EXAMINING LEVELS OF LEARNING LOSS, TRAUMA, AND RESILIENCE IN CHILDREN, PARENTS, AND TEACHERS IN TIGRAY, ETHIOPIA

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A SUMMARY OF AN INDEPENDENT STUDY BY THE INSTITUTE FOR EDUCATION, HEALTH, AND DEVELOPMENT (INEHD)
Executive Summary

The Luminos Fund, an international nonprofit organization dedicated to providing education opportunities to the world’s most vulnerable children, commissioned an independent study to examine learning loss, trauma, and resilience among primary-school-aged children in Tigray, a region in northern Ethiopia, in the wake of COVID-19 school closures and two years of civil war.

The study, led by Dr. Belay Hagos from the Institute for Education, Health, and Development (IEHD) in collaboration with a team of researchers from Mekelle University, surveyed 600 internally displaced children who were enrolled in Grades 2, 3, and 4 at the time of school closures in 2020. It also included 450 parents and 400 teachers. Due to ongoing security concerns in various parts of Tigray, participants were selected from temporary shelters located in and around Mekelle.

The following findings are deeply alarming, indicating that children have experienced significant learning loss, and there is evidence of substantial psychological trauma affecting children, parents, and teachers. The full report is available upon request.

Key Findings:

1. 70% of children thought they would die from hunger.
2. 72% of children experienced shooting at a very close distance.
3. 62% of children expected that they would be killed.
4. 44% of children saw a dead body.
5. 29% of children saw someone being killed.
6. 4 out of 5 teachers experienced symptoms of post-traumatic stress disorder (PTSD).

More than 50% of Grade 4 students tested at the lowest level (below basic) in English, Math, and Tigrigna.

Less than 5% of students were proficient in these subjects.
Context

Over the past two years, the war between the Ethiopian government and the Tigrayan People’s Liberation Front (TPLF) devastated the education of millions of children in Ethiopia. The conflict affected over 20 million people, closed over 7,000 schools, and shut almost 1.5 million children out of school. The World Health Organization’s Director-General, Dr. Tedros Ghebreyesus, referred to the war as “the worst humanitarian crisis in the world.” It came directly on the heels of earlier school closures due to the COVID-19 pandemic.

After the Ethiopian government and TPLF announced a peace agreement, Luminos moved to re-establish our education program in Tigray, in partnership with communities and government. In early 2023, Luminos commissioned this study to inform a variation of our core program model that is customized to the unique needs of children in Tigray.

Research Methodology

In April 2023, children who were enrolled in Grades 2 and 3 at the time of school closures in March 2020 were assessed across four subtasks from the Early Grade Reading Assessment (EGRA) to measure potential learning loss: Letter Name Recognition, Familiar Word Reading, Oral Reading Fluency, and Reading Comprehension. The results were benchmarked against the regional averages for Grade 2 and 3 students from the 2018 national EGRA, which was the last national EGRA before the conflict to include students from Tigray. Additionally, children who had been in Grade 4 at the time of the pandemic were tested in Tigrinya, English, and Math with a tool based on the Grade 4 National Learning Assessment. The results were compared to the regional averages for the 2019 National Learning Assessment.

About the Luminos Fund

The Luminos Fund’s mission is to ensure all children have equal access to joyful, foundational learning, especially those shut out of education by crisis, poverty, or discrimination. Our accelerated education program reaches thousands of out-of-school children, and helps them catch up to grade level, reintegrate into government schools, and prepare for lifelong learning. In just one school year, the Luminos program teaches students to read and do math – to learn how to learn – through a joyful, activity-based curriculum.

