



JOURNAL ON EDUCATION IN EMERGENCIES

EDITORIAL NOTE

Dana Burde and Heddy Lahmann

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2013-2016

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Difficulties Affect Learning Outcomes:
A Study of Primary School Children
in Syria

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122 East 42nd Street, 14th floor

New York, NY 10168

<https://inee.org/journal>

journal@inee.org

New York University

International Education Program

246 Greene Street, Suite 300

New York, NY 10003

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EDITORIAL NOTE

DANA BURDE AND HEDDY LAHMANN

We are very pleased to present the spring issue of the INEE-NYU *Journal on Education in Emergencies (JEiE)*, which offers a firsthand view into a broad range of the multiple dilemmas facing those who work in education in emergencies (EiE). The issue provides actionable data and resources for policymakers who are hoping to improve the learning outcomes of children living in emergency contexts. The rigorous research and cutting-edge field notes contained in this issue continue our efforts to support equity and social justice through the production of knowledge and dissemination of evidence for the field of EiE. *JEiE* offers crucial descriptive and explanatory data from practitioners, researchers, and policymakers, and from research teams comprising all three who partnered in writing their articles. These team members, who seek to gain a more comprehensive understanding of various practical questions, approach their subjects with methodological rigor that breaks common boundaries between research and practice.

In this issue, authors from five continents present evidence that cuts across an array of geographic settings and populations, including the Middle East, South America, South Asia, and sub-Saharan Africa. The first two research articles address the effects of conflict on education. In “War and Schooling in South Sudan, 2013-2016,” Augustino Ting Mayai takes an innovative approach to examining physical exposure to violence in an effort to understand the long-term effects of war on the accumulation of human capital. Mayai notes that, although previous research has focused on displacement and food insecurity, there has been little systematic collection of data that will provide a better understanding of how long-term conflict affects education and the accumulation of human capital. Taking advantage of the fact that exposure to violence varies across geographic locations, Mayai “estimate[s] the causal impact of the recent civil war on primary school enrollment as a proxy for measuring human capital accumulation” (p. 14). He finds that “schools located in the South Sudanese war zones lost 85 children per year on average, or 18.5 percent of total enrollment” (p. 14). He also finds that the decline in girls’ enrollment is unrelated to the conflict, which is perhaps surprising to outsiders. Mayai argues this is likely due to pre-existing social barriers, such as “gendered domestic roles, early marriage, and out-of-wedlock pregnancies” (p. 14) that have long blocked girls’ educational opportunities in South Sudan. He pays close attention to the policy implications of his research and, based on his findings, calls for a number of government interventions to improve schooling outcomes. His recommendations include support for creating

safe learning facilities, increased education funding for displaced South Sudanese children, preventing armed forces from occupying schools, and enforcing local and international child labor laws by confronting child soldiering. Because this article was among our “first views” for this issue, in August 2020, the government of South Sudan has already benefitted from Mayai’s findings and has even incorporated some of them into its revised education policies.

The next article, “How Cognitive and Psychosocial Difficulties Affect Learning Outcomes: A Study of Primary School Children in Syria” by Grace Anyaegbu, Caroline Carney, Holly-Jane Howell, Alaa Zaza, and Abdulkader Alaeddin, assesses the effects of conflict on children’s mental health and wellbeing and on their education outcomes. The authors collected data from a large sample of children (n=7,191) who received educational support combining “classroom lessons with remedial education, structured psychosocial support, and play-based activities” (p. 54) through the Manahel Program in northwestern Syria from November 2018 to May 2019. The data included children’s cognitive and psychosocial functioning levels and their literacy levels, as reported by their teachers. The authors find a clear and robust connection between cognitive and psychosocial difficulties and “poorer learning progress” (p. 50). Although others have found that psychosocial interventions with conflict-affected children can improve learning outcomes (Betancourt et al. 2014), the degree to which children’s learning suffers as a result of their cognitive and psychosocial difficulties has been less clear. Thus, these findings make an important contribution to the literature.

The next two articles offer compelling insights into interventions for conflict-affected learners in Lebanon and Colombia. First, “A Proof-of-Concept Study of Can’t Wait to Learn: A Digital Game-Based Learning Program for Out-of-School Children in Lebanon,” coauthored by Jasmine S. Turner, Karine Taha, Nisreen Ibrahim, Koen I. Neijenhuijs, Eyad Hallak, Kate Radford, Hester Stubbé-Alberts, Thomas de Hoop, Mark J. D. Jordans, and Felicity L. Brown, examines an education technology intervention in a humanitarian setting. The authors present a proof-of-concept study of Can’t Wait to Learn, a digital game-based learning program that “combines an experiential, active learning design with meaningful, competency-appropriate, and contextually relevant content” (p. 76). Employing proof-of-concept studies is important in being able to assess most accurately whether a program is likely to be effective enough to warrant investment. These studies also are useful in assessing how and to what extent a program may need to be modified or adapted to fit new circumstances. In this case, the authors assessed the feasibility of using Can’t Wait to Learn with out-of-

school children in Lebanon by “implementing its mathematics component in basic literacy and numeracy classes (n=30) with out-of-school children (n=390) ages 10-14” (p. 76). In addition to estimating changes in the children’s numeracy and psychosocial wellbeing, the authors conducted “focus group discussions (n=16) and key informant interviews (n=19) with children, facilitators, parents, and partner staff members to understand the lived experience, perceived impact, and implementation challenges of the program” (p. 76). The authors found dramatic results across a number of key indicators, including “significant improvements in numeracy, psychological symptoms, and self-esteem” (p. 76). This article provides a good example of a successful academic-practitioner partnership, which included War Child Holland and its partner education specialists. As the authors continue their efforts to determine conclusively if the program is effective, their findings will inform future studies.

In “The Role of Technical and Vocational Education in Social Reintegration: Insights from Colombian Ex-Combatants,” coauthors Maria Paulina Arango-Fernández and Stephanie Simmons Zuilkowski add a critical dimension to our understanding of technical and vocational education and training (TVET) for ex-combatants. The authors explore the “experiences and perceptions of the ex-combatants who participate in these programs” (p. 110). Although seminal research conducted in the late 1990s and early 2000s explicitly sought to understand former youth combatants in Uganda (Blattman and Annan 2008, 2010) and in Sierra Leone (Humphreys and Weinstein 2005), more recent research featuring ex-combatants’ voices has been scarce. Arango-Fernández and Zuilkowski argue that this lack has obscured whether these men and women find “access to TVET useful in building new social networks” (p. 110), which is a critical factor in preventing violence and promoting social cohesion. To address this gap, the authors conducted in-depth interviews with female and male ex-combatants from Medellín, Colombia, who were engaged in TVET in order to “examine their perceptions of whether and how TVET contributed to their social reintegration” (p. 110). The authors’ findings show that some forms of TVET provided transitional spaces in which a sense of normalcy could prevail and ex-combatants could interact with trusted mentors and educators. This created opportunities for their structured integration into civil society and the workforce and promoted psychosocial recovery and built social support. Other types of TVET, however, “reinforced [ex-combatants’] isolation and segregation” (p. 110), especially short-term programs that served only ex-combatants. Ex-combatants also reported struggling to reintegrate into society, in part because they felt stigmatized. The authors argue that, in order to enhance the success of future TVET programs, they should seek to “develop social bonds and trust between ex-combatants and their communities” (p. 110).

The next set of articles addresses problems inherent in the structure and organization of EiE programs and research. For their article, “Landscape Analysis of Early Childhood Development and Education in Emergencies,” Liliana Angélica Ponguta, Kathryn Moore, Divina Varghese, Sascha Hein, Angela Ng, Aseel Fawaz Alzaghoul, Maria Angélica Benavides Camacho, Karishma Sethi, and Majd Al-Soleiti set out to determine why early childhood development (ECD) programs still lag behind other EiE interventions. In their effort to understand this question, they collected survey and interview data from key stakeholders and conducted a large-scale review of the literature. They asked key stakeholders about (1) their perceptions of challenges to ECDEiE their organizations faced, (2) what opportunities may exist to overcome these barriers, and (3) which advocacy strategies may be most effective in increasing access to ECDEiE. To complement the surveys, the authors’ extensive literature review represents a mapping of the organizations working to support ECDEiE. Ponguta et al. examined “trends in the geographic focus, program models, and evidence of the implementation and impact of programs” in both published and gray literature. Their findings point to six focal areas that “drive strategic [ECDEiE] initiatives in national and global contexts: a greater focus on community needs and participation; systematization of evidence and strategic brokerage and communication; coherence between national and humanitarian aid agency mandates; a focus on workforce development and support; identification and promotion of ECDEiE as a priority area among key donors and funders; and capitalizing on and strengthening ECDEiE multisectoral partnerships” (p. 172). Like many of the findings reported in this issue, this review offers new resources for practitioners committed to gaining a better understanding of the global topography of ECD interventions, including the strengths, weaknesses, and remaining gaps.

The next article offers innovations in theory for what the author terms “smart radicals.” In “Learning to Become Smart Radicals: A Regenerative Lens on the Potential for Peace and Reconciliation through Youth and Education Systems,” Mieke T. A. Lopes Cardozo offers a new model that builds on her earlier efforts to understand youth and peacebuilding. In the midst of the ongoing media and policy focus on youth as a population that presents risks and initiates violence, and on recent responses that aim to mitigate this perception, such as the UN Global Study on Youth, Peace, and Security (Simpson 2018), Lopes Cardozo takes up the challenge of examining the potential of education to support peacebuilding among youth. She offers a new perspective as she explores how a regenerative approach can help the EiE field “rethink and reshape education to prepare younger generations to respond more effectively to peacebuilding and to the related ‘wicked challenges’” (p. 190). Lopes Cardozo builds on existing conceptual frameworks

(Novelli, Lopes Cardozo, and Smith 2017; Tomaševski 2005) to “encourage a deeper understanding of education’s transgressive potential to inspire alternative, reconciliatory paths toward peacebuilding” (p. 187). Readers likely will be struck by Lopes Cardozo’s provocative approach to these ideas. She elicits—even demands—the reader’s participation in her effort to “inspire the development of ‘smartly radical’ questions; to support research, policy, and practice design that is more critically informed and consciousness driven; and, finally, to support the transformative potential of education systems and stakeholders to serve younger generations more effectively and enable them to respond to ‘glocal’ challenges in ways that are mindful, conscious, and effective” (p. 187-88). This article represents a step toward the reform of knowledge creation and production that many scholars and practitioners are discussing today, and that *JEiE* supports.

Our research article section concludes with “Beyond Numbers: The Use and Usefulness of Data for Education in Emergencies” by Elizabeth Buckner, Daniel Shephard, and Anne Smiley. They note complexities within the EiE data ecosystem that many of our readers, including scholars, practitioners, and policymakers, have experienced firsthand. In this article, the authors seek to understand and systematically categorize “how EiE professionals use data and what makes data ‘useful’” (p. 214). To accomplish this aim, these scholars had to first clarify and understand the dimensions of the task. From extensive in-depth, qualitative interviews with 48 professionals who are working across humanitarian, development, and stabilization efforts, the authors identify “six primary ways EiE actors use data” (p. 235): planning, coordinating, monitoring, evaluating, advocating, and policymaking. Among their respondents, they find a bifurcation in the way national/local and international actors speak about and use data. Perhaps unsurprisingly, those working at a national or local level “spoke the most about operational uses of data and the least about strategic uses, such as policymaking and advocating” (p. 214). Actors with a global purview, often those working in the headquarters of international nongovernmental organizations, multilateral agencies, or UN agencies, spoke more frequently about “strengthening data systems and . . . strategic uses” for data (p. 214). Importantly, the authors identify and problematize the many “nontechnical factors that shaped participants’ perceptions” of data availability and usefulness, particularly the “politicization of data, users’ expertise in analysis, and personal and institutional relationships” (p. 214), issues that concern *JEiE* readers writ large. Recognizing the weight of these nontechnical factors, Buckner et al. argue that efforts to improve the data on EiE must not ignore challenges related to people, institutions, and contexts and instead acknowledge their centrality in supporting or obstructing access to information.

Our field notes section begins with Maryam Jillani’s description of “Community-Led Provision of Nonformal Education for Displaced Learners in Northern Nigeria.” Jillani explores a “community coalition model” designed by Creative Associates International and its partners to provide “provide nonformal education to out-of-school displaced children and youth in northern Nigeria” (p. 243). The available evidence demonstrating a clear cause-and-effect relationship between enhanced community involvement and improved education outcomes in crisis- and conflict-affected contexts is scant. However, anecdotal evidence from northern Nigeria indicates that “vertical cohesion”—for example, collaboration between state authorities and local communities—prompted investment in school infrastructure and the formalization of a nonformal education site, thus mandating that a formally trained teacher be employed at the site (p. 257). Descriptive data collected by Creative Associates International show how this community mobilization and capacity-building approach works. Jillani draws from the project’s monitoring and evaluation data to show that the program provides education access for more than 80,000 learners in this volatile region.

Our next field note, “Embedding Social and Emotional Learning in Literacy and Teacher Training in Afghanistan” by Susan Ayari, Agatha J. van Ginkel, Janet Shriberg, Benjamin Gauley, and Sarah Maniates, similarly describes key elements of an innovative EiE intervention, in this case a program that illustrates possibilities for supporting social and emotional learning (SEL) in literacy and teacher training. The authors seek to enhance understanding of the challenges of supporting SEL in EiE, with a particular focus on “embedding social and emotional skills into literacy learning in the early grades of primary school” (p. 262). The authors note the importance of examining a program like this in Afghanistan, where “many children and their teachers have been exposed repeatedly to adversity and highly stressful situations,” including, for example, attacks on schools (p. 262). Given the effects these experiences have on students’ and teachers’ learning and wellbeing, this article describes the benefits of approaching these challenges by embedding SEL in the “early grade literacy curriculum and teacher training in Afghanistan, and in education support systems and practices” (p. 262). Preliminary data suggest that this approach can have a promising effect on teachers and students. The authors call for further research to understand more fully the effects of embedding SEL practices in early grade reading materials, classrooms, and teacher training, in Afghanistan and beyond.

This issue also features an interview commentary, “Fishing in the Desert: Empowering Sustainable Development through Higher Education in Kakuma Refugee Camp,” in which Paul O’Keeffe interviews Dieu Merci Luundo, founder of Vijana Twaweza Youth Club (VTC). VTC won *Permaculture* magazine’s 2020 Youth in Permaculture Prize and the 2021 UN World Food Programme NextGen East African Innovator Programme competition. O’Keeffe and Luundo’s discussion highlights the role higher education played in enabling refugees to implement their own initiatives to support the needs of their communities. Luundo describes how higher education programming in Kakuma inspired both the development of VTC and the way the club works across communities within the camp—Congolese, South Sudanese, Somalis—“to provide better nutrition to Kakuma residents and to help combat some of the effects [of] climate change” (p 278).

Our book review section features two books that follow the journeys of refugees from conflict-affected settings in sub-Saharan Africa, to refugee camps, to a new life in the United States. Kelsey A. Dalrymple’s review of *Making Refuge: Somali Bantu Refugees and Lewiston, Maine*, by anthropologist Catherine Besteman, describes a seven-year ethnographic study that focused on the journey of Somali Bantu refugees, a marginalized ethnic group in Somalia. Education is a recurring theme as the refugees make their way to camps in Kenya, and eventually to resettlement in Lewiston, Maine. Dalrymple notes that the book demonstrates the central role schooling can play in shaping the past, present, and future of refugees’ personal and cultural identities, including integration and the discrimination they face in education contexts.

Finally, Elisabeth King reviews *Those We Throw Away Are Diamonds: A Refugee’s Search for Home* by Mondiant Dogon (with Jenna Krajeski). The book traces Dogon’s life, from his early childhood in the Democratic Republic of the Congo to two decades in refugee camps in Rwanda, and then to New York City, where he earned a master’s degree in international education. Here, too, education is central to the book—and to Dogon’s journey, as it provided a vital source of hope for the future. King emphasizes the power of Dogon’s story to challenge common misconceptions about displacement and refugees, and to remind us of the important work that the field of EiE still requires.

We are encouraged by the tremendous progress and innovative approaches to EiE that the articles in this issue, and in *JEiE* in general, represent. And yet, we are aware that there is much more work to be done. With the Taliban takeover in Afghanistan and their subsequent banning of secondary education for girls, the multiplying climate catastrophes, the rippling effects of the COVID-19 pandemic,

and Russia's recent invasion of Ukraine, we are in an era of global crises that involve interstate war, displacement, and learning losses unlike anything the world has seen since World War II. It is our ardent hope that the knowledge offered in these pages will inform future EiE response for the scores of learners whose lives and education are being disrupted by new and ongoing global crises, and that it will push the field forward toward more and better research and evidence-based policy, programming, and practice.

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WAR AND SCHOOLING IN SOUTH SUDAN, 2013-2016

AUGUSTINO TING MAYAI

ABSTRACT

South Sudan was embroiled in a civil war from mid-December 2013 to mid-September 2018. Nearly 400,000 people died, and several million were displaced. The economy nearly collapsed as the nation's output was severely reduced, causing inflation to soar. While prior research on the immediate humanitarian crisis in South Sudan has focused on forced displacement and food insecurity, there is little information available about the long-term impact the war had on human capital accumulation in this context. This analysis exploits spatial variation in exposure to violence to estimate the causal impact of the recent civil war on primary school enrollment as a proxy for measuring human capital accumulation. Results based on the difference-in-differences methodology indicate a statistically significant relationship between school enrollment and the war. The study shows that schools located in the South Sudanese war zones lost 85 children per year on average, or 18.5 percent of total enrollment. The diminishing trends in girls' enrollment are unrelated to the war, which is not surprising; social barriers, including gendered domestic roles, early marriage, and out-of-wedlock pregnancies, have long impeded female educational opportunities in South Sudan. These effects are robust to a number of specifications, including holding constant school-level fixed effects and adjusting for the standard errors. The article presents important policy implications for education and the labor market, both locally and internationally.

INTRODUCTION

In December 2013, a little more than two years after it gained independence from Sudan, a civil war broke out in South Sudan. The violence quickly elevated in intensity and area, threatening what little progress the country had made

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during a wobbly transition. The resultant humanitarian situation was considered catastrophic, with millions of people displaced and nearly half the new nation's population facing a severe food shortage (IPC 2017). The destruction of physical capital in recent years thwarted the fundamental development process in South Sudan, with basic services gravely affected (Mayai and Hammond 2014; Addison et al. 2015; Lai and Thyne 2007; Burde et al. 2017). This included institutions in the education sector, which struggled to perform their duties as learning facilities, became homes for armed groups, were destroyed, or closed down. This forced some 400,000 children in three states to drop out of school (Hodgkin and Thomas 2016; Lai and Thyne 2007).

The civil war also caused a drastic disruption of economic activity. Breckenridge (2014) estimated that South Sudan could lose up to US\$28 billion if the war continued for more than five years, mainly via a decline in oil production and trade. Indeed, in the course of the war, South Sudan's monthly revenue declined from hundreds of millions to just US\$20 million (Ministry of Finance and Planning 2017).

The war significantly threatened human capital investment in South Sudan and put future socioeconomic development at risk. Investment in education, training, and health care in South Sudan was always modest, but it was nearly crowded out by spending on defense and security during the war (Mayai and Hammond 2014; Poirier 2012), thereby weakening prospects for skills development and economic growth (Schultz 1980; Becker 1994; Barro 1999). These deficits in education and training have left postconflict South Sudan without the productive capacities it needs to manage its long-term development and economic aspirations. They also have important implications for human capital accumulation—essentially an investment in people—which is critical for development, due to its importance to labor output and the generation of economically stimulating ideas (Schultz 1960, 1980).

There has been marked interest, both locally and internationally, in understanding how to respond to South Sudan's tragic humanitarian crisis and the economic upheaval caused by the war, particularly the alarming food insecurity and far-reaching socioeconomic consequences (Mayai et al. 2017; IPC 2017). Research commissioned in response to the emergency has often focused largely on the adverse short-term effects of war-induced shocks, but this humanitarian-driven research agenda offers little insight into the long-term deficits in human capacity and skill development that South Sudan must now confront (Brown 2006). Another strand of research has focused mainly on the correlation between schooling and

political stability, citing in particular how certain education policies excite or perpetuate grievances (Burde et al. 2017). However, little is understood as yet about the extent to which South Sudan's civil war has impacted human capital accumulation, especially as it concerns the spatial (i.e., in the states) and gender distribution of such effects.

Fortunately, data from the Assessment Capacities Project (ACAPS) have helped fill this gap, as they retrospectively track primary school enrollment in South Sudan to a prewar time, when the new country was relatively stable. Using these data, supplemented with Armed Conflict Location Event Data (ACLED) on conflict intensity, we explore the nexus between primary school enrollment as a measure of human capital accumulation and the civil war in South Sudan. Our analysis addresses two main research questions: To what extent did South Sudan's civil war affect primary school enrollment? And is the outcome gender differentiated? Human capital accumulation in this case is measured as the average number of children enrolled annually in primary school. Primary school attainment is not often used as a predictor of socioeconomic outcomes, particularly income. However, primary education is an important point of departure into higher learning, which is associated with significant economic gain (Schultz 1988; Card 1994), thus, primary education in developing countries can have a sizable influence on earnings. Research shows, for example, that an additional year of primary education in such contexts accounts for a 10 percent rise in later wages (Klenow and Rodriguez-Clare 1997; Mincer 1974). Therefore, as an economic enabler, primary education is as significant in settings where literacy rates are relatively low as secondary or higher education is in more developed settings, making it an imperative human capital constituent. Similarly, we made the decision to examine primary school enrollment, rather than secondary school or higher education, because of the availability of new, more reliable data.

We assess two hypotheses pertaining to the war in South Sudan and its human capital consequences. First, we expect enrollment to decline in schools directly exposed to the recent war, most of which suffered infrastructural damage, the flight of staff, and a drastic reduction in instructional activities (Mayai and Hammond 2014; Addison et al. 2015; Lai and Thyne 2007; Burde et al. 2017). Second, we expect the war's impact on school enrollment to be more pronounced for male than female children (Burde et al. 2017; Kirk and Winthrop 2007; Lai and Thyne 2007).

There are decisive ways a war can undermine the education process (Akbulut-Yuksel 2009; León 2012). First, due to the threat of violence, schools in war zones are likely to be closed or destroyed (Guariso and Verpoorten 2013). Second,

parents are likely to pull their children out of a school in a threatened area and move them to a safer location, whether or not the new location has a school. Third, displaced people lose their income, which negatively affects their ability to pay for their children's education. That is, a substantial decline in enrollment is expected during a conflict, given the high level of forced displacement. Moreover, youth recruitment into armed forces is ubiquitous in such contexts (Wessells 2002; Lai and Thyne 2007), and prior studies indicate that male children are more likely than female children to be conscripted (Achvarina and Reich 2006; Lai and Thyne 2007). Using children as combatants increases the number of out-of-school children and clearly interferes with their schooling (León 2012; Wessells 2002; Guariso and Verpoorten 2013).

