels than would be provided by an average summary score across different subtests or an individual subtest score. We then used the resulting latent variables to evaluate the impact of Healing Classrooms programming on students’ overall reading and math capacities.

TIES/NYU also worked to develop, adapt and pilot a suite of measurement tools designed to capture information about the cognitive, social, and emotional processes that enable learning and mental health. For example, during piloting, TIES/NYU found that Syrian refugee children were reluctant to respond to first-person survey questions meant to assess social-emotional skills and mental health. We thus adapted and used a scenario-based measure in which children were asked how they would hypothetically respond to certain social situations described in short vignettes. Psychometric analysis of baseline data indicated the scales resulting from this “Children’s Stories” measure were reliable and demonstrated preliminary evidence of construct validity. We additionally collected information about children’s working memory and inhibitory control via tablet-based performance assessments as well as about higher level executive functioning skills through teacher- and enumerator-report.

Finally, the IRC additionally independently conducted qualitative interviews with students and parents in order to better understand recipients’ perceptions of and experiences with remedial support programming.
The Preliminary Results

This memo summarizes preliminary findings that answer our first two research questions after the first cycle of intervention, which lasted for approximately 16 weeks between November 2016 and March 2017.

Academic Skills

“I don’t know how to support my children with their homework or the subjects they find difficult at the public school especially in French and Math. I can manage for a certain extent in Arabic. Remedial [3EA] classes have reduced the burden on my children especially in the beginning of the school year...The Remedial classes offered the support my children needed. Now they are doing much better at school.”

- MAYSA, MOTHER OF 6-YEAR OLD SAHAR, STUDENT ENROLLED IN HEALING CLASSROOMS RETENTION SUPPORT

Social-Emotional Skills and Outcomes

“I’ve started to recognize my feelings and to be able to express freely and without fear using my own simple words. I like Mindfulness Activities, since I live the situation and start to imagine wonderful things and the world becomes a more peaceful place. I practice at home when I feel nervous, since this helps me to calm down and to become relaxed and comfortable again.”

- AHMAD, 12, STUDENT ENROLLED IN HEALING CLASSROOMS + TARGETED SEL

As suggested by Maysa, the results of our experimental evaluation indicated that Syrian refugee students enrolled in Lebanese public schools with access to both types of Healing Classrooms programming had significantly higher reading and math skills compared to Syrian refugee students enrolled in Lebanese public schools without access to Healing Classrooms programming.

Our impact evaluation indicated that Syrian refugee children who are enrolled in Lebanese public schools who have access to both types of Healing Classrooms retention support, when compared to children who only have access to Lebanese public schools, are less likely to view interactions with peers as hostile in intent. Research in the United States has identified this type of social cognitive processing—known as hostile attribution bias—as a common and debilitating consequence of exposure to violence and bullying and a major risk factor for developing conduct disorders and disruptive behaviors.

After 16 weeks of intervention, however, neither HC Basic nor HC + Targeted SEL significantly improved children’s mental health, including symptoms of depression and anxiety as well as of conduct disorders. Additional analyses will be conducted to determine whether mental health symptoms improved after a full year of programming (two cycles).

19 We use pseudonyms to refer to clients of IRC programs throughout this report.
Preliminary Recommendations

Additional and more in-depth results of the impact of Healing Classrooms retention support after two cycles of intervention will be available in the fall of 2017. In the meantime, we offer a set of preliminary recommendations for the timely consideration of key stakeholders.

To international donors:

• Invest in non-formal and complementary learning opportunities implemented by trusted NGO partners for refugee children to catch-up, learn and ultimately thrive in host country formal education systems.
• Require the programs you fund to seek education outcomes, not simply outputs.
• Given what we know from education research about how outcomes influence each other, direct resources to programs that seek to achieve a balance of academic, social-emotional, safety and access outcomes.
• Invest in education programs in crisis settings that are based on the best available evidence—even if in stable contexts—and show a commitment to learning how to achieve these outcomes.

• Dedicate 10% of all funding towards research-practice partnerships and learning that will provide the sector with a strong evidence base on what works to improve programs and achieve outcomes, as well as where, for whom, how, under what conditions and at what cost.
• Commit funding that is multi-year and includes resources for design and pilot stages so that research-practice partnerships can develop evidence-based program and research designs quickly, and then sustain programming for the time required to generate rigorous evidence and execute a meaningful learning agenda.