Ethiopia is the Luminos Fund’s largest and longest-running program. In partnership with the government and community-based organizations, Luminos is implementing an accelerated education program, successfully reaching more than 189,768 out-of-school children. To address the out-of-school challenge at scale, Luminos is building capacity within the national, regional, and local education bureaus to adopt and deliver our program. In the 2022-23 school year, the government is reaching over 30,000 children through the adoption of the Luminos program model.
To gain a deeper understanding of the trauma and resilience of internally displaced children in Tigray, researchers conducted assessments using five survey instruments: the War Trauma Questionnaire (WTQ), the Children’s Revised Impact Event Scale (CRIES), Depression Self-Rating Scale for Children (DSRC), the KidCOPE Scale, and the revised Child and Youth Resilience Measure. These tools were used to assess the range of wartime experiences children faced, the severity of their trauma symptoms, and the coping strategies they developed in response. In addition, questionnaires and standardized scales were administered to parents and teachers to gauge their experiences of the war and shed light on the informal methods they used to support student learning during the period of school closures.

Key Findings

Trauma and Resilience

There is unequivocal evidence that children, teachers, and parents have experienced significant trauma during wartime and are likely to require some form of psychosocial support as schools reopen. The results of the Children’s Revised Impact of Events Scale indicate that 47% of children – nearly 1 in 2 – exhibit likely symptoms of PTSD (48% of males and 45% of females). Notably, children from West Tigray, one of the six administrative territories in Tigray known to have experienced some of the most severe wartime atrocities, demonstrated more pronounced trauma symptoms compared to those from other areas of the region.

While a majority of the surveyed children reported using a combination of positive and negative strategies to cope with their trauma, a higher proportion of children exhibiting PTSD symptoms were found to resort to more harmful coping strategies compared to those who did not meet the PTSD threshold. For example, 63% of the children showing signs of PTSD reported using self-criticism as a coping strategy (compared to 38% of children with less severe trauma symptoms), and 53% of children with PTSD resorted to resignation (compared to 47% of children without PTSD).

The Regional Impact of War

The findings of this study highlight significant regional variations in the impact of the war. Out of the 600 children randomly sampled from IDP settlements in Mekelle, 60% were from West Tigray, one of the six administrative territories in Tigray known to have experienced some of the most severe wartime atrocities. Notably, children from West Tigray demonstrated more pronounced trauma symptoms and scored significantly lower on the EGRA subtasks and on the Math and English sections of the Grade 4 National Learning Assessment compared to children from other areas.

Of the children surveyed:

- **81%** of children were forced to leave their village or town.
- **50%** of children were separated from their families.
- **15%** of children had at least one family member killed.
- **45%** of children saw someone being tortured.
In the case of teachers and parents, results from the Revised Impact Event Scale (IES-R) revealed that 91% of teachers and 82% of parents received scores in the PTSD range. On the Depression, Anxiety, and Stress Scale, 59% of surveyed teachers exhibited symptoms of depression above the normal range, 62% exhibited symptoms of anxiety above the normal range, and 36% exhibited symptoms of stress above the normal range. For teachers and parents, the experience of the war has been compounded by economic hardship. Before the conflict, only 6% of teacher respondents described their socio-economic status as “lower than most people” (compared to “same as most people” or “better than most people”). However, this percentage increased to 52% following the conflict, indicating a significant shift in their perceived socio-economic standing.

An important aspect of this study was the focus on the resilience of respondents. Despite the hardships teachers and parents experienced, they were nonetheless able to identify areas of unintended personal growth resulting from the circumstances of the war. Specifically, 55% of teachers and 52% of parents reported developing greater personal strength, 52% of teachers and 53% of parents stated that their relationships improved, and 58% of teachers and 56% of parents expressed an enhanced appreciation of life.

**Learning Loss**

Children who were in Grades 2 and 3 at the onset of the pandemic exhibited lower scores on the three timed EGRA subtasks (Letter Name Recognition, Familiar Word Reading, and Oral Reading Fluency) in 2023 than the Tigray regional averages for Grade 2 and 3 students in 2018. Both Letter Name Recognition and Familiar Word Reading subtasks scores decreased by more than 10 points between 2018 and 2023 for Grade 2 and Grade 3. Additionally, in 2023, there was an increase in the percentage of Grade 2 and 3 students who were unable to answer any questions correctly on the EGRA subtasks (for Grade 2 students, the percentage of zero scorers increased from 30% in 2018 to 36% in 2023, and for Grade 3 students, it increased from 15% to 25%). Moreover, there was a decline in the percentage of students who could be characterized as proficient in oral reading fluency.