Our identification strategy relies on the following four assumptions. First, exposure to political violence varies by geography, represented in this study by individual states. Our model stratifies schools into locations (states) affected and not affected by conflict. Second, exploiting location-specific exposure to war permits use of the difference-in-differences (DD) approach to estimate an exogenous variation in enrollment between two groups of schools (1 if exposed to war, 0 if not). Third, South Sudan, being recently independent, is an instructive context for studying gender difference relative to the war's effect on school enrollment. Finally, South Sudan is undergoing a dramatic political transformation, making it a suitable context for studying the impact of political violence on human capital accumulation in the 21st century. Given this unique moment in the country's history, lessons from South Sudan could be used to promote the UN Sustainable Development Goals, which advocate for a substantial increase in the number of young adults with the skills and knowledge to meet the 21st century's economic demands (UN Economic and Social Council 2017).

With this study, we provide instructive insights into educational returns to political violence in South Sudan and complement the prevailing literature on education processes in emergencies (Talbot 2013). Given the interplay between education and conflict, analysis of education in emergency contexts is essential to determining the conditions most conducive to future socioeconomic development and political stability (Burde et al. 2017; Lloyd et al. 2010). Education is an equalizer on the socioeconomic development front, as it enables individuals to help build societies and improve their personal wellbeing (Haveman and Smeeding 2006), and it is critical to stability, as it influences the way societies deal with violence. Research shows an appreciable decline in violence in a given society as the number of educated people increases (Gillis 1994). This means that minimizing inequalities in education can reduce group-based grievances, ease resulting tensions, and

possibly engender a more stable state (Burde et al. 2017). Our analysis, therefore, presents empirical evidence to guide local and international policymaking on education processes in emergency situations, with a focus on the present and future socioeconomic challenges people in emergency contexts are likely to grapple with during an unstable time and after stability has been restored.

This work adds to existing research in three important ways. First, by using impact evaluation techniques to estimate the causal impact of war on schooling in South Sudan, this study contributes to a growing literature on education processes in emergencies. Second, this study is the first of its kind, in that it exploits school-level panel data to estimate the average treatment impact of war on primary school enrollment, specifically in South Sudan and more generally in East Africa. Lastly, the study assesses the causal impact of political violence on school enrollment in a context where prior research of this kind is scarce.

The present analysis shows that, although there has been a general surge in primary school enrollment in South Sudan since 2015, the war is associated with considerably reduced school enrollment in locations directly exposed to the conflict. From 2013 to 2016, the schools examined lost on average more than 80 children each, or 18.5 percent of total annual enrollment. With 70 percent of the former ten states directly affected, the overall long-term effect the war has had on schooling in South Sudan could be overwhelming.¹

Against this backdrop, the remainder of this study proceeds as follows: section two summarizes the history of the civil war in South Sudan; section three reviews the literature on the subject; section four presents materials and analytical strategies; section five presents our results, which are then discussed in section six.

LEGACIES OF CIVIL WAR IN SOUTH SUDAN

Having gained independence from Sudan in 2011, South Sudan is still in the process of forming a stable state. Its institutions have long been overshadowed by personalized politics, with political elites often mired in power squabbles. This infighting enabled the elites to overtly ignore the conventional instruments of governance, including the new nation's constitution, in running state affairs (Awolich and Akol 2013). The result has been protracted violent conflicts of varying magnitude throughout the country.

¹ In 2015, a presidential decree created 28 states out of the original 10; in February 2020, this decision was reversed, and the country returned to the previous 10 states.

In December 2013, a disagreement among leaders in the governing political party, the Sudan People's Liberation Movement (SPLM), sparked deadly violence in Juba, the nation's capital. Within a short time, the war had spread to at least four more states, with masses of people, both combatants and civilians, killed or forced to flee to internationally protected encampments (Checchi et al. 2018). Although the degree of destruction varied, basic infrastructure such as schools, government buildings, health-care facilities, and essential economic systems were severely damaged across the affected states. In the education sector alone, the conflict caused 70 percent of schools to close in the states of Jonglei, Upper Nile, and Unity, and as many as 400,000 children dropped out of school (Hodgkin and Thomas 2016). Traditional livelihoods in those states were also significantly disrupted.

The impact of the war on South Sudan's macro economy was also overwhelming. Oil production plummeted, foreign investors fled, and millions of citizens lost their basic livelihoods, ending up as refugees or as internally displaced persons (IDPs). This widespread insecurity resulted in low economic activity, even at the subsistence level. The price of goods skyrocketed, but wages were not adjusted accordingly; as a result, the number of people living below the poverty line increased while purchasing power declined (Reng and Mayai 2016; Shimeles and Verdier-Chouchane 2016). As of late 2017, the country's overall consumer price index stood at 272 percent, 267 percent for food alone (NBS 2017), and the World Bank projected that South Sudan's 2017 real gross domestic product would shrink by 10.5 percent. The high inflation was due chiefly to shocks in the commodity market caused by the war. The conflict also constrained South Sudan's trade with neighboring states, particularly Uganda (Mayer and Thoenig 2016), which proved tragic for a country that depends on imports for essentially all consumable goods and services.

As oil production fell, South Sudan turned to its meager foreign reserves and depleted them through spending on defense and security, meanwhile sparing only limited funds for food, medical needs, and energy imports. Moreover, South Sudan no longer receives development aid, which has compounded the country's fiscal burden, and it is now struggling to raise sufficient revenue to meet its fiscal obligations, especially for basic services.

After the civil war broke out in 2013, two million South Sudanese became internally displaced, 1.9 million sought refuge in neighboring countries, and, as of 2017, an estimated 5.5 million people were facing critical food shortages. In 2017, the United Nations declared a state of famine in parts of the Upper Nile region. Hundreds of thousands of citizens in the northern territory of South

Sudan are thought to have migrated to Sudan in the last few years in search of security and better economic prospects.

A political settlement—the Agreement on the Resolution of the Conflict in the Republic of South Sudan—was signed between the SPLM-In Government (SPLM-IG) and SPLM-In Opposition (SPLM-IO) in August 2015 in Addis Ababa. This established the Transitional Government of National Unity, a government made up mostly of members of the two parties. Although implementation of this agreement commenced in April 2016, the lack of political capital and trust between parties caused it to fail. Deadly events ensued, as many had predicted, including shootouts at the state house in Juba. Riek Machar, a principal signatory to the agreement who represented the SPLM-IO, was driven from Juba and pursued into the Democratic Republic of the Congo by the SPLM-IG security loyalists. The SPLM-IO subsequently split into factions. Gen. Taban Deng Gai, Machar's former chief negotiator, replaced him as the SPLM-IO's lead implementer of the agreement in the Transitional Government. These events reignited the violence countrywide and essentially put the Transitional Government in a coma. The new round of war inflicted humanitarian and economic damage on the civil population. The Intergovernmental Authority on Development, the regional economic and security bloc, attempted to revitalize the Agreement on the Resolution of the Conflict in South Sudan, but there was general skepticism about its ability to restore peace in the Republic of South Sudan. The Government and SPLM-IO eventually signed the Revitalized Agreement for the Resolution of the Conflict in the Republic of South Sudan in September 2018, which is currently being implemented.

The war-engineered shocks to the economy and the population have had adverse consequences for South Sudan's current and future economic outcomes. This has been especially disturbing for a country whose average spending on education before the war was a mere 5.8 percent of the annual budget (Mayai 2015). This paltry investment in education reflects the low priority the country's leaders place on this essential constituent of economic development. In 2008, the number of citizens in South Sudan with a basic education was the lowest in the world, estimated at just 27 percent. The war exacerbated this appalling situation, posing the risk of both short- and long-term underdevelopment. These negative effects of the war on human capital accumulation are concerning, particularly in one of the least developed countries in modern history. Now that the war has ended, improved understanding of this experience will hopefully allow for informed, resilient policymaking.

HUMAN CAPITAL AND POLITICAL VIOLENCE

There is ample, if mixed, evidence on the economic costs of political violence. Numerous studies have found that political instability significantly reduces economic growth, as measured by the annual rate of change in gross domestic product (Abadie and Gardeazabal 2003; Alesina et al. 1996; Lai and Thyne 2007; Shields and Paulson 2015). Addison et al. (2015) found further that political violence threatens both human and social capital and weakens institutions. While examining changes in global education spending and enrollment over an 18-year period (1980-1997), Lai and Thyne (2007) found that political instability reduces the amount of resources put into education and undermines a state's ability to perform its basic functions, such as providing services. Looking at the relationship between conflict and schooling in sub-Saharan Africa, Poirier (2012) found that increasing schooling expenditures by 1 percent of the gross domestic product boosts enrollment and completion rates, and that an increase in military spending, which often occurs in conflict settings, reduces schooling in terms of the level attained.

Weldeegzie (2017) examined the impact of the Ethiopian-Eritrean war on a range of childhood outcomes, including schooling. He found that children exposed to war are likely to drop out of school, struggle with reading, and have relatively low overall educational attainment (Omoeva, Hatch, and Moussa 2016). León (2012) reported on the long-term effects political instability has had on educational attainment in Peru, where children exposed to war lost an average of 0.31 years of schooling as adults. Akresh and De Walque (2008) examined the effects the 1994 Rwandan genocide had on schooling, finding that exposure to war reduced children's education by half a year. Akbulut-Yuksel (2009), who assessed the impact of World War II on educational attainment in Germany, found that children exposed to the war lost an average of 0.4 years of schooling as adults; those who lived in the hardest hit locations lost an average of 1.2 years of schooling. Akbulut-Yuksel also found that children who were exposed to war earned 6 percent less as adults than their peers who were not. In their analysis of the intergenerational effects of political violence, Akresh et al. (2017) found that individuals exposed to the Nigerian Civil War showed lower educational achievement. Finally, according to Guariso and Verpoorten (2013), Rwandan children exposed to war had an 18.5 percent average reduction in total years of schooling.

The long-term effects of political violence on educational attainment varies by gender (Buvinić, Das Gupta, and Shemyakina 2013; Chamarbagwala and Morán 2011). While it generally reduces the amount of schooling all children receive, it

has a different effect on boys than on girls (Burde et al. 2017; Diwakar 2015). In a study of the short- and long-term effects of violence on education in Timor Leste, Justino, Leóne, and Salardi (2014) found that the decline in human capital due to war was more pronounced among boys than girls. There are two presumable explanations for this difference. First, using male children as combatants is common in developing countries (Achvarina and Reich 2006), and Lai and Thyne (2007) found that boys' education suffers more than girls' during a civil war because boys are more likely to be conscripted. However, Kirk and Winthrop (2007) studied gender differences in schooling in Afghanistan, finding that the distance from home to school affects attendance for girls more than boys. They found similarly that, due to mistrust, parents are less likely to send their daughters to schools where the teaching staff is predominately men or outsiders. Attitudes and cultural constructs also tend to favor schooling for boys more than for girls (Kirk and Winthrop 2007; Burde et al. 2017). Østby, Urdal, and Rudolfson (2016) noted that, as the quality of schooling declines as a result of war, girls' enrollment declines significantly. Finally, the economic shocks of political violence are likely to alter boys' role in the family, with some becoming the main providers (Buvinić et al. 2013).

These studies provide some understanding of the impact political instability can have on human capital development. However, the question remains of how this impact translates into socioeconomic development outcomes at both the macro and micro level. Most economists agree that economic growth is positively and strongly associated with average years of schooling (Barro 1999) and that, by adopting up-to-date technologies, human capital development can accelerate economic growth (Barro 2001; Heckman and Carneiro 2003). Accordingly, a substantial reduction in schooling weakens a population's opportunity to adopt new technologies. In developing countries, the more years of education a person has, the higher their eventual income: one additional year of primary education increases an individual adult's wages by 10 percent (Klenow and Rodriguez-Clare 1997; Mincer 1974). Conversely, as human capital declines due to conflict or related factors, so does average personal income. Perhaps most worrisome is that the negative consequences of war are often transmitted intergenerationally, which can impede the economic progress of future generations and even perpetuate political instability (Akresh et al. 2017; Bricker and Foley 2013; Cervantes-Duarte and Fernández-Cano 2016).

DATA AND METHODS

Although prior research helps to explain the impact of political violence on individual and national socioeconomic outcomes, it does not provide evidence of outcomes at the institutional level, such as a school. This study fills the gap by exploiting space variation in exposure to violence and estimating the impact the South Sudanese civil war had on primary school enrollment as a measure of human capital accumulation. We accomplished this objective by using the sampled schools as the primary units of analysis, with enrollment measured as the average number of children enrolled in each school between 2013 and 2016. The study covers the first four years of a civil war that ended in 2018.

DESCRIPTION OF DATA

The study used two secondary data sources, ACAPS and ACLED. ACAPS covers school enrollment and background, while the ACLED dataset documents conflict intensity over time and across the ten states. Each dataset is further detailed below.

THE ACAPS DATASET

Late in 2016, ACAPS, with support from UNICEF South Sudan, surveyed 393 schools in South Sudan out of an initial sample of 400. The study was an institutional analysis focused on primary schools nationwide that covered functional and nonfunctional schools. The sample included both public (i.e., community and government run) and private primary schools. The survey was designed to educate policymakers about developing humanitarian interventions that would make primary education safe and sustainable, even as the war prevailed. The ACAPS data were used to assess how political instability and its proximate consequences, such as population displacement and macroeconomic shocks, influenced children's education in South Sudan. The dataset came from a pool of randomly selected schools clustered in some of the country's three regions and ten states; enrollment information was generated retrospectively, especially for the 2013-2015 period.

The sampling strategy adopted was as follows. The study commenced with key informant interviews the study team conducted with education officials at the county level to inform a structured survey. The survey was preceded by team visits to some schools, the list of which was reconciled with Education Management Information System (EMIS) records. A nationally representative sample of four hundred schools was then randomly drawn from the more than five thousand

primary schools found in the EMIS database, a 7.3 percent representation. To draw this sample, the study team used a multistage clustering/stratification strategy. The first stage comprised South Sudan's three regions: Equatoria, Bahr el Ghazal, and Upper Nile. The second stage involved urban and rural areas. Twenty counties were selected at the regional level; this meant that at least 30 percent of the sample or two of the twenty counties were allocated to the urban segment of each region. The rest of the counties were chosen from rural settings and allocated in accordance with the total number of rural counties each region contains. The sample targeted schools were listed in the 2013-2015 EMIS database. This restriction induced a downward bias in enrollment, as it excluded schools that opened after this period.

Owing to widespread insecurity, some schools could not be reached. When this occurred, the data-collection team's strategy was to randomly select a school from the list, which was stratified by region and county, to replace the inaccessible schools. In total, 105 schools (26% of the sample) were replaced, with the final dataset adjusted for representativeness. Altogether, the team surveyed 393 primary schools out of the initial sample of 400, a response rate of more than 98 percent.

Key information was gathered about each school's basic infrastructure and ownership, and whether it was functioning or closed. The survey also documented each school's establishment date, the primary reason for closing (if no longer operational), and any institutional or governance support a school was receiving from partners, which were mostly international, such as the UK Department for International Development's Girl Child Education Fund. Finally, the survey recorded information on enrollment at the start of each school year, the number of children who dropped out of school each year, the number of internally displaced and refugee children attending the school, the main reasons children dropped out of school, children's exposure to violent attack or school occupation by armed groups, and size of the teaching staff, measured as the number of teachers available at the start of the most recent school year.

Table 1 details the sample under analysis. The sample size is presented as school years ($N=393 * 4=1,572$).² As noted, one principal objective of the ACAPS survey was to document how the civil war influenced primary education processes in South Sudan by looking at several indicators. Panel A shows school functionality

² Each school contributed four years of enrollment data. Taken together, the analysis used a total of 1,572 school years.

and its key determinants, with conflict featuring prominently. More than 76 percent of the 393 sampled schools were operating during the data collection. A vast majority of the schools no longer operating had been disrupted by the war; indeed, nearly 63 percent had closed primarily due to political instability.

Panels B and C present information on school ownership and infrastructure. These variables are included in the analysis as correlates of functionality and enrollment. The present analysis indicates that community and government schools had higher rates of closure (37% and 23%, respectively) than private schools (15%); however, government schools constituted the majority, 65.8 percent, community schools 11 percent, and privately owned 23 percent. Infrastructure also played a statistically significant role in school functionality. Schools operating in permanent and semipermanent structures were two to five times more likely to be functional than schools operating in the open air or in mobile structures; they were distributed nearly evenly across categories (permanent structures 37.6%, semipermanent 38%, open air 23.4%; see Panel C).

The size of the teaching staff and the number of internally displaced and refugee children at a school are important factors in understanding enrollment. The average sampled school had 9 teachers, with 23.4 IDPs and refugee children enrolled annually (see Panel D). A unit increase in either variable is positively associated with changes in enrollment; all else held constant, the positive relationship between enrollment and the size of the teaching staff remains. Although this might signify reverse causality more generally, there is little cause to believe this is the case in the South Sudanese context. In fact, a recent review of school enrollment nationwide showed faculty size falling as the rate of enrollment increased. This result calls for increased investment in recruiting and retaining teachers.

Panels E, F, and G summarize enrollment. For the period under investigation, primary school enrollment averaged 464.5 children annually, nearly 267 boys and 196 girls. The average school enrolled 460 children in 2013 and about 466 in 2016. Schools not directly exposed to political instability on average enrolled 500 students a year, compared to an average of 460 for schools in conflict zones. During this period, 35.3 out of 100 boys dropped out of school each year, as did 31 out of 100 girls. Panel G shows that 28.7 percent of the boys dropped out because of the war, whereas 22.9 percent of girls did so. Overall, political instability was the reason for 25.8 percent of dropouts from 2013 to 2016.

Table 1: Sample Characteristics

Variable	Mean	N
<i>Panel A: Functional</i>		
Yes	76.79	1204
No	23.21	364
Primary reason for not functioning		
Conflict related	62.64	228
Other reasons	37.4	136
<i>Panel B: Ownership</i>		
Community	10.97	172
Government	65.82	1032
Private	23.21	364
<i>Panel C: Infrastructure</i>		
Open air	24.35	376
Permanent	37.56	580
Semipermanent	38.08	588
<i>Panel D: Teachers, IDPs, and refugees present</i>		
Number of teachers	9.01	1196
Number of IDPs and refugees	23.43	1568
<i>Panel E: Enrollment</i>		
Total	464.47	963
Boys	266.85	951
Boys [2013]	267.79	200
Boys [2016]	300.16	294
Girls	195.95	952
Girls [2013]	183.60	197
Girls [2016]	228.97	297
Not exposed to war	495.06	175
Exposed to war	457.68	788
2013	459.91	199
2016	465.66	764
<i>Panel F: Dropout rates</i>		
Boys	35.29	1056
Girls	31.02	1044
<i>Panel G: Reasons for dropping out, by gender</i>		
Boys		
Conflict related	28.74	300
Others	71.26	744

WAR AND SCHOOLING IN SOUTH SUDAN

Variable	Mean	N
Girls		
Conflict related	22.88	248
Others	77.12	836

Note: Mean represents proportions and averages; N represents number of school years. Author's calculations based on 2016 ACAPS data.

Tables 2A and 2B summarize unadjusted changes in enrollment over the same four-year period. Both tables exploit spatial discontinuity in exposure to the conflict to estimate the average enrollment using the DD framework. The “before” estimates refer to 2013 (peacetime), whereas the “after” estimates refer to 2016 (wartime). Notably, the war had a substantial effect on early education in South Sudan. Although enrollment generally declined in schools in the conflict zones, girls’ average registration increased by about 11 students per year. According to the pooled sample, each school in a war zone enrolled six fewer children a year on average, or roughly ten boys per school. However, by treating schools not exposed to war as counterfactuals, average enrollment for schools in war zones decreased by nearly 65 children annually (see Table 2A). Table 3 demonstrates further that the impact of war on schooling is greater for boys than for girls, as average enrollment for boys declined over the years by 48, and by only 22 for girls.

Table 2A: Summary Statistics for Enrollment by Treatment

	Not exposed to war			Exposed to war			DD
	Before	After	Diff.	Before	After	Diff.	
Enrollment	450.0	508.8	58.8	462.5	456.5	-6.0	-64.7
	[N=41]	[N=134]		[N=158]	[N=630]		

Note: Average enrollment rates and differences are across periods and groups, a final difference between the two groups; sample size (N) in brackets. Author's calculations based on ACAPS data.

Table 2B: Summary Statistics for Enrollment by Sex and Treatment

Sex	Not exposed to war			Exposed to war			DD
	Before	After	Diff.	Before	After	Diff.	
Boys	278.9	317.6	38.7	265.0	255.5	-9.5	-48.2
	[N=40]	[N=134]		[N=160]	[N=617]		
Girls	158.1	191.3	33.2	190.1	200.9	10.8	-22.4
	[N=40]	[N=134]		[N=157]	[N=621]		

Note: Average enrollment rates and differences are across periods and groups, a final difference between the two groups; sample size (N) in brackets. Author's calculations based on ACAPS data.

DATA ON ARMED CONFLICT EVENTS

Tables 3A and 3B summarize conflict intensity by treatment region over time using the ACLED dataset. This dataset details violent events, including date, actor, nature of violence, location, and deaths associated with these events. The ACLED data are matched with school-level data by using state and time period as identifiers. Analysis of the combined dataset helps assess the robustness of the regression estimates offered in Table 5.

Table 3A: Conflict Intensity by Treatment

Year	Not exposed to war		Exposed to war	
	Mean	SD	Mean	SD
2013	13.00	1.62	54.92	37.72
2014	25.71	7.35	133.15	75.40
2015	27.26	7.06	109.58	46.51
2016	49.97	29.25	151.82	99.92
N	248		1,320	

Note: Mean represents average conflict events and SD stands for standard deviation.

Table 3B: Conflict-Related Fatalities by Treatment

Year	Not exposed to war		Exposed to war	
	Mean	SD	Mean	SD
2013	90.29	67.38	871.24	872.38
2014	165.94	148.17	761.07	709.98
2015	112.74	80.80	445.10	342.21
2016	178.45	154.18	572.52	410.26
N	248		1,320	

Note: Mean represents average conflict events and SD stands for standard deviation.