To the Lebanese Ministry of Education and Higher Education:

• Support a competencies-based curriculum for NGO retention support programs as an effective complement for Syrian refugee children in the formal Lebanese school system.
• Provide training to teachers on how to incorporate social-emotional learning principles into the academic curriculum of Lebanese schools.
• In order to facilitate learning what works, share disaggregated data about Syrian refugee student attendance and performance in Lebanese public schools with research universities and practitioners.

To the NGO community:

• Commit to designing, implementing, and learning from outcomes-based education programming that is based on the best available evidence in the education in emergencies sector.
• Develop education research agendas and share with the wider EiE community in order to coordinate research and evaluation endeavors, synthesize findings, ensuring that the limited amount of funds to education in emergencies are leveraged throughout the community;
• Recognize that doing rigorous research and evaluation in emergency contexts is complicated; therefore, share practices and lessons learned as a community as well as share the different types of research endeavors being used;
• Test curricular proofs of concepts using a small-scale approach before embarking on a large scale research initiative in order to understand how they are implemented, what works, and what needs to be modified.

Attendance and Program Implementation

Implementation data indicated that Syrian refugee children struggled to attend retention support classes. On average, students attended 40% of the 51 retention support classes offered in Cycle 1. While this is likely due to high levels of mobility among the student population, qualitative data also suggested significant motivational, contextual and operational barriers to attending Healing Classrooms retention support programming.

It is imperative to address such barriers, given evidence that the amount and quality of implementation of Healing Classrooms retention support programming matters for children’s holistic learning and development. Descriptive analyses indicate that among students with access to Healing Classrooms programs, higher attendance predicts improvements in Arabic literacy skills as well as improvements on a range of social-emotional skills and outcomes (e.g., teacher- and assessor-rated executive functioning skills, behavioral difficulties, pro-social skills). We caution, however, that these analyses are not causal, although they do adjust for many potential “selection factors” that may have influenced both students’ attendance rates and learning and well-being outcomes.
Our Next Steps

Our partnership is taking several steps to ensure that what we have learned this year directly benefits the children and families in our programming. First, we will continue analyzing the data to address our third research question, which asks whether a second targeted SEL strategy—Brain Games—improves children’s holistic learning and development outcomes over and above access to Healing Classrooms retention support alone. Second, based on our results, we will actively refine our SEL programming and test a new version of the Healing Classrooms retention support program in school year 2017-2018 in Lebanon. Since we learned this year that Syrian refugee children face many barriers to attending retention support programs in Lebanon, we are also planning to conduct qualitative work to identify how those barriers can best be addressed. Third, we will be working to test systems for real-time data collection—including attendance data collection—thereby reducing staff burden and increasing our ability to make mid-course corrections. In doing so, we aim to not only contribute much-needed evidence to the education sector, but to learn how research and practice must work hand-in-hand to achieve the vision of an evidence-based education in emergencies field.

For more information, contact:

CASE-STUDY AUTHORS:
Carly Tubbs Dolan
3EA Director of Measurement & Metrics, TIES/NYU
carly.tubbs@nyu.edu

Jamie Weiss-Yagoda
Education Policy Advisor, IRC
jamie.weissyagoda@rescue.org

PROGRAM MANAGERS:
Lindsay Brown
3EA Impact Director, TIES/NYU
lindsay.brown@nyu.edu

Paul Frisoli
Senior Education Technical Advisor, IRC
paul.frisoli@rescue.org

PRINCIPAL INVESTIGATORS
J. Lawrence Aber
Willner Family Professor of Psychology and Public Policy and University Professor, TIES/NYU
lawrence.aber@nyu.edu

Jeannie Annan
Senior Director of Research, Evaluation and Learning, IRC
jeannie.annan@rescue.org
Endnotes


6 Dana Burde and Leigh L Linden, “The Effect of Village-Based Schools: Evidence from a Randomized Controlled Trial in Afghanistan” (National Bureau of Economic Research, 2012).

7 Aber et al., “Promoting Children’s Learning and Development in Conflict-Affected Countries.”


9 Maysa Jalbout, “Reaching All Children with Education in Lebanon: Opportunities for Action” (UK: TheirWorld, 2015), http://b.3cdn.net/awas/425e9d6ef2c7ca9980_tom6bga7x.pdf.


16 Because IRC did not have sufficient program funding to provide remedial support to all 87 communities, it decided to allocate access to remedial support by chance through a lottery. In cycle 2, the 20 no retention support sites were randomly assigned to either receive HC Basic or HC + Targeted SEL.

17 Gove and Wetterberg, “The Early Grade Reading Assessment.”


19 We use pseudonyms to refer to clients of IRC programs throughout this report.

20 Dodge et al., “Multidimensional Latent-Construct Analysis of Children’s Social Information Processing Patterns.”