**Mean scores on timed EGRA subtasks by grade level and year**

*Average scores for Tigray from the 2018 national Early Grade Reading Assessment*
Among the children who were in Grade 4 when the pandemic began, more than 50% tested at the lowest level (below basic) in English, Math, and Tigrigna on an assessment modeled after the Grade 4 National Learning Assessment. With schools closed for the last three years, children have not only lost foundational literacy skills and subject-specific knowledge, but they have missed out on the opportunity to advance through the government school system, dramatically limiting their higher education and career prospects.

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While learning loss was evident, the research also reveals that some students and parents found alternative ways to continue learning during school closures. Although 68% of children reported being disengaged from learning entirely during this period, 17% utilized technology to continue their studies, with platforms such as YouTube (5%), Telegram (11%), Radio (15%), and TV (60%) being their primary sources of educational content. Additionally, 31% of parents sought assistance from teachers to support their children’s learning, while 10% hired private tutors. Among the teachers surveyed, 60% reported providing academic support to students during the school closure, and 41% stated that they had been hired as tutors. Notably, 93% of teachers expressed their willingness to teach students despite not receiving their monthly salary.

"The findings of our study are a stark reminder of the devastating toll that war takes on children. It’s not just the physical destruction and loss of life – it’s the psychological trauma."

Dr. Belay Hagos Hailu, Associate Professor of Education and Director of the Institute of Educational Research, Addis Ababa University
Key Recommendations

Based on the comprehensive findings of this study, several key recommendations emerge:

1. Provide comprehensive psychosocial support services for children, their families, and teachers to address the emotional and psychological needs resulting from the crisis.

2. Implement an accelerated learning model that targets missed or disrupted learning and embeds Social and Emotional Learning (SEL) approaches, offering tailored interventions to facilitate catch-up and bridge the learning gap.

3. Create and maintain conditions that encourage and support children’s continued attendance and engagement in learning, addressing potential barriers to ensure their sustained participation.

4. Prioritize collaboration between relevant stakeholders, including educators, parents, community-based organizations, and policymakers, to collectively address the challenges and develop effective strategies for educational recovery.

By implementing these recommendations, it is possible to address the critical needs identified in the study and work towards mitigating the impact of the pandemic and war on children’s education and well-being.

98% of children reported that they are excited to return to school.

While 98% of the children surveyed in this study reported that they are excited to return to school, creating the conditions to ensure they remain in school will be of the utmost importance.
Acknowledgments

Many individuals contributed their hard work, insights, and time to this study. The Institute for Education, Health, and Development (InEHD) collaborated with a team of researchers from Mekelle University, working together at all stages of the research. The research team included:

- Belay Hagos Hailu (PhD), Lead Author
- Tirussew Teferra (PhD, Prof.), Research Team Member
- Zenawi Zerihun (PhD), Research Team Member
- Tsegaye Hagos (PhD candidate), Research Team Member

Luminos appreciates the support and endorsement received from the Tigray Education Bureau.

Cover Image: A school destroyed in the Afar region in northern Ethiopia. (Photo by J. Countess/Getty Images)

The Luminos Fund is unlocking the light in every child. We’re working to ensure all children have equal access to joyful, foundational learning, especially those shut out of education by crisis, poverty, or discrimination. To date, we’ve helped 218,541 children get a second chance at education in Sub-Saharan Africa and the Middle East.

In the Luminos program, we teach formerly out-of-school children learn how to read, write, and do math – to learn how to learn – through a joyful, activity-based curriculum. Our program allows out-of-school children to catch up to grade level, reintegrate into local schools, and prepare for lifelong learning.