As Tables 3A and 3B illuminate, South Sudan's human security became more fragile over time and was increasingly threatened by the country's rapidly changing political climate. Before 2013, sporadic yet relatively small-scale communal conflicts had occurred; the situation worsened with the outbreak of the civil war in December 2013. The number of these conflicts rose more than fourfold between 2013 and 2016, confirming the country's deteriorating security situation during the war.

The regions of South Sudan not directly affected by the war (i.e., northern Bahr el Ghazal, Warrap, Eastern Equatoria) averaged 13 conflict events in 2013; the number of events in these regions rose significantly in 2016, indicating the neighborhood effect of instability. In the regions directly affected by the war (i.e., western Bahr el Ghazal, Unity, Central Equatoria, Western Equatoria, Jonglei, Lakes, and Upper Nile), the average number of conflict events nearly tripled, from 54.9 in 2013 to 151.8 in 2016. Notably, the warring zones already had a more volatile security environment before the outbreak of war than their unaffected counterparts, which undoubtedly signaled the spatial (i.e., state) heterogeneity in localized violence. This spatial heterogeneity at the baseline does not seem to drive differential effects on schooling, as our parallel assumption assessment results indicate. Moreover, besides violence-inducing local grievances, most states within the Greater Upper Nile and Equatoria regions suffered major bouts of politically aggravated insecurity. During the period assessed (2013-2016), the politically volatile states experienced an average of 112.37 conflicts, while the less volatile states experienced only 28.98.

The average number of fatalities during the war in South Sudan fluctuated over time, as shown in Table 3B, and did not seem to depend on how many conflict events a region endured. Nationally, each conflict event resulted in 7 deaths per 100 population. Presenting this based on exposure to conflict, a single conflict accounted for 11 deaths per 100 population in nonconflict regions, and 6 deaths per 100 civilians in conflict regions. Because these findings indicate that the frequency of conflict events generally evokes fear, the ensuing number of fatalities is likely to depend on the destructive nature of such events.

Connecting these results to education processes demonstrates that conflict is intimately associated with school closure. Two years, 2014 and 2016, experienced more conflict events than 2015, when the first peace agreement was signed. This is consistent with our estimates presented in Table 5, which point to a greater than 15 percent reduction in school enrollment in 2014 alone; more than 62 percent of the schools not functioning in 2016 had closed due to the conflict.

DESCRIPTION OF CONTROL VARIABLES

Although the principal emphasis of this analysis is to complement existing knowledge on the adverse effects political instability has on the socioeconomic outcomes of individuals and societies, recognizing the role of other factors is imperative (Connelly and Zheng 2003; Tansel 2002). Deolalikar (1997), for example, highlighted the significance of infrastructure and other community-level constraints on school enrollment. In this study, we consider school-level or background factors, such as the

size of the teaching staff, school infrastructure, ownership as a proxy for investment (i.e., spending on school), population shifts due to conflict or environmental shocks or both, fixed effects, and secular conditions. To ensure that the causal link between enrollment and war was adequately isolated, we conducted a series of robustness checks before estimating the final empirical model. We specifically assessed the roles the size of the teaching staff, infrastructure, and school ownership play in enrollment, as these variables significantly relate to a school's functionality. The number of IDP and refugee children attending a school also factors into overall enrollment, but changes in enrollment can be a function of other invariant, unobserved conditions, which our analysis captures by using period and omitted fixed effects.

Without controlling for other variables, violence appears to be insignificantly related to enrollment, save for the boys' subsample. Still, when other variables are not controlled for, the effect of political violence on enrollment in the boys' sample is attenuated by 35 percent; however, the statistical relationship still holds at a less than 1 percent confidence level. This result indicates that controlling for other factors does not necessarily matter—war continues to play a fundamental role in the educational attainment of male children. This suggests the relative vulnerability of male children in situations of political instability.

The war caused extensive social and economic troubles in South Sudan that have drastically reduced national and personal incomes, thus a number of measurement concerns are worth noting. The fear of violent attacks and substantial cuts in economic resources likely forced parents to pull their children out of school. However, our sample has no information on the economic determinants of enrollment, which challenges any attempt to accurately estimate the impact of war on enrollment, as children not directly exposed to conflict could still drop out of school due to war-related economic consequences (e.g., a marked drop in household or family earnings). In other words, the influence of a rapidly deteriorating economy on household-level enrollment decisions cannot be ruled out. In addition, schools that closed because of the war are not included in the sample. If these schools stopped operating due to political insecurity, then the impact of war on enrollment is undoubtedly underestimated in this study. Finally, our analysis does not study whether students are generally gaining the skills or knowledge necessary to become productive members of society (Steer et al. 2014).

IDENTIFICATION STRATEGY

As noted elsewhere, the South Sudanese civil war erupted in Juba in mid-December 2013 and spread quickly, especially to the Upper Nile region. Over the next five years, the war directly affected seven of the country's ten former states, which induced widespread economic and physical insecurity among the population. These seven states include Western Bahr el Ghazal, Unity, Central Equatoria, Western Equatoria, Jonglei, Lakes, and Upper Nile. Lakes and Jonglei also suffered communal violence for nearly a decade, which was equally disruptive. The present analysis uses this spatial distribution of violence as the basis for its identification strategy.

First, it should be noted that geography matters. A school's location determines its exposure to the conflict. As such, primary schools situated in the seven states directly affected by the war constitute the treatment group. Those located in the other three states represent the control group. In other words, the current analysis stratifies the sampled schools into locations exposed and not exposed to political conflict. A school located in a war zone is represented by 1, otherwise 0. Exploiting geography to determine exposure to war engenders the use of a DD approach to estimate the exogenous variation between enrollment and war.

The DD methodology is particularly valuable in netting out time-invariant group differences. An additional strength of this estimation strategy is the assumption of no difference between the two groups prior to the introduction of a policy or occurrence of an event. In Table 4, we evaluate the hypothesis that the two groups of schools did not differ at baseline (i.e., 2013). This is performed by interacting two variables: period (year) and treatment (exposure to war). Enrollment—the dependent variable—is then evaluated as a function of an interaction term. Whether the difference between these groups truly exists is established if the interaction term that involves 2013 (prewar) and the war exposure is statistically significant. Evaluating such a spatial difference in enrollment is restricted to 2013, due to the lack of sufficient quality data for prior periods. As the results show, there is no evidence to suggest that the two groups differed before the outbreak of civil war. A t-test at baseline confirms the same story. Based on this evidence, no time-varying differences are observed between the two groups of schools. Therefore, any parallel trends observed following the outbreak of the conflict can be attributed to the conflict itself (see Figures 1, 2, and 3).

Table 4: Parallel Trends Assumption Test

Variable	(1) Full sample	(2) Boys	(3) Girls
Exposed to war	-27.61 (53.39)	-47.98 (34.58)	24.71 (27.74)
2016*War (base)	-	-	-
2013*War	40.00 (79.12)	34.12 (51.43)	7.29 (41.33)
2014*War	-66.91 (78.08)	-43.05 (50.57)	-30.06 (40.59)
2015*War	-35.36 (76.45)	-15.64 (49.53)	-28.41 (39.74)
Observations	963	951	952

Note: Standard errors in parentheses.

* p<0.1

Figure 1: Enrollment Trends, South Sudan, 2013-2016

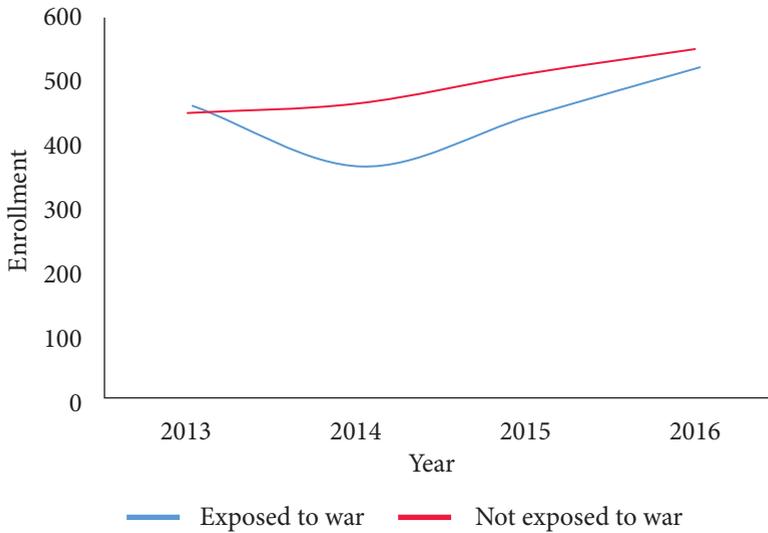


Figure 2: Enrollment Trends for Boys, 2013-2016

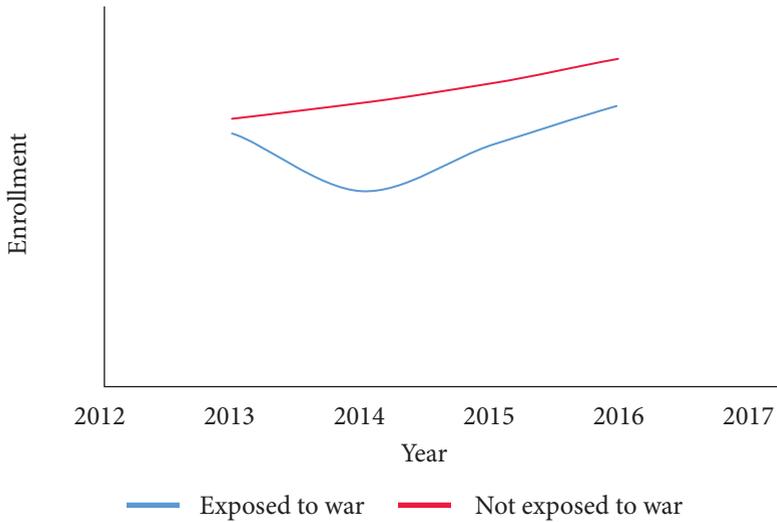
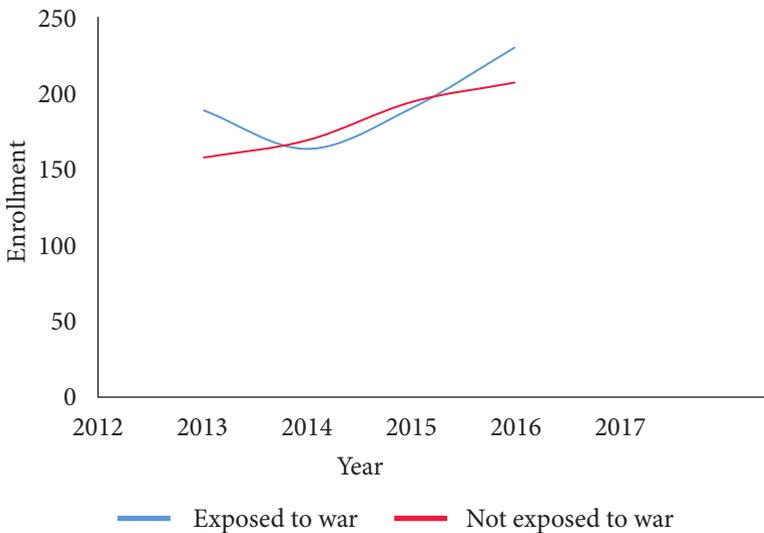


Figure 3: Enrollment Trends for Girls, 2013-2016



Similarly, using the ACLED data, we test how school enrollment responds to conflict intensity, measured as the number of conflict events and associated fatalities at a particular location over time. Although the relationship is not statistically significant, we find a negative association between conflict and enrollment, with each unit of conflict events reducing enrollment by 0.20 for the entire sample, 0.15 for boys, and 0.02 for girls. Finally, a unit increase in

fatalities results in a reduction of 0.03 for the overall sample, 0.02 for boys, and 0.01 for girls (see appendix for these results, Tables A1 and A2).

Let E be a continuous measure of schooling or enrollment for school i , and δ the average causal impact of violence on schooling. Let us then evaluate the impact (δ) of war on such a measure using the linear, difference-in-differences equation below. This is an ordinary least squares procedure with enrollment specified as a linear function of war, net of background characteristics and school-level and period fixed effects. The fixed effects component accounts for both measured and omitted invariant variables, and accounting for these variables results in more reliable estimates. We estimate the models by first constructing a dummy variable representing two groups of schools, denoted by D . D equals 1 if the school is located in a state directly exposed to the war, otherwise 0. The average causal effect of war on schooling then becomes

$$\delta = \frac{1}{n} \sum_{i=1}^n [E_{it}|D = 1 - E_{it}|D = 0],$$

with the \sum sign representing the summation of enrollment over the entire sample for the duration of the conflict this analysis is evaluating. Transforming this equation into a linear regression model that nets out the influence of other factors produces

$$E_{ist} = \alpha_i + \beta(X_{is}) + \delta(\text{War exposure}) + \gamma_t + \varepsilon_t,$$

where X represents a set of background variables that do not vary over time but whose values vary across schools. War exposure is an indicator of whether the school is located in a state affected by war (treatment status), and year represents the periods over which the enrollment is being investigated. Because the DD methodology allows individual sample points to act as their own controls, α denotes the school-level fixed effects (Allison 2009). β represents the coefficients of background variables, and δ is the causal impact of war on enrollment, which is represented by E , as noted above. The δ is considered to be additive and constant (Angrist and Pischke 2009), γ estimates the year fixed effects, and ε accounts for random disturbances or unobserved characteristics of individual schools (Imbens and Woolridge 2009). Enrollment is not only a continuous measure of time dimension; it also varies across schools and is measured as the number of children enrolled in a school at the beginning of each school year. Thus, holding other factors constant, including time-invariant omitted variables, the impact of

war on enrollment is estimated for school i in state s at time t , respectively. Using 2013 as the base period, average enrollment is estimated for 2016, the last period.

Background variables include school infrastructure, ownership, size of the faculty, and the presence of IDP and refugee children. Infrastructure is defined as open air, permanent, and semipermanent. School ownership is defined as community, government, and private. Faculty size is defined as the average number of teaching staff available at the start of a school year. IDPs and refugees are defined as the number of IDP and refugee children attending the school during the school year. The information on faculty size and the number of IDPs and refugees is for the most recent period and, as such, the impact of those variables on enrollment is assumed to be constant over time.

The National Bureau of Statistics of South Sudan uses neighborhood-based census tracts (clusters) to generate data for population-based studies. The ten states make up some of the clusters the bureau has defined and used to generate spatially representative samples. The present sample was drawn using these state-distributed tracts. To adjust for standard errors, we take into account the clustering effects by treating individual states as independent groups in which schools are located. Although the clusters are considered independent, schools within them are likely to have similar experiences; this leads to local dependence that could influence the statistical tests of significance.

Lastly, we note some methodological flaws. This work does not take into account the household determinants of enrollment, as the necessary data are absent. Therefore, we are unable to isolate the impact of war from other essential factors in determining enrollment. For example, an economic downturn associated with political instability is likely to have a bearing on a household's decision to continue educating the children, especially the boys (Justino et al. 2014). Late payment of civil servants' salaries also was exacerbated by the war; those serving in the police and education sectors waited as long as eight months to be paid (Mayai et al. 2017). This situation certainly impacts these households' ability to keep their children in school, and since the current analysis is at the individual school level, students' fixed effects could not be measured. Moreover, the communal conflicts that permeated most of South Sudanese society would likely have effects on education processes and general stability comparable to a national conflict. Lack of relevant data on communal conflict hinders our ability to discriminate between the impact of communal violence and violence that is politically motivated. Inaccessible schools are not included in the sample, resulting in additional bias. Finally, enrollment statistics are not a strong measure of school

quality, so even if their school remains operational, children in conflict-affected areas are likely to receive poor quality instruction. The best teachers often seek jobs in a conflict-free area, and students who appear on a school roster may not attend classes regularly, due to a lack of security.

RESULTS

In this section, we estimate the impact of political violence on primary school enrollment. The treatment effect of the war on schooling is presented using three separate models: full sample, boys, and girls. This stratification is necessary, as there is a proven gender dimension to the influence of war on socioeconomic outcomes, particularly in education. We use the full sample to estimate the universal causal impact of war on schooling, producing results that are ideally generalizable at the population level. This is in accordance with the assumption that the effects of war are often far reaching. Gender-stratified evidence is desired, as it could be used to support targeted policies. South Sudan National Gender Policy (sec. 3.2) advances the importance of education in the empowerment of both men and women for sustainable socioeconomic development (MGCSW 2012). Table 5 reveals instructive results, net of school background characteristics, individual fixed effects, and period fixed effects. It shows that primary schools exposed to the war suffered a substantial decline in enrollment. The impact is particularly pronounced for male children. These results reflect the direction of our key hypotheses: that we expect school enrollment to decline in locations directly exposed to war, and that this impact is more pronounced for male than female children, due to the gendered political economy of war (i.e., boys are often conscripted) and sociocultural factors (i.e., there is less focus on educating girls than boys). While some universal aspects of the influence of war are generally expected, the education of young boys suffers more, for reasons previously discussed.

The effect on enrollment at schools caught in the war is especially notable and statistically significant for the first two models. For the full sample, we find that schools exposed to war lost 85 children on average per annum. Considering that the threat of war was constant during the four years of our study, the overall impact amounted to a loss of 340 children per school (73.9% of enrollment) during the conflict window, which is a vast proportion of the average enrollment.

Table 5: Primary School Enrollment and Political Violence

Predictor variable	(1) Full sample	(2) Boys	(3) Girls
Exposed to violence	-85.18* (40.96)	-80.53*** (21.23)	-8.83 (27.80)
School ownership [ref=community]			
Government	92.73*** (23.36)	63.79*** (13.43)	24.89 (20.57)
Private	-24.31 (13.56)	-17.65 (14.76)	-1.46 (19.26)
Infrastructure [ref=open air]			
Permanent	84.70** (33.24)	55.34** (22.43)	35.72* (17.53)
Semipermanent	41.52 (26.70)	29.72* (16.11)	16.15 (15.04)
Number of teachers	27.38*** (1.28)	10.41*** (2.68)	14.93*** (1.42)
Number of IDPs and refugees	1.21***	1.05***	0.23
Year [ref=2013]			
2014	-72.26 (62.79)	-47.90 (38.29)	-20.23 (26.52)
2015	0.85 (59.61)	-3.48 (37.14)	9.68 (24.66)
2016	72.82 (48.32)	37.74 (28.33)	46.82 (26.71)
Observations	945	933	934

Note: Robust standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

There is a statistically significant relationship between the number of boys who dropped out of primary school and those who experienced war. For our sample, the average enrollment per year decreased by 80.5 boys, or 30 percent of total enrollment. For girls the impact was rather modest, a decrease of 8.8 per year, and was insignificantly related to war at all conventional significance levels. There are several possible reasons for this gender disparity. One is that boys are often conscripted into the army (Lai and Thyne 2007), and child soldiering affects the vast majority of young boys in South Sudan (Fegley 2008). Second, boys are often sent to safe locations, both for safety and educational opportunities. Lai and Thyne (2007) described the experience of the Sudanese “Lost Boys,” the more than 20,000 orphaned or displaced youth who were sent to various East

African countries to get an education. Since the start of the conflict in South Sudan, at least one-third of the population has been displaced, a vast majority of them children and women (IPC 2017). Most refugee and IDP encampments offer educational opportunities these days. This is great news for South Sudan, as it helps to minimize their lost opportunities.

Traditional norms dictate that girls in South Sudan are rarely exploited for waging war. Girls are among the members of society considered most vulnerable, along with adult females, young children, and the elderly. Owing to the cultural expectation that these vulnerable members of the community should be protected from violence, girls are often relocated to safe places where they can continue their schooling. However, girls' enrollment in South Sudan schools is lower than boys', and where enrollment is low in general (i.e., for girls and boys), the war's impact on schooling is usually negligible (Shields and Paulson 2015). Distance between home and school also plays an important role in girls' and boys' attendance. In Afghanistan, for example, the distance to school influences girls' attendance more than it does boys' (Kirk and Winthrop 2007). Kirk and Winthrop (2007) note that sociocultural factors, such as early marriage and domestic obligations and being relegated to doing housekeeping and child care, play a role in young girls' school attendance, which stymies their educational progress.

DISCUSSION

This analysis explores the role the civil war in South Sudan has played in primary school enrollment as a measure of human capital accumulation. The civil war in the world's newest country caused significant shocks to its economy, creating the direst humanitarian conditions in the state's brief history. Hundreds of thousands of people were killed during the war and millions were displaced, while nearly half the population suffered food insecurity (Checchi et al. 2018). The state's capacity to deliver basic services was significantly weakened, the economy deteriorated, and primary school enrollment experienced a drastic reduction in the 2013-2016 period. The damaging nature of war, especially its impact on the economy, calls for improved policy regimes, including the imperative to address the long-term ramifications of war for the younger generation.

Using quasi-experimental frameworks by exploiting space-specific exposure to violence, we find a strong relationship between primary school enrollment and political instability in South Sudan, with schools in conflict zones losing on average nearly one hundred children per year. This adverse effect is particularly pertinent

for boys. The decrease in girls' enrollment is not necessarily tied to exposure to political violence, which suggests that gender differentiation in enrollment could be associated with a host of other forces. For example, conscription of young boys is an enduring problem in South Sudan (Burde et al. 2017; Lai and Thyne 2007). Our analysis indicates that sociocultural circumstances, including gendered domestic functions, poverty, early marriage, and pregnancy, all negatively impact girls' education. Therefore, the enrollment of girls, preconflict or otherwise, is expected to be lower than for boys, making the conflict less impactful for girls. As such, external interventions can give girls an advantage by reducing the impact of war on their learning activities and simultaneously addressing these other sociocultural barriers. Increased investment in girls' education from donors and nongovernmental organizations such as Girls Education South Sudan is important in enabling such an advantage.

This research is important due to its unique approach to examining the impact of war on school enrollment. Given the complex ways the impact of war manifests, evidence of its impact at the institutional level is needed to develop policies that target institutions. This study evaluated education processes in emergencies using the DD framework, and the results show that schools in the conflict-battered states of South Sudan lost an average of 85 schoolchildren annually, which constitutes 18.5 percent of average enrollment. A vast majority of young people exposed to the conflict currently have limited ability to find meaningful work in a rapidly evolving postwar labor market.

This analysis presents a causal impact of political violence on education in a relatively new context, South Sudan. Policymakers and political leaders may use this evidence to improve planning for education during emergencies. Although community safety as a whole is paramount during emergencies, the present findings suggest that increased efforts to secure primary education attendance during conflicts could lower the short- and long-term socioeconomic costs of political instability. Guaranteeing safe learning facilities should be an integral part of local, regional, and international relief agendas. For example, increasing education funding for displaced South Sudanese children will strengthen the nation's future capacity. Evidence from the South Sudan School Attendance Management System shows that Girls Education South Sudan grants to primary schools were associated with a 401 percent increase in enrollment, even as the war prevailed. Preventing schools from being destroyed or occupied and keeping teachers and children safe should be a main priority of any intervention (Guariso and Verpoorten 2013; Akbulut-Yuksel 2009). There is also a pressing need to guarantee the safety of young boys, in particular by strengthening and

enforcing local and international child labor laws that address the problem of child soldiering.

