LHC significantly improved students’ perceptions of the safety and supportiveness of their schools, as well as their reading and math skills, after one year of implementation in two cohorts of schools. One year in a Healing Classroom provided the equivalent of 3.9 extra months of Congolese schooling in reading instruction and 10.3 extra months of Congolese schooling in math instruction.

However, LHC did not significantly improve children’s mental health or experiences of victimization in either cohort of schools. LHC focused on building a safe and supportive, as well as predictable and cooperative, school environment. This strategy may not have been enough to improve the social-emotional skills and processes that promote mental health and prevent victimization.

All impacts faded out as the program expanded to additional schools in the second year.
THE BACKGROUND

A growing number of strategies have been developed and implemented to improve the reading and math skills of primary-school aged children in developing countries. Relatively few such programs, however, have been rigorously evaluated through the use of random assignment to intervention and control groups, the gold standard in intervention research and increasingly in development and humanitarian contexts as well. A recent meta-analysis, for example, indicates that by 2013 in such contexts there have only been 76 randomized experiments of three types of strategies – instructional interventions, health interventions, and incentive-based interventions – to improve student reading and math outcomes. Some strategies have had no average impact on learning to date (for example, monetary grants), while other strategies have proved more successful. In particular, teacher training and curricular interventions – elements of which are included in LHC – demonstrate the largest average impacts thus far. We estimate, however, that fewer than ten of these experiments were conducted in countries recently or currently experiencing armed conflict.

There is almost no evidence from either low-income or conflict-affected countries about the impact of such strategies on students’ perceptions of the school environment, their mental health, and social-emotional well-being. We do know, however, that children can demonstrate remarkable resilience when provided with educational opportunities that include social-emotional strategies to mitigate the negative effects of adversity and stress. School-based universal social-emotional learning programs that promote supportive classroom environments and teach children to recognize and regulate their emotions, establish and maintain positive relationships, and make responsible decisions have been shown across hundreds of studies in high-income countries to improve academic performance and social-emotional wellbeing and to reduce aggressive behavior.

The evaluation of Learning in a Healing Classroom in the Democratic Republic of the Congo is, to the best of our knowledge, the first rigorous test of the impact of a school-based program that infuses social-emotional learning into teacher training and curricular strategies in a conflict-affected country. It is also the only evaluation of a school-based program in a conflict-affected country to consider the program’s impact on both academic skills and social-emotional wellbeing.

THE LEARNING IN A HEALING CLASSROOM PROGRAM

<table>
<thead>
<tr>
<th>Integrated Curriculum</th>
<th>The integrated curricular materials were developed in collaboration with MEPSP curriculum experts. The content of the materials reflects the national standards for each grade level, and includes foundational reading, writing, math, and social-emotional content.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Professional Development</td>
<td>Teachers participated in an intensive 10-day initial training and subsequently took part in continuous in-service training, known as Teacher Learning Circles (TLCs). TLCs are rooted in the MEPSP’s Cellule de Base de Formation et Encadrement (Basic Unit for Training and Coaching), a practice that started in the DRC in 1984.</td>
</tr>
</tbody>
</table>
THE EVALUATION

145 schools serving 11,745 children in three provinces of the DRC – Katanga, South Kivu, and North Kivu – were randomly assigned to start implementation of Learning in a Healing Classroom in 2011, 2012 or 2013. We used this cluster randomized wait list control trial design to answer causal questions: Did the LHC intervention change (a) students’ reading and math skills; (b) students’ social-emotional well-being, including perceptions of their classrooms as safe/supportive and predictable/cooperative, as well as their mental health and victimization experiences; and (c) teachers’ motivation and professional well-being? This design also ensured that services were eventually provided to all schools, teachers, and children in our sample.

In this report we summarize the impact of LHC relative to a control condition in two separate cohorts (groups) of schools. These cohorts were defined by geographic location and timing of implementation. Cohort 1 schools were located in four educational subdivisions in Katanga province. In Cohort 1, LHC was introduced in the school year of 2011-2012 to one-third of the schools, allowing us to estimate the impact of one year versus no years of LHC during the initial roll-out phase. LHC expanded in the school year of 2012-2013 to an additional one-third of schools, allowing us to estimate the impact of two versus one versus no years of LHC during the expansion phase. Cohort 2 schools were located in South Kivu and two additional educational subdivisions of Katanga province. In Cohort 2, LHC was rolled out in the school year of 2012-2013 to one-third of schools, allowing us to replicate our estimate of the impact of one year of LHC during a roll-out phase.

MEASURING OUR IMPACT

The LHC 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 most of the subtests were too difficult for a majority of the children sampled, NYU used a statistical technique called factor analysis to provide more reliable information about the impact of LHC on students’ reading and math capacities than an average summary score or individual subtest. Factor analysis suggested a single reading score from the nine EGRA subtests and two math scores from the nine EGMA subtests. We refer to these scores as the reading score, the geometry score, and the addition/subtraction score, respectively. Additional survey measures were used to assess children’s perceptions of the school environment and their social-emotional wellbeing, as well as teachers’ motivation and wellbeing.