In states grappling with violent conflict, policymakers and political leaders often scramble to negotiate political settlements as a way to end instability and establish a point of departure for reconstruction (Kreutz 2010; Mason et al. 2011; Högladh 2011). A return to stability demands distinct policy options that foster an encompassing reconstruction process. Though nearly every aspect of rebuilding is considered a priority in a postconflict environment, policymakers must target investment programs with an eye toward long-term development. An inclusive, predictable economic recovery program must include children's timely return to school (Albertyn et al. 2003). Moreover, with or without war, education programs must address the wide gender gaps in schooling in South Sudan, as bridging the gap will ultimately lead to improved economic development for all (Kirk and Winthrop 2007). Finally, providing educational opportunities for a greater number of children will not sustain growth and political stability (Bricker and Foley 2013; NBS 2010; Urdal 2006) unless the country's educated youth are also given opportunities for gainful employment. Thus, increasing school enrollment must be accompanied by integrated policies that align education with improved youth employment prospects (Barakat and Urdal 2009; Bricker and Foley 2013). If South Sudan fails to do this, it risks breeding a new legion of educated rebels (LaGraffe 2012; Hoffman and Jamal 2012; Steer et al. 2014; Bricker and Foley 2013; Hilker 2011).

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APPENDIX

Table A1: Regression Results (conflict episodes)

Variables	(1) Full sample	(2) Boys	(3) Girls
Conflict event	-0.20 (0.16)	-0.15 (0.11)	-0.02 (0.08)
State controls	Yes	Yes	Yes
Year controls	Yes	Yes	Yes
School level controls	Yes	Yes	Yes
IDPs	Yes	Yes	Yes
Observations	945	933	934
R-squared	0.36	0.27	0.33

Note: Standard errors in parentheses.

Table A2: Regression Results (fatalities)

Variables	(1) Full sample	(2) Boys	(3) Girls
Fatalities	-0.03 (0.02)	-0.02 (0.01)	-0.01 (0.01)
State controls	Yes	Yes	Yes
Year controls	Yes	Yes	Yes
School level controls	Yes	Yes	Yes
IDPs	Yes	Yes	Yes
Observations	945	933	934
R-squared	0.37	0.27	0.33

Note: Standard errors in parentheses.

HOW COGNITIVE AND PSYCHOSOCIAL DIFFICULTIES AFFECT LEARNING OUTCOMES: A STUDY OF PRIMARY SCHOOL CHILDREN IN SYRIA

GRACE ANYAEGBU, CAROLINE CARNEY, HOLLY-JANE HOWELL, ALAA
ZAZA, AND ABDULKADER ALAEDDIN

ABSTRACT

Meeting the education needs of children is increasingly recognized as a necessary part of humanitarian response in emergencies. Experiences of war, dislocation, and trauma are known to affect children's psychosocial wellbeing. Less is known about how mental health and psychosocial wellbeing affect children's learning in emergencies. In this article, we examine this effect among children experiencing the crisis in Syria. The data we use are from children (N=7,191) who received educational support in northwest Syria from November 2018 to May 2019. We used the literacy levels reported by teachers to measure student learning, and the Washington Group Questions to measure cognitive or psychosocial difficulties. The average length of time between moving up a literacy level was 64 days. We fit mixed ordinal models to assess the associations between having one, every, or multiple cognitive and psychosocial difficulties. Having a single cognitive or psychosocial difficulty was associated with poorer learning progress. Children with two or more cognitive or psychosocial difficulties were less likely to progress as far as those without any such difficulties. The findings suggest that psychosocial and cognitive support for children in emergencies is needed, not just for their wellbeing but to enable them to learn effectively.

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INTRODUCTION

Children living in emergency contexts are vulnerable to a range of risks. Education interventions are being used increasingly in these settings to support children's psychosocial wellbeing, to ensure their physical safety, and to provide learning. The research featured in this article adds to the existing knowledge on whether cognitive and psychosocial wellbeing are associated with learning. This will help those designing and delivering education responses to incorporate mental health and psychosocial support (MHPSS) into their program activities. We posit that MHPSS may enable children to learn while in emergency settings. In this article, we describe the context of the Manahel program's intervention in Syria, define what we mean by positive mental health, discuss the existing evidence on the effectiveness of MHPSS as part of education delivery, and address the persistent need for MHPSS in emergency settings.

CONTEXT OF THE INTERVENTION

Following the Arab Spring protests of 2011, the government of Syria deployed the army against demonstrators. In 2012, the International Committee of the Red Cross ("Syria in Civil War" 2012) declared that Syria was in a state of civil war. By 2018, an estimated 500,000 lives had been lost (Human Rights Watch 2019). Before the civil war, the government of Syria had provided free education, but the provision of education services was disrupted by the conflict. Schools were destroyed, damaged, or transformed into shelters, and families were reluctant to send their children to school due to safety concerns. As the opposition interim government began to take control of some areas, they had to fill the gaps in the provision of basic services, including education. Local communities formed councils and technical directorates to meet this gap. It was no small task, as the infrastructure had been weakened by bombardments (Fatima 2018). From the start of the conflict up to 2015, there were 4,000 attacks on schools (McDonald 2017), one-third of the nation's schools were nonoperational for education purposes, and the education workforce had been depleted, as 150,000 teachers had left the country (UN OCHA 2019). Where education was available, it was often interrupted by security issues that required schools to close.

EDUCATION, MENTAL HEALTH, AND PSYCHOSOCIAL SUPPORT AND LEARNING

“Education in emergencies” describes the provision of education for those affected by crisis, such as a war or natural disaster (Sinclair et al. 2001). Education provision, which is increasingly recognized as part of humanitarian response, enables children to return to their studies when schools reopen, which helps to sustain social capital (Talbot 2013). However, receiving education in emergency settings does not necessarily translate into learning gains for the recipients (Sharifian and Kennedy 2019), and it has not been associated with learning gains for children in various locations. War-related trauma can negatively affect children’s intelligence, cognition, memory, and attention (Sharifian and Kennedy 2019), which may indicate that children need psychosocial support to be able to learn when in a conflict or emergency setting.

Mental health and psychosocial needs are different but interconnected (WHO 2011). The World Health Organization (WHO 2013, 1) defines positive mental health as a state of wellbeing, wherein the individual can realize their abilities, cope with normal life stress, work productively, and contribute to their community. “Psychosocial” refers to the interaction between the social and the psychological, which contributes to wellness (IASC 2007). The development sector has made progress in acknowledging mental health and psychosocial needs within a global understanding of “disability prevalence.” This has been facilitated by the Washington Group Questions, which are standardized tools for understanding disability in children (Washington Group on Disability Statistics 2016).

Schools could provide an appropriate environment for delivering mental health and psychosocial support, as most children feel safe there (UNICEF 2019; McDonald 2017). However, there is a lack of evidence on the delivery or effectiveness of psychosocial support as part of an education response in crisis settings. An education project in post-civil war Sierra Leone demonstrated that psychosocial support was beneficial for children recovering from trauma; the project did not investigate whether it also supported learning (Crisp, Talbot, and Cipollone 2001). There is limited evidence from crisis settings to indicate that MHPSS can support children’s learning (Torrente et al. 2019; Jordans, Pigott, and Tol 2016). A review by Burde et al. (2015) of the aspects of education interventions that may be effective in supporting the learning and wellbeing of children in crisis settings did not find sufficient evidence to determine whether wellbeing and mental health were associated with learning outcomes in humanitarian contexts. The literature from developing countries on MHPSS and learning in conflict or crisis contexts is

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limited and we cannot assume that study findings are generalizable from other contexts or across crisis settings, but there is evidence from other study settings that that this type of support may benefit children's learning outcomes.

Mental health and psychosocial interventions have been found to have positive associations with learning in Western contexts (Reback 2010; Stokes and Brunzell 2019), but this has not always been the case when using objective measures of learning. A review of several social and emotional learning interventions in the United States only found positive effects, as reported by teachers, for ability, motivation, and skill, but not for grades or standardized test scores (Jones et al. 2017). These findings indicate an association between MHPSS and learning in Western contexts, but making inferences beyond Western cultures should be done with caution, as the culturally inappropriate application of psychosocial support can be harmful (Wessells and van Ommeren 2008).

It is important to understand whether MHPSS is conducive to learning, as children's mental health and psychosocial needs are greater in crisis settings. Therefore, evidence is needed to support programs that include MHPSS in the delivery of education. The mental health and psychosocial needs of children and adults are negatively impacted by violence, economic uncertainty, and food insecurity (IASC 2007; Talbot 2013). The scale of the need for MHPSS among children in Syria is unknown (McDonald 2017). However, research among children living in refugee camps in Turkey found that 60 percent had symptoms of depression, 45 percent had posttraumatic stress disorder (PTSD), and 65 percent had psychosomatic symptoms (Özer, Şirin, and Oppedal 2013).

There are challenges in providing sufficient MHPSS to the frontline professionals and paraprofessionals who can give children and adults the support that they need (ABAAD Resource Center for Gender Equality 2016). Failing to help adults and children recognize when individuals around them may need MHPSS could exacerbate the problem. The effects of MHPSS on children are underresearched, as most research conducted on MHPSS in Syria has focused on adults (Lee, Ziveri, and Pfeffer 2019). PTSD is the most researched area in the field; less is known about other psychosocial needs, which may affect more of the population (Blanchet et al. 2015; Jordans et al. 2009). The limited evidence, the scale of mental health and psychosocial needs, and the importance of providing education interventions that deliver learning demonstrate the need to understand the link between MHPSS and learning in the Syrian context. Burde et al. (2015) noted the lack of research on children with disabilities and other vulnerable populations and recommended further research in this area.

RESEARCH AIMS AND OBJECTIVES

Understanding the association between mental health and psychosocial needs, functional difficulties, and learning can help those delivering education in the context of emergencies to meet the needs of the children they support and ensure that they receive MHPSS for their wellbeing and learning. There is only limited research thus far on children's mental health and psychosocial needs and learning in the education in emergencies context. The objective of this research is to explore whether mental health and psychosocial needs are associated with learning in the Syrian crisis. We aim to show whether mental health and psychosocial needs are associated with learning and, if so, which aspects are associated with it and whether the association differs in accordance with the degree of mental health and psychosocial difficulties.

METHODOLOGY

STUDY SETTING, POPULATION, AND SAMPLE

The Manahel program, which was established in Syria in 2018, is funded by the UK Foreign, Commonwealth, and Development Office.¹ The Manahel program, which provides access to safe, inclusive, quality education for primary school-age children in first through fourth grade, operates in seven districts across two provinces and includes 25 of the 26 subdistricts in Idleb. It combines classroom lessons with remedial education, structured psychosocial support, and play-based activities.

The Manahel program has mainstreamed MHPSS in all its activities. This includes helping teachers know how to identify the children's MHPSS needs, training paraprofessional MHPSS workers, ensuring that schools have child-friendly spaces, and providing structured learning materials and sessions on key topics, such as bullying, coping with change, expressing feelings, and making friends. The program aim is for teachers and MHPSS workers to help children overcome the trauma they have experienced.

Schools participating in the program aim to be a place where children can solve problems, build confidence, make friends, manage stress, and learn to process and express feelings of empathy, sympathy, sadness, and hope.

¹ The UK Department for International Development and the UK Foreign and Commonwealth Office merged on September 2, 2020, thereby creating the Foreign, Commonwealth, and Development Office. The Manahel program was still operating in Syria at the time of publication.

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STUDY POPULATION

Since 2018, the Manahel program has supported 354,940 children ages 6 to 14, 50 percent of whom were girls. Teachers collected some administrative data to support learning. For example, they kept a paper record that included the school's name, teacher's name, child's name, and the class the child was attending. They also entered the date of the learning assessment, what literacy level the child reached, and completed the Washington Group Questions for the child. A selection of 59 schools participating in the Manahel program was drawn from a list of all schools to produce a random sample. Eighteen schools were removed from this list due to security concerns in northwest Syria.

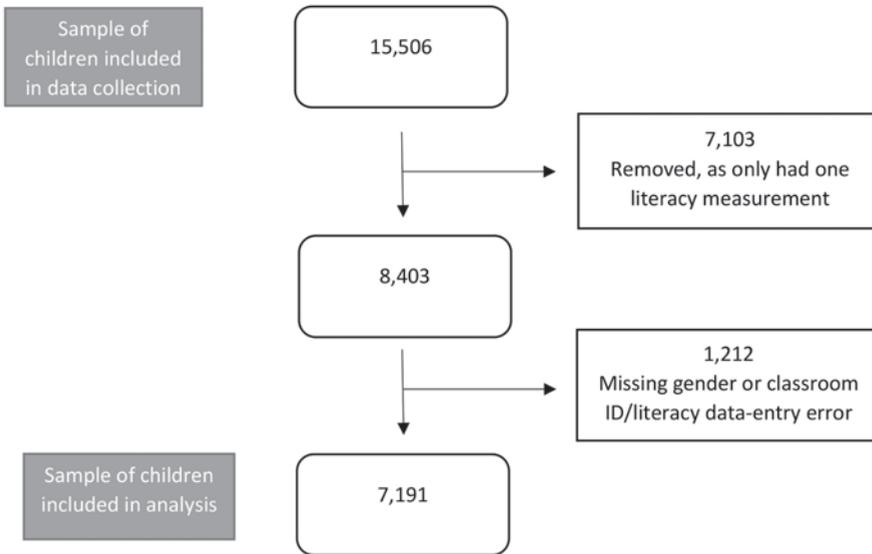
For this research, Manahel project staff members manually entered data for the sampled schools on an Excel spreadsheet. Children's names were used to determine gender, then removed and replaced with a unique identifying number; the teachers' names were removed. The spreadsheets from each school were then combined into one. The Manahel program gained consent to use the anonymized data for reporting and research purposes. A translated summary of the research was shared with the provinces' education directorates in opposition-held areas as part of the agreed-to accountability mechanisms. When enumerators collected the data, they informed the teachers that the data showing children's names would be used to track each child's progress, and that all sensitive data (in our case, children's and teachers' names) would be removed when the data were used for research and reporting. The data collection resulted in a representative sample of 15,506 children, which was representative of the population of children taking part in the Manahel program.

ANALYTICAL SAMPLE

We collected only one literacy level measurement for approximately half the children in the study when they entered the program, and it was not possible to identify whether their literacy level had not progressed, if they were missing an updated record, or if they had left the program. Therefore, in our analysis we could only use children who had two literacy measurements. This meant we removed 7,103 children from the sample, leaving us with 8,403 observations. In the Appendix, we compare the profiles of those with one literacy measurement to those with two. We found that the proportion of those who had cognitive or psychosocial difficulties was similar in the two groups, 7.6 percent and 6.9 percent, respectively.

The sample available for analysis was depleted further due to high item-level missingness on the gender variable (1,172 cases missing). Eighty-two children were the only child in their classroom; this was assumed to be a data-entry error and they were recoded as missing. Forty-five children were assumed to have data-entry errors on their literacy measure and were recoded as missing. There was some overlap between those missing gender data and those with a data-entry error on classroom identifier or literacy level, meaning that a total of 7,191 observations remained. This is depicted in Figure 1.

Figure 1: Description of Exclusions from the Analytical Sample

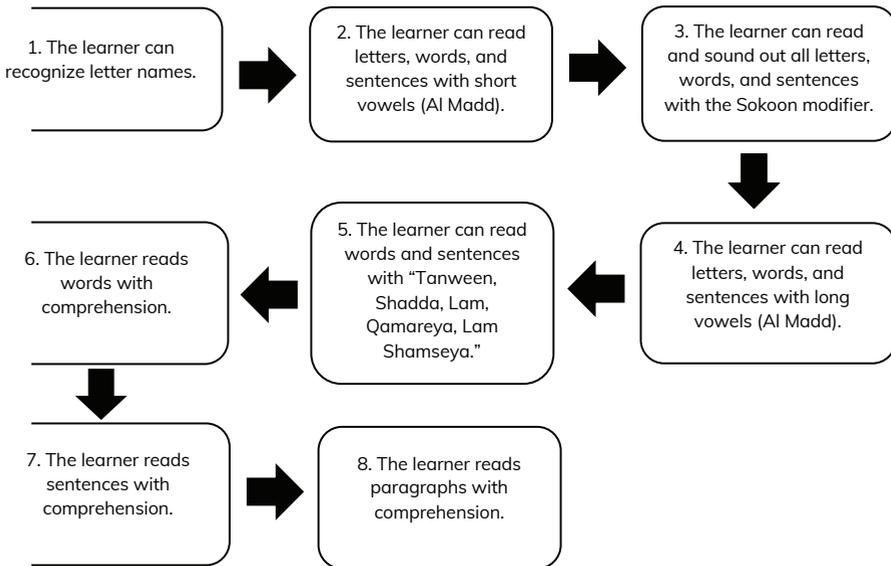


MEASUREMENT

LEARNING

Children’s literacy was assessed using Manahel’s eight literacy levels, as depicted in Figure 2. We call these level one, level two, and so on.

Figure 2: Assessment of Literacy Levels in the Manahel Program



The date measurements for each level were transformed so that, instead of being in date form, they became a categorical measure of level to capture the initial level at which each child entered the program and the last literacy level at which they were observed. The learning outcome we used for this analysis was the number of levels each child moved between their first and last recorded measurement. For example, if a child had a date measurement for level one, a date measurement one month later for level two, and a final date measurement recorded for level three, their outcome was that they had moved two levels. Due to the small number of children in the upper levels, and because few children had moved more than five levels (46 had moved six levels and 16 moved seven levels), we recategorized those who moved five, six, or seven levels into “five or more level moves.” Several children (n=45) had moved to a higher or a lower literacy level on the same date as their entry; although these trajectories were not necessarily implausible, we recoded these children’s learning progress as missing. Thus, the outcome variable of learning progress comprised the number of levels children progressed, which

ranged from one to five or more. This was considered more appropriate than using the final literacy level children achieved; using the number of levels moved as the outcome meant we could compare progress between children with either a high or low literacy level upon entering the program.

COGNITIVE AND PSYCHOSOCIAL FUNCTIONAL DIFFICULTIES

The Washington Group Questions were developed by a United Nations Statistical Commission City Group made up of more than 130 representatives from national statistical offices, as well as UN agencies, bilateral aid agencies, nongovernmental organizations, and disabled people's organizations. The questions were developed in recognition of the paucity of disability measurement tools for collecting data on the prevalence of disability and to monitor the UN Convention on the Rights of Persons with Disabilities. The Washington Group Questions also aim to foster comparability in disability information across countries, which did not previously exist (Washington Group on Disability Statistics 2020, 1).

The questions cover different types of impairment (e.g., visual, aural, mobility, cognitive, self-care, and developmental) and were pretested in multiple countries, including Cambodia, the Maldives, Portugal, Germany, Mongolia, the Philippines, and Sri Lanka (Loeb, Eide, and Mont 2007). The questions also include a child-functioning module—a set of Washington Group Questions adapted for children—to identify children with disabilities more accurately. We note that the Washington Group Questions are not a diagnostic tool; for the purpose of this paper, we conceptualized the questionnaire to classify children as having a functional difficulty.

We measured cognitive and psychosocial functional difficulties using the Washington Group/UNICEF Child Functioning Module. The module covers children between ages 2 and 17 and assesses whether they have difficulties in one of the following domains: seeing, hearing, walking, self-care, communication, learning, remembering, concentrating, accepting change, controlling behavior, and making friends, as well as anxiety and depression.² A full list of the Washington Group Questions and how the teacher asked them is available elsewhere.³

² A data-entry error led to the omission of the walking domain from this analysis.

³ The Washington Group/UNICEF Child Functioning Module is available at <https://www.washingtongroup-disability.com/question-sets/wgunicef-child-functioning-module-cfm/>.

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The seeing and hearing domains were used as control variables in the analysis in order to separate their effects from the cognitive and psychosocial difficulties. Responses were coded as per the instructions for using the Washington Group Questions.⁴ Functional difficulty was present for children who reported “a lot of difficulty” and “cannot do at all” for all questions, and also reported experiencing anxiety and depression daily.

A teacher administered the questions while the child registered for the class. The child’s functional difficulty status may have subsequently changed, but this was not captured in our data. Social workers trained the teachers to use the Washington Group Questions, including one-on-one support and shadow mentoring as teachers conducted the questioning with a sample of their students. The social workers also performed verification checks by comparing a random sample of the data entered with the paper records when they uploaded the data.

As teachers completed the questions for each child, a potential limitation was how well teachers were able to use them. However, a study using the Washington Group Questions on children in Fiji found that parents and teachers were both able to diagnose the questions, with the reliability between teachers and parents rated as “fair” (Sprunt, McPake, and Marella 2019). Another study of the Washington Group Questions used with children in Uganda to assess the internal validity and consistency of the questions showed that they are an effective scale for evaluating disability, as internal consistency was good and factor-level internal consistency was excellent (Zia et al. 2020). The Washington Group Questions have been lauded as being low cost and easily administered by nonspecialists. However, critics have argued that they only identify individuals with more significant disabilities and may omit individuals with mild disabilities (Groce 2017).

OTHER CHARACTERISTICS

Children’s gender was determined by their names in the learning record, and the names were then removed. Where gender could not be determined clearly, it was coded as missing. This was the case for a substantial proportion of the sample (n=1,172, 14%). The school district was included in the administrative data related to schools. A measure of learning duration was derived from the number of days between recording a child’s first and last learning levels. This is a proxy measurement of how long children spent in the program, although they could have spent more time than was captured in the date measurements. We

4 See <https://data.unicef.org/resources/module-child-functioning-tabulation-plan-narrative/>.

included this measure because the longer children spend in school, the greater the likelihood that they will learn, and this provided a measure of learning progress. The first learning level children were observed at is included in the model, as those who entered with a low literacy level could have been more inclined to achieve progress than those who entered at a higher level, or vice versa. As few children entered above level three, we aggregated these measures into the category “level three or higher.”

We adjusted for differences in learning that could arise from children being in different grades and classes. This was derived from the random identifier generated at data entry for each school, and the children’s grade and class variables. Grade was included in the identifier because of how information on class and grade were captured. The children could be in class one, class two, and so on, but this put them in multiple grades; therefore, we combined grade and class to identify individual classrooms within a school.