THE RESULTS

After one year, Learning in a Healing Classroom significantly improved students’ reading and math scores during the initial roll-out phase. These results were obtained first in 2011-2012 in Cohort 1, and then replicated in Cohort 2 in 2012-2013. In Cohort 1, LHC increased students’ reading scores and geometry scores by .14 standard deviations each. In Cohort 2, LHC increased reading scores by .21 standard deviations and addition/subtractions scores by .30 standard deviations. The reading gains are equivalent to 3.9 extra months of schooling in the Congolese education system, while the math gains are equivalent to 10.3 extra months of schooling in the Congo.
After one year, Learning in a Healing Classroom also significantly improved how safe and supportive students perceived their schools to be during the initial roll-out phase. However, the impact of LHC on how students perceived their schools varied. LHC increased students’ perceptions of the safety and supportiveness of their schools in Cohort 1 by .22 standard deviations. These results were then replicated during the initial roll-out phase in Cohort 2, where LHC improved the safety and supportiveness of school environments by .13 standard deviations. But there were mixed results regarding children’s perceptions of how cooperative and predictable their learning environments were. In Cohort 1, LHC unintentionally decreased students’ perceptions of cooperation and predictability by .15 standard deviations. However, in Cohort 2, LHC increased these perceptions by .22 standard deviations.

As the program expanded to additional schools in Cohort 1, the impacts of Learning in a Healing Classroom on reading, math, and perceptions of school supportiveness faded out. That is, the positive effects we saw after one year of LHC in Cohort 1 were no longer observable after two years.

Additionally, in neither cohort of schools did LHC reduce children’s mental health problems or experiences of peer victimization compared to the control condition.

Learning in a Healing Classroom impacted teachers’ professional well-being differently based on teachers’ prior level of experience and gender. Specifically, LHC improved the professional well-being of the least experienced teachers. Teachers with the fewest years of teaching experience gained increased motivation levels after the initial roll-out phase. In the expansion phase, the program had positive impacts on the least experienced teachers’ sense of personal accomplishment. However, the program had negative impacts on female teachers’ professional well-being. Specifically, in the initial roll-out phase the program increased job dissatisfaction for female teachers, and in the expansion phase the program reduced female teachers’ sense of personal accomplishment in Cohort 1.

THE IMPLICATIONS

Integrated teacher training and curricular programs should consider adding targeted and affordable social-emotional learning and mental health strategies to promote multiple dimensions of children’s learning in conflict-affected countries. Learning in a Healing Classroom was designed based on the hypothesis that improving teachers’ professional well-being and the quality of the school environment would lead to improvements in children’s academic skills and social-emotional well-being. LHC improved students’ reading and math skills as much as or more than most other interventions designed to improve academic achievement in low-income countries, but the size of the impacts is still too small to meet the needs of Congolese children. Moreover, LHC did not at any point in time improve children’s mental health or experiences of peer victimization. This suggests that focusing on improving teacher and school quality may be necessary but not sufficient in conflict-affected countries: there may be additional factors that need to be addressed in order to improve children’s learning and wellbeing.

Research in the brain and behavioral sciences suggests one such factor. Children exposed to the violence and adversity that are common in conflict-affected settings have a physiological stress response that can alter brain development in a way that hampers their ability to learn. Specifically, changes stemming from the stress response can have significant negative effects on cognitive executive functions such as long-term and working memory, flexibility of attention, and inhibition of impulses, which are required for learning and wellbeing. Low-intensity strategies that can be easily embedded into classroom activities, and that are designed to decrease stress and improve executive functions are promising avenues for future programming.
School-based strategies to improve children’s academic learning and social-emotional wellbeing should consider implementing continuous quality improvement strategies to ensure impacts are sustained over time. As reported above, Learning in a Healing Classroom did not have an impact on students’ learning and well-being after the program expanded to additional schools. There are a variety of factors that could contribute to this fade out: a decline in the quality of implementation, turnover of teachers, or fatigue of the implementation staff. To better monitor and ensure consistent quality, future initiatives should consider adding processes that allow for continuous monitoring and feedback to school staff and program implementers.

Rigorous research can successfully be conducted in conflict-affected countries – but innovations in measurement and monitoring are necessary to facilitate evidence-based action by practitioners. Our project indicated that the most commonly used measures of literacy, numeracy, and social-emotional wellbeing in conflict-affected contexts are adequate but not optimal. They are often too difficult for children or have untested validity and comparability across contexts. In addition, while budget constraints prevented us from collecting implementation data for this evaluation, our research indicated that the design and use of feasible measures of implementation fidelity are critical for understanding why programs have – or fail to have – impact.

1 North Kivu had to be excluded from the evaluation sample due to security concerns.