ANALYTICAL TECHNIQUE

A mixed model was fit with a random intercept for classroom. Capturing variations in learning progress at this level enabled us to control for children in the same classroom being more likely to have similarities; the associations between independent variables and learning progress were assumed not to vary and to be equal across classrooms (Harrison et al. 2018, 1-32; Rabe-Hesketh and Skrondal 2008, 128). We used a mixed ordinal model because, although there is an ordered rank in progress through each literacy level, the differences between each level are not necessarily equal (McCullagh 1980, 109-42). Gender, sensory difficulty, district, initial literacy level, and learning duration were added to the model as control variables. There was no imputation of missing data, and complete case analysis was used. Nonrandom item nonresponse can reduce generalizability, and missingness was high on the gender variable (1,172 missing cases), which may undermine the representativeness of our results. For example, nonresponse cannot be distinguished from nonprogress in the case of learning progress, thus our conclusions can only be generalized to the population that demonstrated learning progress.

Models were fit using R version 3.6.1 (R Core Team 2018). The first model estimated the effects associated with having any cognitive or psychosocial difficulty. We subsequently fit a model for each of the domains: self-care, communication, learning, remembering, concentrating, accepting change, controlling behavior,

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making friends, and anxiety and depression. We estimated the effects of having either one or two or more cognitive or psychosocial difficulties.

SENSITIVITY TESTS

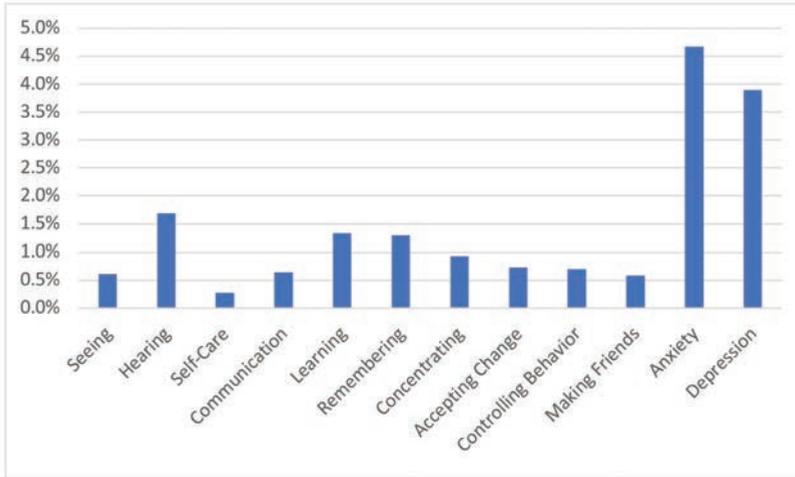
The Washington Group Questions include learning as a domain in which children can report having difficulty. Because the domains of learning, concentrating, and remembering may be closely related to making learning progress, we reran the analysis first while excluding children reporting difficulties in the learning domain, then again excluding those reporting difficulties in the learning, concentrating, and remembering domains. Given that we focused only on children who had two learning measurements and excluded those who did not, due to our inability to distinguish between no progress and nonresponse, we reran the analysis including these children as having made no progress. If having a cognitive or psychosocial difficulty was associated with making no progress, we might have seen a stronger association between the cognitive or psychosocial difficulties and learning in the sensitivity analysis. Results from all sensitivity tests were broadly in line with the main results and are available from the authors on request.

RESULTS

DESCRIPTION OF ANALYTICAL SAMPLE

We included 7,191 children in the analysis; 8.0 percent reported having a cognitive or psychosocial difficulty. Of these children, a larger proportion reported having multiple functional difficulties; 4.9 percent reported having two or more, and 3.2 percent reported having only one. The proportion reporting for each domain is shown in Figure 3. Sensory difficulties captured by the Washington Group Questions pertained to seeing and hearing; 0.6 percent of children experienced difficulty seeing, and 1.7 percent experienced hearing difficulties. Difficulty in self-care was reported by 0.3 percent; 0.6 percent reported communication difficulties; and having difficulty accepting change and controlling behavior were both reported by 0.7 percent. Having difficulty learning was reported by 1.3 percent, and difficulties remembering and concentrating were reported by 1.3 percent and 0.9 percent, respectively. Difficulties making friends and controlling behavior were reported by 0.6 percent and 0.7 percent of the children, respectively. Anxiety and depression were the two most frequently reported domains—4.7 percent and 3.9 percent, respectively.

Figure 3: Proportions Reporting Each Domain of Cognitive or Psychosocial Difficulties



The sample included 52.4 percent girls and 47.6 percent boys. All the children in Aleppo were in the Jebel Saman school district. In Idleb, children were in the districts of Ariha (14.7%), Harim (9.9%), Idleb (32.9%), and Jisr-Ash-Shugur (7.0%). Most of the children (73.7%) entered a Manahel classroom at the first learning level; 20.5 percent were in level two, 5.8 percent in level three or higher. In terms of learning outcomes, the majority of the children (61.7%) moved one level, 21.9 percent moved two, 9.9 percent moved three, 4.8 percent moved four, and 1.7 percent moved five or more levels.

Table 1: Profile of the Analytical Sample

Characteristics	Percentage N=7,191
Functional difficulty	
Any psychosocial/cognitive difficulty	8.00
Multiple psychosocial/cognitive difficulties	
One psychosocial/cognitive difficulty	3.20
Two or more psychosocial/cognitive difficulties	4.90
Gender	
Female	52.40
Male	47.60
District	
Ariha	14.70
Harim	9.90
Idleb	32.90
Jebel Saman	35.43

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AND LEARNING OUTCOMES IN SYRIA

Characteristics	Percentage N=7,191
Jisr-Ash-Shugur	7.00
Initial learning level	
Level one	73.70
Level two	20.50
Level three or higher	5.80
Learning progress (number of levels moved)	
One	61.70
Two	21.90
Three	9.86
Four	4.83
Five or more	1.71

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Table 2 shows the odds ratio (OR), a 95 percent lower confidence interval (CI), a 95 percent higher CI, and the *p*-value for the estimated association between any cognitive or psychosocial difficulty and learning outcomes. Cognitive or psychosocial difficulties were associated with lower odds of moving more than one learning level compared with children with no cognitive or psychosocial difficulties (OR=0.72%, CI=0.55-0.93). This implies that children with cognitive or psychosocial difficulties were less likely to move multiple learning levels than those without functional difficulty in these areas.

Table 2: Association between Cognitive or Psychosocial Difficulties and Learning

Cognitive or Psychosocial Difficulty (Reference group is those reporting no difficulty)	OR	95% Lower CI	95% Higher CI	<i>p</i> -value
Any cognitive/psychosocial difficulty	0.72	0.55	0.93	<i>p</i> =0.002

Note: Model adjusted for gender, sensory difficulty, district, literacy level at entry, and learning duration; children were nested within classrooms (N=7,191).

Each domain of cognitive or psychosocial difficulties was entered into a regression model with adjustment for confounders. The results from each of the regression models for each domain are shown in Table 3 and Figure 4. Significant associations were found between learning (OR=0.37, CI=0.21-0.67), remembering (OR=0.32, CI=0.17-0.60), and concentrating (OR=0.20, CI=0.10-0.40). Children with these forms of functional difficulty were less likely than their counterparts to move

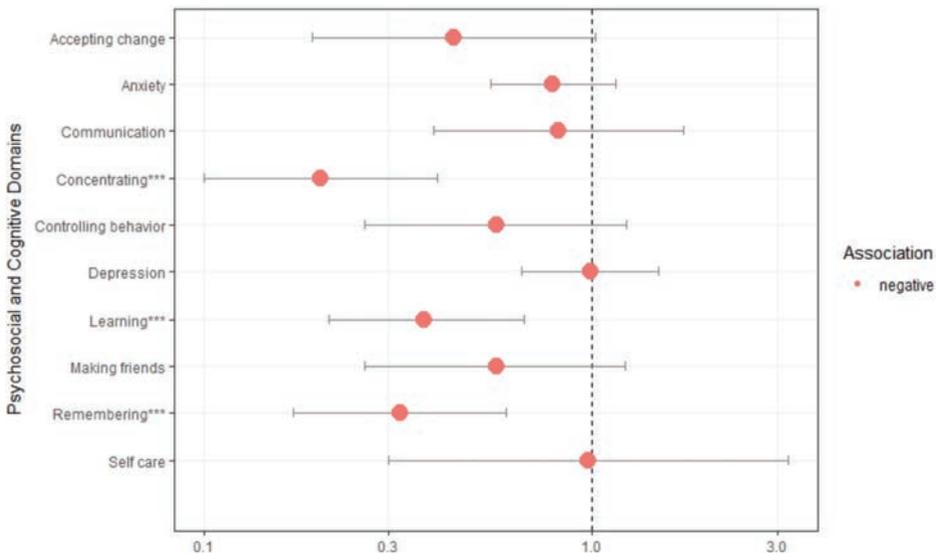
multiple learning levels. Accepting change did not have a significant association, but it was close to the 0.05 significance threshold (OR=0.44, CI=0.19-1.02). We did not find significant associations between learning outcomes and self-care, seeing, making friends, hearing, depression, controlling behavior, communication, or anxiety.

Table 3: Association between Each Domain of Cognitive or Psychosocial Difficulty and Learning

Cognitive/Psychosocial Domains (Reference group for each is those not reporting difficulty in that domain)	OR	95% Lower CI	95% Higher CI	p-value
Accepting change	0.44	0.19	1.02	0.057
Anxiety	0.79	0.55	1.15	0.221
Communication	0.82	0.39	1.72	0.593
Concentrating	0.20	0.10	0.40	7.09E-06
Controlling behavior	0.55	0.24	1.28	0.152
Depression	0.99	0.66	1.48	0.963
Learning	0.37	0.21	0.67	8.540E-04
Making friends	0.57	0.26	1.22	0.148
Remembering	0.32	0.17	0.60	3.320E-04
Self-care	0.98	0.3	3.2	0.972

Note: Model adjusted for gender, sensory difficulty, district, literacy level at entry, and learning duration; children were nested within classrooms (N=7,191).

Figure 4: Odds Ratios (95% confidence intervals) for Each Domain



Note: * p<0.05, ** p<0.01, *** p<0.001

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Each child could report up to ten cognitive or psychosocial difficulties. More than half of those who reported having cognitive or psychosocial difficulties reported having more than one; few reported having three or more. The regression results presented in Table 4 show the likelihood of moving multiple learning levels for two groups of children—those with one cognitive or psychosocial difficulty, and those with two or more cognitive or psychosocial difficulties—as compared to children with no cognitive or psychosocial difficulties. The estimate for those with one cognitive or psychosocial difficulty was not significant ($OR=0.96$, $CI=0.67-1.38$). The chance of moving multiple learning levels for children reporting two or more difficulties was lower than for those without a cognitive or psychosocial difficulty. Their odds ratio was 0.55 ($CI=0.38-0.78$), meaning that they were about half as likely as children without a cognitive or psychosocial difficulty to move multiple learning levels.

Table 4: Association between Multiple Cognitive or Psychosocial Difficulties and Learning

Multiple Cognitive/Psychosocial Difficulties <i>(Reference group is those reporting no difficulty)</i>	Number of Disabilities	OR	95% Lower CI	95% Higher CI	p-value
	One cognitive/psychosocial difficulty	0.96	0.67	1.38	.543
	Two cognitive/psychosocial disabilities	0.55	0.38	0.78	7.130E-12

Note: Model adjusted for gender, sensory difficulty, district, literacy level at entry, and learning duration; children were nested within classrooms (N=7,191).

DISCUSSION

MAIN FINDINGS

Our findings indicate that children with a cognitive or psychosocial functional difficulty made less learning progress than those without any kind of functional difficulty. When individually examining the association between each cognitive or psychosocial domain and learning outcomes, the remembering, concentrating, and learning domains each showed a significant association with reduced

learning outcomes. Although we did not find significant associations between other psychosocial domains and learning outcomes when we considered them individually, we did conduct a sensitivity test wherein we removed the remembering, concentrating, and learning domains, due to their closeness to cognitive ability; this test did find a significant association between having any cognitive or psychosocial difficulty and learning (excluding the three domains). This suggests that, although important, these three domains do not explain the entire association found. We regressed whether children had just one cognitive or psychosocial difficulty, or two or more such difficulties, on learning; we did not find a significant association between having one cognitive or psychosocial difficulty and learning. Having two or more cognitive or psychosocial difficulties was associated with poorer learning progress.

FINDINGS IN RELATION TO CONTEXT

Most children in the study (73.7%) entered the Manahel program at level one or level two, meaning that they could only understand letters or read short words. This is consistent with another study on recipients of an education intervention in Syria, which found that the majority of children in grades two to eight could not read at a second-grade level (International Rescue Committee 2017). Our research found that the two most frequently reported domains from the Washington Group Questions were anxiety and depression, which were present in 4.7 percent and 3.9 percent of the children, respectively. This possibly reflects the trauma the children have experienced during years of conflict, displacement, and loss. Other research has indicated a greater need for mental health and psychosocial services among similar populations; among children living in refugee camps in Turkey, 60 percent had symptoms of depression, 45 percent had PTSD, and 65 percent had psychosomatic symptoms (Özer et al. 2013); however, differences in how these conditions were measured and the population groups means that comparability is limited. We derived our measure of cognitive and psychosocial difficulties from the Washington Group Questions instructions where, in order to be classified as experiencing anxiety or depression, one must have experienced it on a daily basis. It is possible that a less stringent measure would show a higher prevalence, which would indicate that other children may experience anxiety and depression less frequently than daily.

In this paper, we have identified a relationship between having a cognitive or psychosocial functional difficulty and learning outcomes among children in Syria. This suggests that there may be value in incorporating MHPSS into education delivery in crisis settings. As a result of the findings of this study, the Manahel program has attempted to ensure that children are provided with literacy, numeracy, and mental health and psychosocial support. The number of focused MHPSS sessions

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in Manahel classrooms has increased, MHPSS has been mainstreamed in numeracy and literacy sessions where possible, and the Manahel program has made a greater investment in hiring specialized and paraprofessional MHPSS staff members. At the same time, the program is investing in understanding how to support change in teacher behavior that will enable them to respond more effectively to the individual requirements of children with a need for mental health and psychosocial support. This is being done through research on changes in teacher attitudes and practices in response to targeted professional development.

FINDINGS IN RELATION TO THE LITERATURE

Our review of the literature did not find any similar research undertaken in crisis settings that we could use as a comparison. Our findings do support those from studies in Western contexts, which have found that MHPSS is positively associated with learning. An evaluation of an MHPSS intervention in the United States found a positive association between the intervention and learning (Reback 2010). An evaluation of a social and emotional learning intervention in the United States found similarly that exposure to the intervention was associated with teacher reports of improved ability and skill in their students; however, it was not associated with improvement on more objective measures, such as grade or standardized test scores (Jones et al. 2017). A study from Australia found that a trauma-informed positive education training initiative with teachers was associated with improvements in reading and attitudes toward school among their students (Stokes and Brunzell 2019). These studies are neither exhaustive nor directly comparable in terms of context, but they do imply a relationship between MHPSS and learning. The literature from more comparable contexts, including a social and emotional learning intervention in the Democratic Republic of Congo (Torrente et al. 2019), a study of mental health and psychosocial support interventions conducted in Burundi and South Sudan (Jordans et al. 2016), and an evidence review from low- and middle-income countries (Kuper, Saran, and White 2018, 1-57), had findings suggestive of an association between MHPSS and learning, but the review had a poor-quality methodology. Furthermore, how learning and MHPSS interventions were contextualized and measured differed between these studies and our own.

STRENGTHS AND LIMITATIONS

The main limitations of this study relate to the sample included in the analysis, the loss of data from the walking domain (i.e., difficulty walking) in the Washington Group Questions, and how learning was measured.

Our analysis was restricted to children with two learning measurements, which limits what we can infer about all children from the Manahel program. We conducted a sensitivity analysis (available from the authors on request) that included those excluded as nonlearners/nonresponse, and the similar results indicate that the associations in the main analysis were consistent for children without two learning measurements. The characteristics of those included in the main analysis were similar to those in the initial study sample (shown in the Appendix). Given the diversity of children receiving education in emergency contexts, we accept that our findings are not generalizable to other crisis settings.

While being able to estimate and control for variation at the classroom level strengthens our confidence in the associations found, not having data on teachers, classrooms, or schools meant that we could not explore how their characteristics affected learning or the association between difficulty risk and learning. Ideally, we would have conducted standardized assessments of learning progress and collected additional information about the children being supported in the education program. We did not have data on child characteristics, and the gender variable derived from the children's names was limited by a high level of missingness because it was not always possible to reliably infer gender from the name.

The study benefited from the cognitive and psychosocial difficulties measured with the Washington Group Questions, which cover sensory and psychosocial health. However, our use of the Washington Group Questions was limited by the exclusion of the walking domain from the analysis due to a data-entry error, and we thus were unable to control for the effect of the risk of a physical difficulty. Teachers answered the Washington Group Questions for their students, thus a limitation of this study is that the responses to the Washington Group Questions could have been influenced by the teacher's perceptions and may not be as precise as a diagnostic assessment of the risk of physical difficulty. Teachers may over- or underestimate children's risk of difficulty, making it less precise. The Washington Group Questions were asked when children first entered a Manahel classroom, which coincided with the first assessment of literacy. However, this may subsequently have changed, such that children who did not experience difficulties upon entering the program may have developed them later, and vice versa. Finally, in the study we did not include an analysis of mild difficulties and their relationship with learning outcomes.

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The teachers assessed learning using the eight Manahel literacy levels (shown in Figure 1). Their subjectivity may introduce measurement error, which could bias associations if teachers systematically under- or overestimated literacy levels, based on the presence or absence of cognitive or psychosocial difficulties. The learning levels as assessed in this study would not be comparable in terms of quality or objectivity with a standardized assessment provided under exam conditions. However, teachers are well placed to assess children's literacy levels and were trained to identify and support the need for mental health and psychosocial support.

CONCLUSION

This research revealed an association between cognitive or psychosocial functional difficulties and learning among children living in a crisis setting in Syria. The evidence suggests that having multiple functional difficulties may be particularly adverse for children's learning. Our attempt to identify the drivers of this association by regressing each domain of the Washington Group Questions on learning produced less illuminating results. We found associations only for the domains most closely connected to learning (learning, remembering, concentrating). However, our sensitivity analysis, which removed these domains from the measure of cognitive or psychosocial difficulty, still found a significant association. These domains may be closely intertwined, and our analysis may not have been sufficiently sophisticated to disentangle these relationships.

Our findings have immediate implications for the delivery of education in emergency settings, as they highlight the need to address children's mental health and psychosocial support requirements in the education context. Using the Washington Group Questions in this intervention showed that they can be used effectively to measure functional difficulties in poorly resourced and highly marginalized settings. The findings from this research helped secure additional resources to provide MHPSS in the intervention, which were used to support the children's wellbeing and learning. There is an opportunity for other education in emergency interventions to support children more effectively by collecting and using data on cognitive and psychosocial difficulties. MHPSS should be considered a foundational need of children that can support their educational attainment, rather than a separate activity. Poor MHPSS and inadequate learning should be avoided in both early-onset emergency situations and protracted crises.

Further research in crisis settings is needed to help build a richer evidence base on the need for mental health and psychosocial support among children in

crises. In particular, research using the full set of Washington Group Questions would be useful in determining whether there is an association between physical difficulties and learning. Further research should be conducted using an objective measure of learning. More research from noncrisis settings also could be useful in understanding the relationship between cognitive or psychosocial difficulties and learning more broadly.

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APPENDIX

COMPARISON BETWEEN THOSE WITH A SINGLE LEARNING ASSESSMENT AND MULTIPLE LEARNING ASSESSMENTS

We excluded 7,103 children from the sample, as we did not have two measures of learning and could not identify if this was due to their not having made progress, whether improvement was not recorded, or whether the children had left the program. We wanted to ensure that these children were not different from those included in the analysis. If they were very different—for instance, if more children with a risk of difficulty were excluded from the analysis due to having only one learning measurement—it could imply that these children were less likely to learn and that our analysis is not representative.

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We compared the profile of those who were included in the analysis and those who were excluded in Table A1. We can see that, overall, the proportions in each group who had a cognitive or psychosocial difficulty were similar: 7.6 percent and 8.0 percent, respectively. Among those who were excluded, a slightly lower proportion had just one cognitive or psychosocial difficulty; a higher proportion had two or more cognitive or psychosocial difficulties. Jebel Saman was overrepresented in our analytical sample in terms of location, and Jisr-Ash-Shugur was underrepresented. A similar proportion was in each learning level in both the excluded group and the sample used in our analysis.

Table A1: Comparison between Those Excluded from Analysis and the Analytical Sample

Characteristic	One Learning Measurement	Two or More Learning Measurements
Functional difficulty		
Any cognitive/psychosocial difficulty	7.6%	8.0%
Multiple cognitive/psychosocial difficulties		
One cognitive/psychosocial difficulty	2.5%	3.2%
Two or more cognitive/psychosocial difficulties	5.1%	4.9%
Gender		
Male	49.6%	47.6%
Female	50.4%	52.4%
District		
Ariha	20.0%	14.0%
Harim	11.2%	9.6%
Idleb	32.5%	31.4%
Jebel Saman	19.4%	38.0%
Jisr-Ash-Shugur	16.9%	6.9%
Initial learning level		
Level one	73.3%	73.7%
Level two	20.6%	20.7%
Level three or higher	6.0%	5.6%

A PROOF-OF-CONCEPT STUDY OF CAN'T WAIT TO LEARN: A DIGITAL GAME-BASED LEARNING PROGRAM FOR OUT-OF-SCHOOL CHILDREN IN LEBANON

JASMINE S. TURNER, KARINE TAHA, NISREEN IBRAHIM, KOEN I. NEIJENHUIJS, EYAD HALLAK, KATE RADFORD, HESTER STUBBÉ-ALBERTS, THOMAS DE HOOP, MARK J. D. JORDANS, AND FELICITY L. BROWN

ABSTRACT

Evaluations of education technology (ed tech) interventions in humanitarian settings are scarce. We present a proof-of-concept study of Can't Wait to Learn, a digital game-based learning program that combines an experiential, active learning design with meaningful, competency-appropriate, and contextually relevant content. We assessed the feasibility of using this program to address the current education gap in Lebanon by implementing its mathematics component in basic literacy and numeracy classes (n=30) with out-of-school children (N=390) ages 10-14. We estimated changes in numeracy competency and psychosocial wellbeing and conducted focus group discussions (n=16) and key informant interviews (n=19) with children, facilitators, parents, and partner staff members to understand the lived experience, perceived impact, and implementation challenges of the program. Our findings support the feasibility of using ed tech programs to meet the needs of out-of-school children, as we saw significant improvements in numeracy, psychological symptoms, and self-esteem; positive reported experiences with the program; increased motivation among the children; and overall ease of implementation. Our suggested improvements to the game design and implementation model will support ongoing program adaptation and implementation, with the goal of increasing access to quality education for children living in humanitarian settings. Our findings will inform future studies that seek to conclusively determine the program's effectiveness.

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INTRODUCTION

At least 75 million children in conflict-affected settings are currently in urgent need of education assistance, yet only 4 percent of humanitarian funding is earmarked specifically for education (Education Cannot Wait 2018). In addition to funding scarcity, substantial macro-level challenges include a lack of prioritization and coordination of education in emergencies (EiE) efforts, insufficient capacity to respond to emergencies, and a data gap concerning both what is needed and what is known to work (Nicolai et al. 2016). Child labor and marriage, repeated displacement, and rigid criteria for entry into formal education systems pose challenges for access and attendance. Moreover, teachers are frequently overburdened by having few resources and large classes of children who vary greatly in age, prior learning, and time spent out of school (Burde et al. 2017; UNESCO 2019). Thus, the need for innovative solutions to increase access to quality education is evident.

Lebanon currently hosts the highest number of refugees per capita: 1.5 million Syrians and 28,000 Palestinians from Syria, plus 180,000 Palestinian refugees who were already living in Lebanon before October 2018 (Government of Lebanon and United Nations 2019). This is in addition to 1.5 million vulnerable Lebanese, which means that vulnerable groups constitute more than half the country's population. Persistently high rates of debt, food and housing insecurity, socioeconomic disparity, substandard living conditions, exploitative work, and unmet education needs are eroding the long-term resilience of these communities. To address the impact of the rapidly increased demand on the education system, the Lebanese Ministry of Education and Higher Education opened double-shift schools and established a state-run accelerated learning program (ALP), which is the official channel for entry or reentry into the Lebanese basic education system (grades 1 to 9) (UNHCR 2016). Until recently, eligibility for entry into the ALP was based on academic competency; this represented a challenge for the many children who had experienced repeated displacement and other barriers to education access. Multilateral agencies, nongovernmental organizations (NGOs), and community-based organizations are largely responsible for implementing basic literacy and numeracy (BLN) programs in Lebanon, which aim to increase enrollment in ALP and, subsequently, formal education. BLN enrolls children ages 10-14 who either have never been to school or show no evidence of prior learning. Implementation models and content have been varied until recently, when a standardized national BLN curriculum was finalized. Despite these combined efforts, almost 1.1 million children in Lebanon remain in need of educational assistance.

Education technology (ed tech) is being explored increasingly as a means to support learning and education needs, given the limited resources and traction for a more traditional response to the aforementioned challenges. Some ed tech programs show promise; McEwan (2015) found in a systematic review that, compared to other types of school-based intervention outcomes, computer and instructional technology interventions in low- and middle-income countries had the greatest effect on learning. Furthermore, randomized controlled trials of an add-on tablet-based program in Malawi, an after-school technology-aided program in India, and a program combining e-learning with activity-based learning in Zambia have shown significant improvements in learning outcomes (Pitchford 2015; Muralidharan, Singh, and Ganimian 2016; De Hoop et al. 2020). Recently, Tauson and Stannard (2018) critically reviewed ed tech programs in humanitarian settings and, while they ultimately conclude that there is space for ed tech in humanitarian education, they recommend increased consideration of existing evidence during program design. This relates in particular to the importance of the role of the teacher or facilitator, pedagogical design, national curriculum integration, adapting to learners' levels, ensuring teacher and parent buy-in, and providing the supportive implementation infrastructure necessary for such programs to function successfully (Tauson and Stannard 2018).

Can't Wait to Learn (CWTL) is a curriculum-aligned learning program delivered on a tablet. It employs a serious gaming approach and nonspecialist facilitators to address some of the many challenges of access to quality education in conflict-affected settings. CWTL was first developed in Sudan for children living in areas where formal education infrastructure was unavailable. A quasi-experimental study indicated significantly greater learning gains in numeracy ($F(1,499)=1170.93$; $p<0.001$; $r=0.85$) among children who were offered lessons using CWTL five days per week over a period of six months than among a comparison group that received state-provided nonformal education (War Child Holland, Ahfad University for Women, and TNO 2016). The study was conducted with children ages 7-9 ($N=591$) who had never been to school and were living in the states of White Nile, North Kordofan, and Al Qadarif.

In the current study, War Child Holland and its partners built on these findings to further develop the program design and research tools and adapt them to the Lebanon context. While previous research focused predominantly on the game's potential to enable autonomous learning, the current proof-of-concept study explored the implementation of the program as a whole in a culturally and contextually different setting. The aim was to offer preliminary insights into the

potential impact of the program and key factors for its successful implementation in a complex, protracted refugee crisis setting.

THE GAME AND PROGRAM DESIGN

Three key learning theories underpin the development of CWTL for EiE contexts. First, according to self-determination theory, psychological wellbeing, motivation, and student retention can be enhanced through sociocontextual conditions that promote competence, autonomy, and relatedness (Ryan and Deci 2020; Fathali and Okada 2017; Eisenman 2007). In EiE, the link between education and mental health deserves specific attention. The psychosocial wellbeing of vulnerable children has been shown to predict school engagement, while the absence of education increases the risk of conflict-affected learners developing mental health disorders (Sirin and Rogers-Sirin 2015; Stiles and Gudiño 2018; Charles and Denman 2013). Second, active learning that involves the learner and creates an experiential learning process is shown to boost student engagement (Freeman et al. 2014; Sitzmann 2011; Saine et al. 2011). This is key for children who have been exposed to trauma and ongoing adversity, which has been shown to have negative effects on attention, memory, and other cognitive functions necessary for learning (Munoz et al. 2018; Sirin et al. 2018; Adubasim and Ugwu 2019). Third, Vygotsky (1978) and Csikszentmihalyi (1990) argue that learning is achieved through a balanced degree of challenge that fits within a learner's zone of proximal development. This requires a degree of individualized content, given the range of prior learning experiences among those who have experienced frequent conflict-related disruption of their education.

Features of education technology and game-based learning have the potential to operationalize aspects of the theories outlined above in EiE contexts. This includes overcoming commonplace challenges, such as a limited number of qualified teachers, high teacher-to-learner ratios, and variations in learners' ages and prior education. For instance, content that adapts to competency levels can enable learners to build momentum by staying within their zone of proximal development, which can result in deep concentration, immersion, and enjoyment, known as "flow" (Csikszentmihalyi 1990). Technology-assisted educational games can include direct feedback on performance, which teachers in overcrowded classrooms may find challenging to provide to individual students. Autonomy can be promoted by offering choices in a game, such as the option to request support, which also contributes to an active learning experience (Björk and Holopainen 2004). Varied gameplay—that is, games with different designs and goals—is

another feature that supports active learning (Björk and Holopainen 2004). This can also promote deeper conceptual understanding than a simple presentation of content and rote learning are able to (Praet and Desoete 2014; Passey et al. 2016; Clements and Sarama 2007; Kalloo, Mohan, and Kinshuk 2015; Gee 2003).

In line with these key principles for promoting both learning progress and psychosocial wellbeing, CWTL game design is based on a learner-centered sociocultural approach. This is achieved by engaging with meaningful, competency-appropriate, and contextually relevant content. To promote relatedness, the game world and its characters (see Figure 1) were co-created with out-of-school children in Lebanon, which resulted in an experiential learning interface that reflects children's realities and dreams. Interaction with these characters and instructional videos that are narrated by children are designed to increase the contextual relevance of the game, to engage emotional and cognitive processes, and to help children grasp the learning objectives (Sarama and Clements 2002; Sitzmann 2011).

Active learning through the game is promoted at two distinct game "levels" that operate like a "games within games" design pattern (Björk and Holopainen 2004). The first level is a game world that provides the connecting narratives for the second level, which consists of a variety of numeracy minigames. In the game world, children can choose to (1) explore, (2) listen to different characters' stories, and (3) help characters, which creates an autonomous and experiential learning process. For instance, the learner can help a character by completing a minigame—that is, a character can ask for help with something, then the learner plays minigames that earn points and resolve the character's issue (i.e., the learner advances through the character's story). As children successfully complete the various minigames, they progress to more difficult concepts and activities. Direct feedback and rewards are incorporated into the minigames to increase the children's sense of value in completing them. The CWTL game actively engages learners by giving them control in the first level of the game and requiring them to interact with mathematics problems in the second.

Figure 1: The Lebanon Can't Wait to Learn Game World and Two Game Characters



To ensure appropriate proximal zones of development, competency, and autonomy, three additional features are included in the CWTL program. First, children complete a placement test on first use of the game. This is an important feature for children whose education has been disrupted, as it ensures that they begin the game at a competency-appropriate level, thereby facilitating learning and increasing their motivation to engage (Tauson and Stannard 2018; Muralidharan et al. 2016). Second, scaffolded support is provided in the game through instructional videos featuring local children and adults, and an in-game guide. Third, although EiE programs are recommended to supplement rather than substitute for teachers (Tauson and Stannard 2018), the game design aims to compensate partially for the lack of qualified teachers by utilizing trained nonprofessional facilitators. The facilitators' role includes behavior, classroom, and tablet management, and encouraging use of the "steps to independence." These four steps promote independent learning when a child faces difficulty: (1) the child watches the instructional video again, (2) the child asks a friend for help, (3) the facilitator tries to elicit understanding, and (4) the facilitator explains the concept or task.

AIMS OF THE CURRENT STUDY

In this study, we aimed to determine the feasibility of delivering an education program in a conflict-affected setting. Specifically, through a mixed methods analysis involving educational and psychosocial assessments, implementation data, and qualitative user and stakeholder feedback, we examined the following:

1. Is such a program feasible to implement in Lebanon with out-of-school children?
2. Is the program associated with children's learning and psychosocial wellbeing outcomes?
3. Are there factors that may predict program dropout, enable and/or hinder successful implementation, and inform future improvements to the program?

METHODS

SETTING AND STUDY DESIGN

We conducted a mixed methods, noncontrolled proof-of-concept study of the CWTL program for out-of-school children in Lebanon, which was implemented as a nonformal BLN education program. The design was practice driven, meaning that the research was intentionally conducted around planned program implementation and adaptations in order to gain rich quantitative and qualitative data on its feasibility and naturalistic implementation experiences and outcomes. Between September 2017 and February 2018, 30 classes from 23 centers run by 13 implementing organizations (partners) were recruited from 7 governorates of Lebanon: Akkar, North, Beqaa, Baalbek-Hermel, Mount Lebanon, South, and Nabatieh. Inclusion criteria for the partners included having the capacity to

1. conduct outreach activities and ensure attendance;
2. document the program implementation;
3. train facilitators;
4. ensure safe storage of tablets;
5. comply with War Child Holland's child safeguarding policies;
6. allow research activities and session observations; and
7. support scale-up.

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CWTL was implemented for one BLN cycle, the length and start date of which varied by partner and center (mean=12.3 weeks, range=7-17 weeks), due to the unstandardized nature of BLN design and implementation at that time. A rolling baseline and endline were used to accommodate the classes' differing implementation timelines.

PARTICIPANTS AND SAMPLING

We selected centers and classes nonrandomly and intentionally sought to include a range of regions and partners. Where multiple classes were conducted within one center during the implementation period, we selected one, two, or three classes for the research. We invited all eligible children in each class to take part in the research. Children were eligible if they were 10-14 years old and not currently enrolled in ALP or formal education. Children were ineligible if they displayed behavior that risked the safety of self, others, or learning materials; had hearing, speech, or vision impairment(s) that significantly limited their ability to listen to or view the game or to participate in assessments; or were unable to understand explanations in the game and learning sessions, as determined on a case-by-case basis by the research team. The quantitative sample (N=390; see Table 1 for demographic characteristics) consisted of 30 classes (mean size=13.9 children; range=2-23 children).

Table 1: Child, Parent, and Household Demographics

	Baseline sample		Girls		Boys	
	n	%	n	%	n	%
N total	390	100	184	47	206	53
Missing demographics (except region and gender)	2	0.5	1	0.5	1	0.5
Mean age (years)	11.6	--	11.5	--	11.6	--
Nationality						
<i>Syrian</i>	352	90.7	166	90.7	186	90.7
<i>Lebanese</i>	30	7.7	14	7.7	16	7.8
<i>Palestinian Syrian</i>	3	0.8	2	1.1	1	0.5
<i>Palestinian Lebanese</i>	2	0.5	1	0.5	1	0.5
<i>Other</i>	1	0.3	0	0.0	1	0.5
Highest grade completed						
<i>No schooling completed</i>	51	13.1	29	15.8	22	10.7
<i>Grade 1</i>	97	25.0	44	24.0	53	25.9
<i>Grade 2</i>	88	22.7	42	23.0	46	22.4
<i>Grade 3</i>	38	9.8	13	7.1	25	12.2
<i>Grade 4</i>	43	11.1	24	13.1	19	9.3

	Baseline sample		Girls		Boys	
	n	%	n	%	n	%
Grade 5	23	5.9	8	4.4	15	7.3
Grade 6 or above	9	2.3	5	2.7	4	2.0
Unknown or refused to answer	39	10.1	18	9.8	21	10.2
Child engaged in work ¹						
No	352	90.7	175	95.6	177	86.3
Yes	36	9.3	8	4.4	28	13.7
Child engaged in child care						
No	158	40.7	56	30.6	102	49.8
Yes	230	59.3	127	69.4	103	50.2
Housing type						
Camp	122	31.4	55	30.1	67	32.7
Rented house	104	26.8	53	29.0	51	24.9
Informal tented settlement	68	17.5	27	14.8	41	20.0
Rented room	62	16.0	33	18.0	29	14.1
Owned property	23	5.9	12	6.6	11	5.4
Living with family or friends	4	1.0	1	0.5	3	1.5
Living with host family	2	0.5	2	1.1	0	0.0
Other	3	0.8	0	0.0	3	1.5
Monthly household income (US\$)						
<\$299	260	67.0	112	61.2	148	72.2
\$300-\$599	95	24.5	49	26.8	46	22.4
\$600-\$899	19	4.9	15	8.2	4	2.0
\$900-\$1999	1	0.3	1	0.5	0	0.0
>\$2000	1	0.3	0	0.0	1	0.5
Unknown or refused to answer	12	3.1	6	3.3	6	2.9
	Mothers		Fathers			
	n	%	n	%		
N total	377	100.0	309	100.0		
Missing demographics	13	3.4	81	26.2		
Parent education						
No schooling completed	156	41.4	71	23.0		
Primary school (grades 1-5) ²	101	26.8	81	26.2		
Middle school (grades 6-9) ²	112	29.7	132	42.7		
High school (grades 10-12) ²	6	1.6	15	4.9		
Tertiary education ³	1	0.3	9	2.9		
Other	1	0.3	1	0.3		
Parent employment						
Homemaker	260	69.0	7	2.3		
Employed for wages ⁴	43	11.4	80	25.9		
Self-employed	10	2.7	59	19.1		

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	Mothers		Fathers	
	n	%	n	%
<i>Out of work</i> ⁵	29	7.7	97	31.4
<i>Retired</i>	3	0.8	1	0.3
<i>Studying</i>	2	0.5	0	0.0
<i>Unable to work</i>	13	3.4	47	15.2
<i>Other</i>	17	4.5	18	5.8

1 Anecdotal reports from implementing staff suggest that the actual number of children working is higher than reported by parents.

2 Completed some or all

3 Completed technical institute, some college credit, or a bachelor's degree

4 Full-time or part-time

5 Currently looking or not looking for work

Focus group discussions (FGDs; n=16) were conducted with children who participated in or completed a cycle of CWTL, their caregivers, and the program facilitators (see Table 2 for details on the qualitative sample). FGDs included between three and nine participants, and the discussions lasted 30 to 60 minutes. Due to the potentially sensitive nature of the content discussed, key informant interviews (KIIs; n=10) were conducted with children who dropped out of the program (defined as not attending any sessions three weeks or more before endline). KIIs (n=9) were also conducted with key partner staff members (see Table 2 for details). The participants were purposefully sampled by the facilitators and field supervisors to ensure a representative and mixed sample by gender, academic achievement, age, and perceived experience with the program. To account for differences between geographic locations, FGDs and KIIs were conducted across all implementation regions in Lebanon.

Table 2: Qualitative Sample Description

Type	n	Gender	Group size mean (range)	Governorates
FGDs				
Children	5	4 mixed; 1 all-female	6.6 (5-9)	A; N; B; ML; S
Parents	6	4 mixed; 2 all-female	5.7 (4-9)	A (n=2); N; B; ML; S
Facilitators	5	2 mixed; 3 all-female	4.3 (3-6)	A; N; B; ML; S
KIIs				
Program noncompleters ¹	10	4 girls, 6 boys	--	A; N; B; ML; S
Partner staff ²	9	3 women, 6 men	--	A; N; B; BH; ML; S

Note: FGDs=focus group discussions; KIIs=key informant interviews; A=Akkar; N=North; B=Beqaa; ML=Mount Lebanon; S=South; BH=Baalbek-Hermel

1 Defined as those who did not attend for three weeks or more before endline

2 Roles included center directors (n=2), education coordinators (n=2), center coordinators (n=3), and CWTL focal points (n=2).

FACILITATOR SELECTION AND TRAINING

The partners led the facilitator recruitment, so inclusion criteria for the role varied, but a cross-cutting prerequisite was previous experience working with children. Lebanese education specialists trained the facilitators on the delivery of CWTL, including basic tablet maintenance, behavior and classroom management, and how to foster a positive learning environment conducive to independent learning. The facilitators were trained to familiarize their class with the “steps to independence” and to encourage children to follow these steps when they did not understand a concept or task. We collected demographic and psychosocial wellbeing data from 21 facilitators who were mainly female (67%), under 30 years old (52%), and a mix of nationalities, including Lebanese (62%), Syrian (24%), Palestinians already based in Lebanon (10%), and Palestinians from Syria (5%).

PROCEDURES

Prior to the start of a BLN cycle at the participating centers, caregivers were invited to a CWTL information session led by the field supervisors, who obtained informed consent and collected demographics. Children were asked to provide their informed assent and subsequently invited to have baseline assessments taken. The facilitators’ demographics and baseline wellbeing data were collected at the same time.

We intended to start the CWTL program within three weeks of the baseline assessments, but in practice this varied. The average time between baseline and program start was three weeks. During the implementation, the center and War Child Holland field supervisors maintained close contact. It was planned that War Child Holland and the partner education specialists would conduct monthly observations of each class. The partners communicated with the War Child research team when their BLN cycle was coming to an end, and endline data collection was conducted with children and facilitators shortly before or after the end of the cycle.

The facilitators notified field supervisors when a child failed to attend the program for three weeks or more. Such children were later invited to participate in KIIs. Candidates for FGDs were approached during endline data collection and invited to participate, as were partner staff members. Informed consent and assent for participation in FGDs and KIIs was obtained. Each FGD was facilitated by a trained interviewer and a note-taker, and one interviewer conducted the KIIs. All interviews were audio-recorded.

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All assessments were conducted in one-to-one interviews with trained research assistants, who read scripted questions and recorded responses using Kobo Toolbox. The trainings included a six-day quantitative training and a four-day qualitative training, and a refresher training prior to endline.

OUTCOME AND FIDELITY MEASURES

PRIMARY OUTCOME

Our primary outcome was numeracy competency, which was measured by a numeracy test designed and reviewed by education and academic test development experts. The numeracy scores and change in scores in this evaluation were both normally distributed, and a validation study of the test is ongoing. The test assessed mastery-level competency at the grade 1-3 levels in number recognition, quantity discrimination, number and place value, addition and subtraction, multiplication and division, and time and shape. The total possible score was 202 points. Skip rules were implemented so that, if a child scored less than 10 percent on a topic at one grade level, they would not progress to a higher grade level on that topic. To prevent testing effects, two versions of the test were developed and counterbalanced between students at baseline and endline. A children's booklet that contained the questions was used as an aid.

SECONDARY OUTCOMES

Secondary outcomes were the scores on psychosocial wellbeing measures. We followed a cultural adaptation process that involved piloting the measures with children to adjust the language and content as necessary to increase understanding and relevance (Van Ommeren et al. 1999).

To measure children's emotional and psychological wellbeing, we used the Stirling Children's Wellbeing Scale, a positively worded, 12-item self-report measure that employs a 5-point Likert scale (Liddle and Carter 2015). It has good internal reliability ($\alpha=0.82-0.85$), good test-retest reliability ($r=0.75$), and good concurrent validity with measures of self-esteem ($r=0.69$) and wellbeing ($r=0.74$) (Liddle and Carter 2015). We measured children's emotional and behavioral problems with the 35-item Pediatric Symptom Checklist, using a 3-point Likert scale (Jellinek et al. 1988).

To measure children's self-esteem, we used the Moray Self-Esteem Scale, a ten-item self-report measure with a four-point Likert scale. The self-esteem scale is the Moray Council's adaptation of the Rosenberg Self-Esteem Scale, which is intended to be used with children starting at age seven. Validation and reliability data on the Moray version are not available; however, the Rosenberg version is widely used and demonstrates good internal reliability (the average from 52 countries was $\alpha=0.81$; in Lebanon it was $\alpha=0.82$), cross-cultural applicability, and test-retest reliability in English at two weeks ($r=0.85$) (Schmitt and Allik 2005; Silber and Tippett 1965).

We used the Kessler Psychological Distress Scale (K10) and the Warwick-Edinburgh Mental Wellbeing Scale to measure facilitators' levels of distress and wellbeing. The K10 is a 10-item self-report measure of distress with a 5-point Likert scale that is used in over 30 countries. In Arabic, it has shown strong internal reliability ($\alpha=0.88$) (Easton et al. 2017). The Warwick-Edinburgh scale is a 14-item self-report scale of mental wellbeing that uses a 5-point Likert scale; it has demonstrated good internal consistency ($\alpha=0.72$) in Lebanon (Tennant et al. 2007; Miller et al. 2020).

PROCESS DATA

The CWTL game generates log data; whenever an activity occurs, such as a video being watched or a minigame opened, data are stored in a log file. These data include the minigame level and outcome (i.e., successful or unsuccessful), date and time, and event duration. We aggregated these data to form variables of interest: the number of minigames played, total gameplay time, number of days played, and ranks in class by level in the game and rate of learning. The rank by level was computed by counting the total number of distinct game levels reached in a class, then assigning the children with the highest level as "1," the second highest as "2," and so on. Rank by rate of learning was computed in the same way, except that rank was determined by the students' rate of progression in a certain class, calculated as end level minus start level.

QUALITATIVE DATA

Topic guides for the KIIs and FGDs were developed in English, translated into Modern Standard Arabic, and then into colloquial Arabic. All FGD topic guides followed a similar format and included questions on prior experience with technology; positive and negative experiences with CWTL; the degree of ease or difficulty in participating; use and understanding of CWTL; CWTL's

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perceived impact on learning, psychological wellbeing, and social relationships; and suggested improvements. The KII topic guide for program noncompleters additionally included their reasons for discontinuing the program. The KII topic guide for partner staff members covered their experience of the program, opinions on its effectiveness and the community's perception, reflections on the format and delivery mode, hypothesized barriers and facilitating factors for scaling, and suggested improvements. The interviews were audio-recorded and transcribed verbatim, then translated into English by certified translators. All transcripts and translations were checked for quality and accuracy by a bilingual member of the research team.

IMPLEMENTATION FIDELITY

We designed a CWTL session observation form to assess the fidelity of implementation. It included items on class composition, timing, session components, and children's and facilitators' behavior. A fidelity score was calculated by summing the total score of three items:

1. The number of tablets (one point was awarded if there was one tablet per child)
2. The timing (one point was awarded if between 25 and 45 minutes were spent on the tablets)
3. Implementation of the steps to independence (one point was awarded if the steps were followed)

The observations were conducted by War Child Holland and its partner education specialists. Interrater reliability among the three observers was 79.1 percent, based on two pairs of observations.

ANALYSIS

STATISTICAL ANALYSES

We conducted the primary analysis to determine the change in numeracy competency following one BLN cycle of CWTL. A linear mixed-effect model was fitted on the intent-to-treat (ITT) sample (N=390), with a continuous score on the numeracy assessment as the dependent variable and time (pre- and post-CWTL) as the predictor variable. While ITT usually refers to a randomized

controlled trial, we define our ITT sample as including the data of all children who enrolled and completed baseline assessments, regardless of whether they completed the program or the endline assessments. Missing data were handled using restricted maximum likelihood. Corrections for clusters (random intercept) were added at the child level and the class level. We included covariates of age, gender, highest grade completed, whether the child provided child care for their siblings, mothers' and fathers' education levels, household income, and the year of arrival in Lebanon. Type II Wald Chi-square tests and bootstrapped confidence intervals were used to determine significance. Values of $p < 0.05$ were interpreted as statistically significant. To quantify the magnitude of change, we calculated Cohen's d for each outcome by dividing the mean difference in raw scores (baseline to endline) by the baseline standard deviation. Note that these effect size estimates do not take into account the random variance estimated by the model, and therefore must be interpreted with caution.

We conducted secondary analyses to analyze changes in children's wellbeing using ITT and three linear mixed-effect models, with continuous scores in psychosocial wellbeing outcomes (wellbeing, self-esteem, and psychological symptoms) as dependent variables. Cluster corrections and covariates were as per above. We repeated the primary and secondary analyses using a per-protocol sample, defined as children who completed both baseline and endline and attended more than 40 percent of the CWTL sessions available to them ($n=196$). However, since these analyses did not change our interpretation of the results, only the ITT results are reported here.

EXPLORATORY ANALYSES

We also carried out a series of exploratory analyses. However, the statistical power for these analyses was low, so their function was to generate rather than confirm hypotheses.

Facilitator wellbeing: We conducted Wilcoxon signed-rank tests on the K10 and Warwick-Edinburgh scale scores to assess pre/post change in facilitator distress and wellbeing over time.

Predictors of dropout: We used logistic regression to identify predictors of dropout and included the following variables in the model: class, gender, age, whether the child worked or cared for siblings, household income, last school grade completed (if any), mothers' and fathers' education level, mothers' and fathers'

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employment status, whether the father lived in the home, rank by level, and baseline psychological outcomes (wellbeing, psychological symptoms, self-esteem).

Predictors of poor attendance: We defined a minimally adequate rate of attendance for the CWTL program as 40 percent over the cycle. This was a consensus decision by the CWTL program director and the Lebanon program manager, who took the common attendance rates in the BLN programs in this context into consideration. We used bias-reducing Firth logistic regression analyses (Firth 1993) to explore whether demographic, baseline (numeracy competency and psychosocial wellbeing), or implementation variables predict less than minimally adequate attendance. We tested the same variables as in the dropout analysis.

QUALITATIVE ANALYSIS

Three authors carried out a framework analysis—a combination of content analysis with a data visualization tool—on the KII and FGD transcripts (Gale et al. 2013).¹ Interrater reliability among the three coders was $\kappa=0.82$, which was deemed “strong” (McHugh 2012). Following a mixed methods approach, we compared qualitative and quantitative data from the children and facilitators and qualitative data from other stakeholders, with the aim of gaining a rich understanding of the experience, process, and outcomes of the program.

ETHICS

Ethical approval was obtained from the Institutional Review Board of the American Institutes for Research. We protected participant confidentiality by using participant codes instead of names. We trained the research assistants, facilitators, and key partner staff members to recognize and report concerns about child protection and adverse events. The core research team discussed these reports on a monthly basis and agreed on appropriate action, where necessary.

RESULTS

A total of 390 children (47% female) were enrolled in the study at baseline, 82 of whom (21%) did not complete the program (defined as not attending for at least 21 consecutive days prior to endline); 82 children (21%) did not attend a single

¹ These three authors are Jasmine S. Turner, Nisreen Ibrahim, and Eyad Hallak.

session. At endline, 286 children (49% female) remained in the study, indicating an attrition rate of 27 percent (n=104; see Figure 2). No major adverse events were reported. We grouped our findings into four subsections, which include our quantitative findings and nine qualitative themes (see Figure 3).

Figure 2: Participant Flow Chart

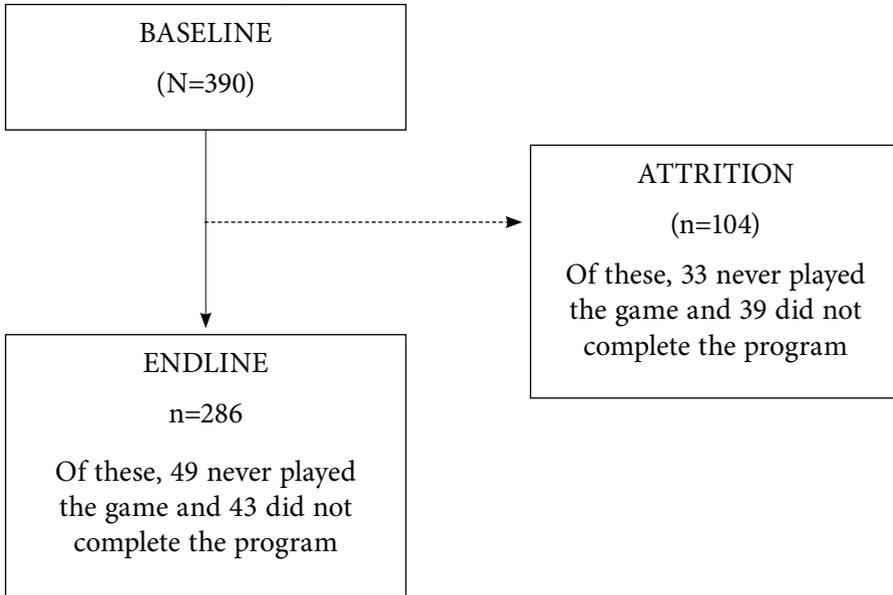
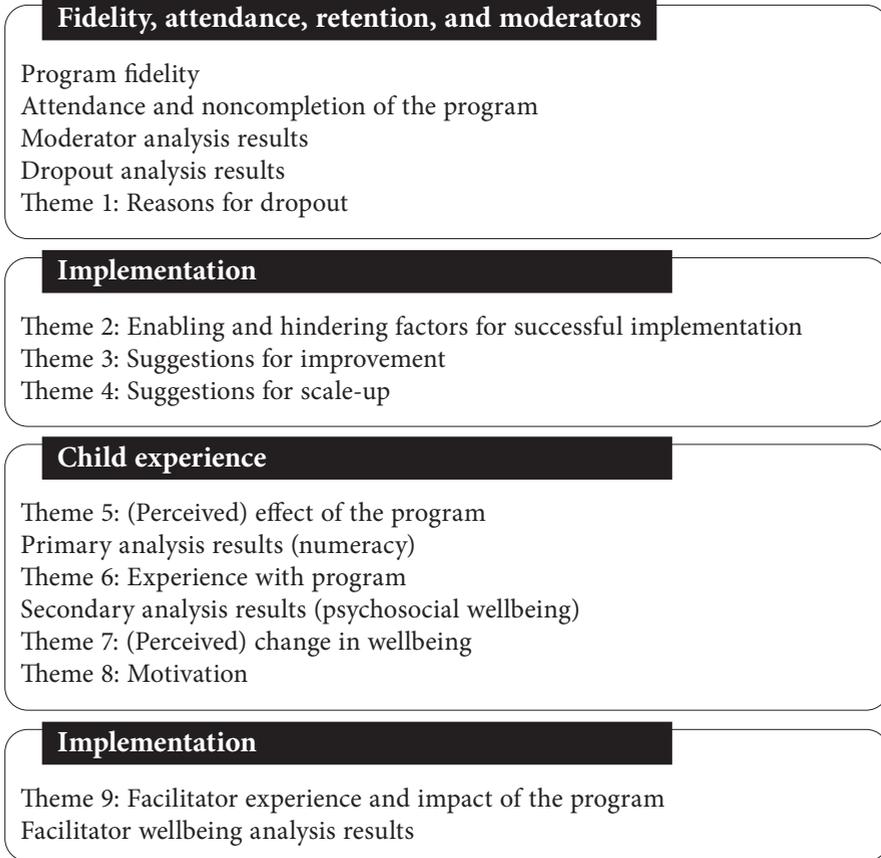


Figure 3: Categorization of Mixed Methods Results



FIDELITY, ATTENDANCE, AND RETENTION

Only 60 percent of the children completed the program; 20 percent started but did not complete it, and 20 percent enrolled but did not attend a single session. Average attendance was relatively low in absolute terms ($M=46\%$, equivalent to two days per week). Rank by level, which ranked children in each class according to the level they were at in the game, was significantly associated ($p<0.05$) with attendance, such that, with each lower rank, a child was 1.72 times more likely to have less than minimally adequate attendance, or lower than 40 percent. However, it is important to note that the causality of this relationship is unknown.

A total of 104 children who completed baseline did not complete the endline assessment (27% of baseline sample). The reason for dropout most often cited was leaving the area ($n=35$), with at least a quarter of these families specifying that they were returning to Syria. Children in two specific classes—between September 2017

and February 2018, 30 classes from 23 centers run by 13 implementing organizations were recruited—had higher odds of dropping out (odds ratio [OR]=21.62, $p<0.01$; $OR=10.50$, $p<0.05$); however, 75 percent of the combined dropouts for these classes was reportedly because children’s families moved away. Twelve children (12%) dropped out because they enrolled in formal education—a positive finding—which they also referred to in the FGDs and KIIs (Theme 1). The logistic regression analyses indicated that children who worked—13 percent of those who dropped out—were more than twice as likely to drop out of the CWTL program than those who did not work ($OR=2.17$, $p<0.05$). Dropout due to child labor was also cited frequently in the qualitative data by all participant types and across all regions. One center coordinator described child labor as “the most difficult thing we face.” One child who dropped out explained that his decision to stop the program in order to work was voluntary: “It’s not that my parents forced me to . . . I want to help my parents.” Of those who dropped out due to work, 62 percent were male.

Other reasons reported for dropout included children’s illness (6%), a child’s withdrawn assent (4%), family obligations (2%), and permission withdrawn by husband/fiancé (2%) or father (1%). In line with the last two reasons, one girl described how she had been pressured to stop attending CWTL by older men in the community because she was “too old” for education (Theme 1). The reason for dropout was unknown for 28 percent of the cases. Additional reasons given in the FGDs and KIIs included dissatisfaction with the repetition in the minigames and the amount of time spent fixing problems with the tablets, challenges getting to the center, issues with classmates, and a desire for incentives to participate. Although gender was not found to be significantly associated with dropout, it is important to recognize that gender is intrinsically linked to some of the reasons for dropout reported above.

Monthly session observations were planned for each class; however, this was not achieved, due to the prioritization of outreach, data collection, and partner support. The mean fidelity score was 2.43 out of 3 (equivalent to 81%; $SD=0.8$; see Table 3 below for the breakdown of scores per item) based on 44 observations (approximately 2.4% of sessions) of 22 facilitators in 20 centers (range=1-7 observations per facilitator). In all but one of the sessions observed, children spent the correct amount of time on the tablets; however, there were not enough tablets for all the children in a quarter of the sessions observed. In two-thirds of the sessions, the steps to independence were implemented correctly. In many of the sessions where the steps to independence were not followed, comments in the observation form indicated that facilitators frequently stepped in too early to help the children.

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Table 3: Scores on Fidelity Items

Fidelity	Yes	No
Enough tablets	33 (75%)	11 (25%)
Adequate time on tablets	43 (98%)	1 (2%)
Implementation of steps to independence ¹	29 (66%)	13 (30%)

¹ Two observations had missing data and were excluded.

IMPLEMENTATION

The FGD and KII participants discussed what they perceived to be enabling and hindering factors for successful implementation, recommendations for program improvement, and ideas for scale-up. Following some initial hesitation about using technology in education, CWTL was embraced because it was felt to be “in line with the era of development and technology” (center director) and to support the rights of refugee students to “be like everyone else” (center coordinator) by exposing them to technology (Theme 2). Many facilitators and partner staff members felt that use of the game should complement facilitator-led teaching: “If you want it to succeed, let it be in parallel with papers and pens” (education coordinator; Themes 3 and 9). Parents often demonstrated limited familiarity with the program and a lack of understanding of its methods, but also expressed a desire to change this and to be able to support their children’s learning in the home more effectively (Theme 2). Integrating the program into the Lebanese formal education system was the most frequent suggestion for scale-up, along with more promotion of and communication about CWTL, and about the importance of education to boost awareness, buy-in, and uptake of the CWTL program by parents, communities, and other NGOs (Theme 4).

The partner staff members and facilitators commented favorably on the partnership with War Child Holland with respect to information technology and facilitator trainings, regular communication, and the “very responsive” field supervisors (education coordinator; Theme 2). Partner staff members advocated for continued scale-up through partnerships with international and local NGOs (Theme 4). The main recommendations and requests for improving the partnership were reduced tablet maintenance time, more exposure to the game for facilitators and partner staff members prior to the program rollout, improved coordination of outreach and rollout, and the provision of incentives to increase enrollment and retention (Theme 3).

The centers were generally perceived as very accessible, which was facilitated by the provision of transportation by War Child Holland and the partners (Theme 2). The classroom environment was positively described as “calm” (child) and somewhere where a child can “find a wider learning” (father; Theme 2). However, as mentioned previously, the facilitators indicated that they would find increased instruction in classroom and behavior management beneficial (Themes 9 and 3). Suggestions on how to improve the program further included separating the class by age and/or ability and extending access to the program to younger children (Theme 3).

Additional suggested improvements to the game, program design, and implementation included having more succinct and enthusiastic instructional videos, less-repetitive minigames, an extended range of minigame levels (both easier and harder levels were requested), and data-driven progress reports to facilitate individualized support (Theme 3). Suggestions were made to both lengthen and shorten the duration of the sessions, and requests were voiced for additional games to teach Arabic, French, English, science, and the humanities (Theme 3).

CHILD EXPERIENCE

Children, facilitators, caregivers, and partner staff members perceived improvements in numeracy competency: “It benefitted me with a lot of things. I now have a better understanding in addition and subtraction and such things, and now, any question, I can know right away” (child; Theme 5). Participants also attributed other improvements to the program, including comprehension and usage of Modern Standard Arabic, technological literacy, and skills key to learning, such as attention, concentration, problem-solving, self-discipline, and perseverance (Theme 5). The quantitative results supported this and indicated a significant increase in numeracy competency between baseline and endline ($\chi^2(1)=125.77, p<0.001, d=0.3$; see Figure 3 and Table 4 for details). Two covariates were significant, including gender ($\chi^2(1)=4.06, p<0.05$), with boys scoring higher overall (average mean difference=12.61), and age ($\chi^2(1)=13.36, p<0.001$), with a linear increase in mean score with increasing age.

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Figure 4: Mean Numeracy Score Pre- and Post-CWTL

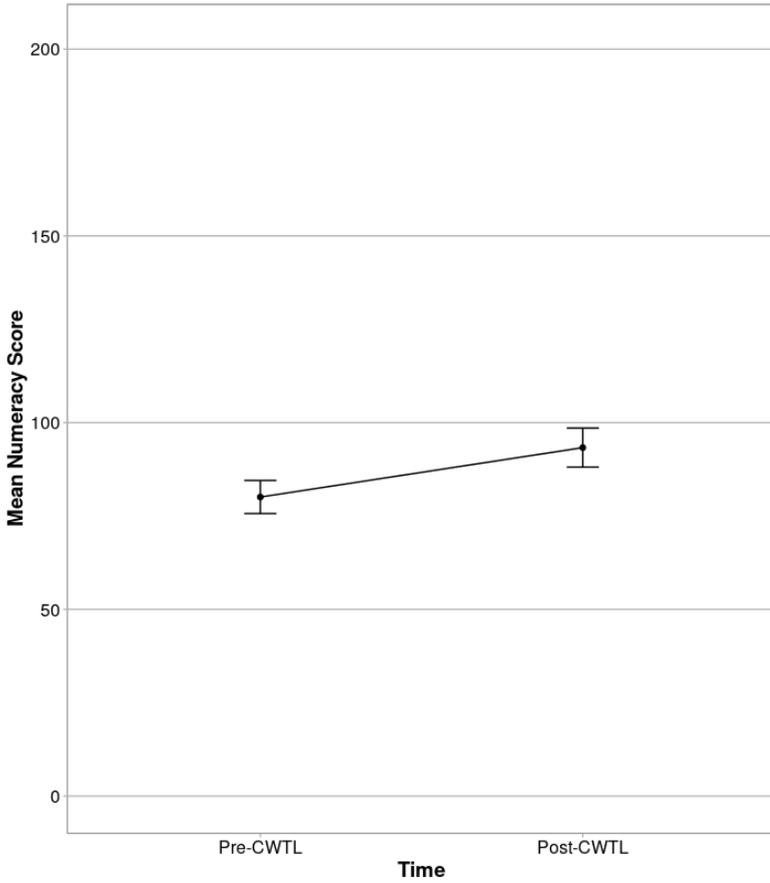


Table 4: Intention-to-Treat Results for Numeracy and Psychosocial Wellbeing Outcomes

Measure	Pre-CWTL		Pre-CWTL		χ^2	Coefficient
	M	SD	M	SD		
Numeracy ¹	80.08	44.28	93.3 ¹	44.96	125.77***	-7.31
Moray Self-Esteem Scale	3.03 ²	0.43	3.16 ²	0.42	6.34*	-0.05
Pediatric Symptoms Checklist	0.64 ²	0.25	0.59 ²	0.26	8.87**	-0.03
Stirling Wellbeing Scale	3.81 ²	0.62	3.90 ²	0.68	0.89	-0.02

1 Out of a maximum 202 points

2 Item mean

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; means are unadjusted for clustering or covariates

In terms of experience with the program, children commented favorably on the game, facilitators, and tablets (Theme 6). The children particularly liked the autonomy the game afforded, in terms of choosing characters within the game and being able to listen to instructions when they wanted. Over time, however, playing the same minigames repeatedly became boring and tablet malfunction was frustrating. Increased motivation to learn emerged as a strong theme and was attributed mainly to the tablets and the desire to discover the game world. One facilitator explained that “[the children] wanted to see the end of the game. They wanted to reach a goal” (Theme 8).

The facilitators hypothesized that a perceived increase in self-esteem was linked to the independent approach to learning: “[The children] start to have confidence in knowing that they found it and solved it on their own. ‘I found out . . . without anybody’s help. I found it on my own.’ There’s a lot of . . . confidence. There’s also more self-reliance” (facilitator; Theme 7). This was corroborated by a statistically significant increase in self-esteem ($\chi^2(1)=6.34, p<0.05, d=0.3$). Children were observed to have become “more at ease” (parent) and “relaxed psychologically” (facilitator) after starting CWTL, and the results indicated a significant decrease in psychological symptoms ($\chi^2(1)=8.87, p<0.01, d=0.2$). There was no significant change in wellbeing scores over time. We analyzed the psychometric properties of these measures using confirmatory factor analyses and calculating omega3 (ω_3) as a measure of internal consistency. We found a good fit for a one-factor model (indicating unidimensionality) for each measure, and we found acceptable internal consistency for wellbeing ($\omega_3=0.84$) and psychological symptoms ($\omega_3=0.87$). However, the self-esteem measure had less than acceptable internal consistency ($\omega_3=0.69$); therefore, findings related to self-esteem should be interpreted with caution in this sample of children

The majority of participants noted strengthened social bonds and collaboration among the children, the development of friendships, and healthy competition using the minigames (Theme 7). As one facilitator reflected, “I felt that my students who had something aggressive in their personalities changed after two weeks of their being in the center. They started to talk in the whole break about what they did in the game. I heard one of them telling the other, ‘When you reach this level, I will help you. Don’t be afraid! If you are making any mistake, I can help you, as I understand it well.’” However, overall qualitative evidence on the perceived social effects of the program was mixed, with some participants commenting that teasing and bullying occurred in some classes and that the celebrated achievements of some made those at lower levels in the game sometimes

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feel inferior. These challenges could have contributed to the mixed quantitative findings on wellbeing outcomes.

FACILITATOR EXPERIENCE

A key finding from the qualitative analysis was that, on the whole, the facilitators were well liked and they fostered positive, warm relationships with the children that led, ultimately, to increased enjoyment of the program by both the children and the facilitators. Another finding was that, while the facilitators found the tablet management relatively straightforward, many expressed a lack of clarity about their role versus the role of the tablet in the context of an ed tech program. The facilitators wanted a more active teaching role and felt that they would benefit from additional training on behavior management. This lack of clarity and frustration linked to feeling like passive observers could have contributed to the lack of significant change in mental wellbeing measured over time, although this could also be due to a lack of power or other unmeasured factors.

In the FGDs, facilitators reported that the program had a positive impact on them (Theme 9). Several described an increase in their empathy and understanding of the contexts and experiences of the children they worked with; as one facilitator said, “You learn a lot . . . I learned from them maybe more than they did from me.” Furthermore, facilitators commented that their participation in CWTL had taught them “patience” and to be “relaxed” and “calm,” which is in line with the significant reduction in distress scores ($n=20$; $K10$ mean difference= -2.75 , $r=0.377$, $p<0.05$). Conversely, we saw no significant quantitative change in facilitator wellbeing.

DISCUSSION

The results of our mixed methods evaluation support the feasibility of using a digital game-based program, Can't Wait to Learn, for out-of-school children in a conflict-affected country. Our increased understanding of the children's lived experience of the program and desired improvements will enable the team to address challenges associated with attendance, retention, and successful implementation. This will increase the ability of CWTL to help close the education gap in Lebanon. Despite low attendance levels, we found statistically significant increases over time in children's numeracy competency and self-esteem, and a statistically significant reduction over time in children's psychological symptoms. Participants and key stakeholders, including facilitators, parents, and partner staff members, attributed

these changes to the program. Causality cannot be attributed solely to CWTL, due to the lack of a comparison group, but it is plausible that the improvements in numeracy and wellbeing are at least partially due to CWTL, as learning across such a diverse sample would not have occurred without pedagogical instruction.

Program attendance was lower than anticipated, with only 58 percent of children completing what we defined as a minimally adequate number (more than 40%) of sessions. On the one hand, we can argue that this strengthens evidence for the program's possible positive effects, in that learning outcomes significantly increased over time despite low attendance. On the other hand, there is clearly room for improvement. Fully powered analyses of predictors of attendance and dropout would support the development of additional strategies to increase attendance and retention. The qualitative and quantitative exploration of the challenges to consistent attendance and retention and of ways to overcome them to increase the potency of the program have implications for the wider education sector, as well as for CWTL specifically. As suggested by partner staff members, increased dialogue with parents and the wider community about education, including the role technology can play, could stimulate increased buy-in and address gender-specific reasons for dropout. A more flexible session format (e.g., time of day, session length, division by age or ability) could help with class and behavior management and ultimately increase learning efficiency. Finally, the many reports of families moving within Lebanon or returning to Syria reaffirm the need for the certification of nonformal education programs to facilitate and encourage children's integration into formal education systems.

Our study also supports the feasibility of using nonprofessional facilitators to overcome shortages of qualified teachers, although our findings also suggest the need for some changes to their originally envisaged role in the program; namely, it should be limited to classroom and tablet management. Key findings are the degree to which the facilitators affected children's experience of the program and the program's described effect on the facilitators. It is possible that, while it was feasible to deliver the program through nonprofessional facilitators, a more pedagogical role could further boost the children's positive experiences and psychological outcomes, and those of the facilitators themselves, without requiring substantial additional training (Islam and Grönlund 2016; Tauson and Stannard 2018). Having teacher-led scaffolding or adult support in parallel with technology has been shown to produce more sustained learning, in part due to a human's ability to differentiate between a mistake and a lack of understanding, which a computer program cannot do (Cayton-Hodges, Feng, and Pan 2015). As indicated by our data on the fidelity of implementation, in one-third of the sessions

we observed, the facilitators provided direct instruction instead of encouraging children to use the steps to independence. This additional support may have affected children's learning differentially; therefore, the program design and future studies should focus on harnessing the facilitators' potential and identifying their optimal level of involvement for the children's long-term academic progress.

In line with previous research, the significant improvement in numeracy scores ($d=0.3$), combined with the reported positive experiences with the program, point to the potential of a digital game-based learning program to meet the heterogeneous education needs of out-of-school children (Pitchford 2015; Muralidharan et al. 2016; McEwan 2015; Tauson and Stannard 2018; Sirin et al. 2018). Consistent with self-determination theory, the reported increase in motivation and skills such as problem-solving and concentration suggests that the game may generate self-determination and intrinsic motivation to some extent, which facilitates learning (Eseryel et al. 2014). However, reports of boredom and frustration, repetition, and minigames that were too easy or too difficult suggest that the game does not yet stay within all children's zone of proximal development (Csikszentmihalyi 1990; Vygotsky 1978). To address this, and in line with recommendations from the study participants, refinements to the game design, including shorter, more enthusiastic videos, more permitted errors in a streak, and less repetition, have been made and applied to subsequent iterations of CWTL. Other improvements to the game design, such as directing children to repeat content when necessary, are currently being investigated.

The significant improvement in self-esteem and psychological symptoms and the self-reported and observed positive psychological and social effects on children suggest that participation in CWTL may have a positive influence on psychosocial outcomes. It is plausible that being engaged in and celebrating the learning of new concepts and skills, reinforced by in-game rewards upon successful completion of minigames, could have a positive effect on wellbeing, which is in line with existing evidence on the positive impact academic learning has on psychosocial wellbeing (Burde et al. 2015; Ryan and Deci 2020; Winthrop and Kirk 2008). Although current evidence on the relationship between ed tech programs and children's wellbeing is mixed, our findings support a positive relationship that merits further investigation (Dunn, Bundy, and Woodrow 2012; Spitzer 2014; Tauson and Stannard 2018).

We recognize several limitations to this study and are addressing them in subsequent studies. First, the lack of a control group precludes claims of causality; therefore, we have conducted quasi-experimental studies in Sudan and Jordan using active comparison groups (Brown et al. 2020; de Hoop et al. under review)

and a randomized controlled trial is being prepared. Second, although the scores and the change in scores of the numeracy assessment were normally distributed, further evidence of the validity of the assessment is required; therefore, we are currently undertaking a validation study. The assessment was developed to cover the Lebanese curriculum and to be more sensitive to change than existing measures, but this limits the comparability of CWTL to other education programs. Third, although it was originally intended as a primary outcome, data on the transition to state-run accelerated and formal education programs were not systematically collected. This was due to a change to, and lack of clarity on, the eligibility criteria shortly after the study began. Fourth, the use of Modern Standard Arabic in the numeracy assessments may have had implications for the children's comprehension, especially for those with little or no prior schooling. However, it was necessary to ensure the reliability of the data, as the Arabic dialects spoken by the children varied. Finally, although an attrition analysis showed no systematic reasons for dropout, we cannot rule out selection bias in the sample; a randomized controlled trial with random sampling will be necessary to ensure a representative sample.

In conclusion, our findings support the feasibility of using ed tech programs, such as CWTL, to meet the education needs of out-of-school children in Lebanon. We found promising measured and reported improvements in numeracy outcomes, improvements in psychosocial outcomes, and high engagement, motivation, and enjoyment of the program. These findings suggest the potential of such programs to address children's compromised access to quality education in humanitarian settings and to mitigate the negative consequences of conflict. The findings suggest that there is a place for technology in the humanitarian education response, but also that technology should be considered just one of the multiple components that comprise a successful education program. We identified key challenges in ensuring children's attendance and in enabling the facilitators to have a clear role in scaffolding learning from the game. The recommendations from this study have informed subsequent implementation of CWTL in Jordan, Sudan, Uganda, Bangladesh, and Chad, as well as more rigorous evaluations to determine its impact and the optimal implementation quality frameworks. Ongoing research aims to understand how CWTL, and ed tech programs more generally, can be adapted to different contexts and needs and can be scaled-up to increase access to and the quality of education in conflict-affected settings.

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THE ROLE OF TECHNICAL AND VOCATIONAL EDUCATION IN SOCIAL REINTEGRATION: INSIGHTS FROM COLOMBIAN EX-COMBATANTS

MARIA PAULINA ARANGO-FERNÁNDEZ AND
STEPHANIE SIMMONS ZUILKOWSKI

ABSTRACT

Reintegration programs for ex-combatants around the globe promote their technical and vocational education and training (TVET). The aim is to help them develop skills, assume new social roles, and gain community acceptance, yet the experiences and perceptions of the ex-combatants who participate in these programs have been little explored. Thus, it is not known whether this group finds access to TVET useful in building new social networks, which is a critical factor in preventing further violence and achieving social cohesion. This in-depth interview study with female and male ex-combatants from Medellín, Colombia, who are at various stages of TVET engagement examined their perceptions of whether and how TVET contributed to their social reintegration. The findings illustrate that some forms of TVET promoted psychosocial recovery and helped to build social bonds, whereas other types reinforced isolation and segregation. This study also found that the TVET programs overlooked the ex-combatants' limitations on socializing that were imposed by their violent environments and feelings of stigmatization. These findings suggest a need to complement education programs for economic development with approaches that help develop social bonds and trust between ex-combatants and their communities.

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INTRODUCTION

A major challenge to achieving stabilization in postconflict contexts and fragile states is the reintegration of ex-combatants into civilian society. In disarmament, demobilization, and reintegration (DDR) processes, reintegration is the phase in which ex-combatants should acquire civilian status, secure sustainable employment and a steady income (UN Inter-Agency Working Group on Disarmament, Demobilization and Reintegration 2006), and gain community acceptance (Bowd and Özerdem 2013). This long-term process, which is critical to sustainable peacebuilding, is the most difficult part of DDR (Humphreys and Weinstein 2005).

International development agencies and governments use technical and vocational education and training (TVET) programs to rehabilitate ex-combatants and reintegrate them into civilian life. Support for these programs is based on three main assumptions: first, that employment programs will address the grievances that were the root causes of a conflict; second, that having a legal livelihood will reduce ex-combatants' incentive to re-engage in violence and crime (Blattman and Ralston 2015; Simpson 2018); and, third, that ex-combatants will interact with different social groups in their education institutions and workplaces and that this contact will foster mutual understanding and examination of stereotypes, which will help build trust (International Labour Organization et al. 2016). However, rigorous evidence that supports these assumptions is rare (Blattman and Annan 2016).

There is little agreement about the conceptual definition of social reintegration. Various empirical studies have interpreted it as reconciliation (Theidon 2007), economic reintegration (Özerdem 2012), ex-combatants' involvement in community organizations (Kaplan and Nussio 2015), and families' and neighbors' acceptance of ex-combatants (Pugel 2007). In this study, we define social reintegration as the process by which ex-combatants establish networks of trust and collaboration with civilians (Putnam 2001). Social reintegration is the primary pillar of economic and political reintegration, as building bonds with community members may enable ex-combatants to feel accepted, envision a positive future, engage in civilian activities, and reduce their risk of re-engaging with an armed group (Özerdem 2012; Nussio 2011). Therefore, understanding how ex-combatants establish ties with actors at education institutions, in the workplace, and in their neighborhoods, and the consequences of these social interactions, is critical. However, little is known about whether ex-combatants find access to TVET programs useful in building new social networks and why, despite TVET implementation efforts,

the programs have not produced the expected results in terms of facilitating reintegration (Humphreys and Weinstein 2005).

Extending Torjesen's (2013) theory of ex-combatant reintegration based on stakeholders' perspectives and trajectories, this in-depth interview study, which is focused on ex-combatants' voices and experiences, examines the perceived effects of TVET interventions on their socialization. The question this study seeks to answer is, What role, if any, does participation in TVET as an institution play in developing ex-combatants' new social bonds and networks to facilitate their reintegration? The bottom-up approach of this study, which often is missing in the policy-centered DDR literature, helps clarify the drivers and obstacles of ex-combatants' social reintegration and enables education program developers to respond more effectively to participants' needs.

This focus on the social sphere of TVET brings a new perspective to education for reintegration, in that studies about education's potential to contribute to socialization, peacebuilding, political participation, and reconciliation following conflict have focused primarily on schools (Bellino, Paulson, and Anderson Worden 2017; Loader et al. 2018), whereas studies of TVET have evaluated whether the programs increase participants' employment and raise their income (UNESCO-UNEVOC 2007). This study offers a more holistic approach by exploring TVET's potential to promote social cohesion in divided societies.

In this paper, we first provide a brief review of the literature linking DDR with TVET and social reintegration. We next give the background of DDR in Colombia, with a focus on Medellín, and go on to describe our research design and data. We then offer a three-part presentation of our results at the individual, programmatic, and macro levels. In the paper's fifth section, we conclude with a discussion of our findings and the implications for education programs seeking to successfully reintegrate ex-combatants into society, in Colombia and beyond.

REINTEGRATION, EDUCATION, AND SOCIAL NETWORKS

DDR, and the role TVET plays in it, has evolved over time. First-generation DDR focused on disarming active combatants and discharging them from the armed forces (UN Inter-Agency Working Group on Disarmament, Demobilization and Reintegration 2006). Poverty was considered the prime incentive for youth to join armed groups, so in exchange for laying down their arms, ex-combatants

were provided with a modest income or employment opportunities, vocational training, and microbusiness grants (IOM 2019). Assuming that employment programs promote economic self-sufficiency (Ralston 2014), DDR programmers offered TVET to ex-combatants, their aim being that providing a legal livelihood would reduce ex-combatants' grievances and incentives to re-engage in violence and crime (Blattman and Ralston 2015). First-generation DDR usually excluded the women who provided support to the military as cooks or sexual partners, but did not carry arms. However, critics of this approach showed that these women required assistance because, upon their return from war, they were more ostracized than the men, and many needed specialized reintegration assistance after suffering gender-based violence (Annan and Brier 2010).

Second-generation DDR acknowledges that, while a central focus, ex-combatants' economic reintegration is not sufficient for them to achieve success. Therefore, DDR's current community-based reintegration perspective focuses on rebuilding the social bonds between receptive communities and ex-combatants. In order to promote broad development and dispel the idea that ex-fighters are rewarded while their victims are left behind, TVET programs target both ex-combatants and communities affected by conflict (UN Inter-Agency Working Group on Disarmament, Demobilization and Reintegration 2014). These programs expect that ex-combatants will interact with different social groups in TVET institutions and workplaces, and that this contact and dialogue will foster trust (International Labour Organization et al. 2016). Second-generation DDR also targets female ex-combatants (UN Inter-Agency Working Group on Disarmament, Demobilization and Reintegration 2014), which is in part the result of pressure from the UN Women, Peace, and Security resolution that encourages all those involved in DDR to consider the different needs of female and male ex-combatants, and to identify women as constructive agents of peace, security, and postconflict reconstruction (UN Women 2017).

Following social capital theory, according to which participation in civic life builds a foundation of cooperation and trust among citizens (Putnam 2001), this study identifies whether ex-combatants' interactions with peers, teachers, and the staff of the *Agencia para la Reincorporación y la Normalización* (Agency for Reintegration and Normalization, or ARN) at TVET institutions promote or limit their new social connections. It also examines whether going through TVET programs facilitates ex-combatants' participation in the job market and in their communities, which would enable them to participate as members of civil society. The study of bonding between ex-combatants and civilians helps

to identify whether education programs facilitate the development of networks based on agreed-to norms and/or establish the collaborative relationships that are the driving force in rebuilding the social fabric.

THE COLOMBIAN CONTEXT

Colombia is a middle-income country where more than 80 percent of the population resides in cities (World Bank 2017a). It is one of the oldest democracies in Latin America, but poverty and inequality limit development opportunities for large segments of the population (World Bank 2017b). Socioeconomic disparities and political exclusion are the root causes of a long-running conflict. At present, Colombia is simultaneously a host to conflict, transitional, and postconflict conditions.

Colombia's civil war is the longest-running armed conflict in the Western Hemisphere. Fifty years of conflict have resulted in more than 220,000 deaths, 25,000 disappearances, 5-6 million people internally displaced by the violence, and numerous human rights violations by guerrilla and paramilitary groups alike. Unarmed civilians suffer most of the casualties. In the 1950s, Marxist guerrilla groups such as the *Fuerzas Armadas Revolucionarias de Colombia* (Revolutionary Armed Forces of Colombia, or FARC), and the *Ejército de Liberación Nacional* (National Liberation Army, or ELN) emerged to fight for agrarian reform and against an exclusive political system. Both groups are financed through extortion, kidnapping, and trade in drugs. In the 1980s, regional elites, multinational actors, and powerful landowning drug dealers formed the *Autodefensas Unidas de Colombia* (United Self-Defense Forces of Colombia, or AUC)—commonly referred to as the paramilitary because of the support it received from government armed forces—a counterinsurgent military organization (CNMH 2013a).

DEMOBILIZATION AND REINTEGRATION IN COLOMBIA

Over the last 20 years, the Colombian government has demobilized more than 70,000 ex-combatants from guerrilla and self-defense militia groups (ARN 2019a). The first collective demobilization began in 2003, following peace negotiations between the AUC and the government, during which 30,000 soldiers were demobilized. Among them, 1,911 (6%) were women (CNMH 2013b). The second collective demobilization took place in 2016, after a peace agreement between FARC and the government led 12,000 guerrilla fighters to give up their arms,

including 2,303 (23%) women (ARN 2019a) who had provided logistical support, including serving as spies, nurses, cooks, and partners to the male combatants. Another 20,000 fighters, mostly from guerrilla groups, demobilized simultaneously, including 4,495 (18.6%) women (CNMH 2013b). In those cases, individuals or small groups chose to desert in exchange for government benefits, which was an important counterinsurgency strategy from 2002 to 2016 (Kaplan and Nussio 2015). After being demobilized, some ex-combatants experienced harassment, displacement, and murder as reprisals for having belonged to an armed group (MAPP-OEA 2019). Between 2003 and 2012, 3,003 (5%) ex-combatants were killed after being demobilized (Nussio 2018), and 234 were killed after the 2016 peace agreement with FARC (Ardila Arias 2020). In general, Colombian citizens distrust ex-combatants and believe they continue to perpetuate violence after being demobilized (Nussio 2018).

Local authorities in Medellín have worked for more than 30 years to implement innovative and structured reintegration programs (Rozema 2008). From 2003 to 2006, Medellín and the capital city Bogotá were centers of reintegration and points of convergence for a heterogeneous population of paramilitary and guerrilla combatants from urban and rural backgrounds who had demobilized both individually and collectively (ODDR 2013). In 2019, local authorities were reintegrating more than 300 FARC ex-combatants (Francisco Cardona, personal communication, October 20, 2019). In Medellín, reintegration coexists with the rearmament of illegal armed groups and a high concentration of criminal groups. In the early 2000s, half of the AUC members who demobilized kept their arms for personal protection or to continue with illegal activities, such as drug trafficking and extortion (Rozema 2008). Today, criminal gangs govern the majority of the poor and middle-income neighborhoods in Medellín to varying degrees. There are roughly 350 local youth gangs that are managed and controlled by larger organizations. These gangs resolve disputes, police their neighborhoods, manage markets, tax businesses, monopolize local illegal markets (Blattman et al. 2020), and create alliances as needed (Moncada 2016). This reorganization of illegal groups poses a security threat to ex-combatants and creates conditions favorable to recidivism (Kaplan and Nussio 2016).

EDUCATION FOR REINTEGRATION

In keeping with first-generation DDR (UN Inter-Agency Working Group on Disarmament, Demobilization and Reintegration 2006), the 2008 Colombian reintegration policy defines reintegration as the process by which ex-combatants acquire civilian status and gain sustainable employment and income. The policy

provides a comprehensive framework for reintegration that includes accelerated education, vocational training, grants to start microbusinesses, psychosocial support, health care, and a monthly stipend conditioned on ex-combatants' participation in reintegration activities (CONPES 3554 2008).

To address the ex-combatants' poor job skills, eradicate intergenerational poverty, and close the equity gaps that were at the heart of the conflict, TVET seeks to provide opportunities for economic empowerment. However, in keeping with second-generation DDR, the Colombian reintegration policy also recognizes that community reintegration is necessary to overcome stigmatization and achieve reconciliation. To build trust, TVET programs are designed to blend ex-combatants from different armed groups in entrepreneurship courses, and to blend ex-combatants with the general population in technical and technological programs. To prepare ex-combatants to respect the norms of working environments, TVET programs train them in discipline, teamwork, professional clothing, and respect for authority and company rules. The reintegration process requires ex-combatants to participate in 80 hours of social service postgraduation in areas such as sports and cultural events, restoration of public spaces, and the implementation of community projects, after which they are eligible to receive credit to start a microbusiness (CONPES 3554 2008). Since 2010, the Colombian reintegration policy has included a gender perspective aimed at transforming identities rooted in violence, and which responds to the interests and needs of female ex-combatants (CNMH 2013b). Female and male ex-combatants have equal access to TVET programs and the same amount of microcredit, and they study in the same institutions.

The Colombian government selected the *Servicio Nacional de Aprendizaje* (National Training Service, or SENA), a publicly accredited institution with a 60-year history of training people in different industries, to be the main institution overseeing ex-combatants' training (CONPES 3554 2008). SENA offers two-year technological programs, one-year technical postsecondary education programs, and short-term complementary trainings (40-80 hours). The technological programs combine skills training with theoretical foundations, whereas the technical programs focus on skills training in specific productive sectors. Both have as a prerequisite a high school diploma. The short-term complementary training, which does not require a high school diploma, focuses on entrepreneurship education (SENA 2015). To stimulate self-employment and increase participants' earning potential, the policy includes a microcredit support of \$2,600 after they graduate from any program.

Since 2006, the ARN, previously called the Colombian Agency for Reintegration, has managed, implemented, coordinated, and evaluated the plans and programs for reintegrating all demobilized fighters, including the TVET programs. ARN delivers its services at 33 centers throughout the country and employs “reintegrators” as case managers (40-100 cases per reintegrator). ARN reintegrators are responsible for monitoring ex-combatants’ compliance and supporting each of them during the reintegration process, which lasts up to seven years (ARN 2019b). Colombia’s budget for DDR comes from the government and international donors, including the European Union, Norway, USAID, UNICEF, and the Inter-American Development Bank (ECP 2008).

In Colombia, TVET programs aim to create economic empowerment, social inclusion, and reconciliation. However, there are contradictions within the programs. For example, the programs focus mainly on individual processes but expect to contribute to collective social cohesion. Moreover, community-based reintegration efforts have not increased trust between communities and demobilized people (Kaplan and Nussio 2015), and despite claiming to offer gender-equal opportunities, the reintegration policy depicts women in traditional roles, such as caregivers. These circumstances raise the question of how ex-combatants perceive their social reintegration through the education process.

RESEARCH DESIGN AND METHODS

This paper is based on an in-depth qualitative interview study that helped to illuminate the educational experiences of ex-combatants and how they believe TVET has contributed to their social reincorporation.

SAMPLE

This study used a purposive sample of 20 participants living in Medellín (Bryman 2012). We used a maximum variation sampling strategy to represent ex-combatants’ diversity and capture their multiple perspectives about educational experiences. We selected 17 interviewees with assistance from ARN staff members. The remaining three were identified through a snowball approach. Ten participants were currently enrolled in TVET programs and were taking complementary entrepreneurship courses. Ten were recent graduates (within one year) of TVET programs. Among them, six had completed 400 hours of complementary courses (between five and ten short-term entrepreneurship courses), and four had completed technical programs. The sampling procedure

created variations in terms of program type, previous armed group affiliation, stage of reintegration, family status, and job situation. All interviewees but one had demobilized individually. All were young adults between 18 and 35 years old (60% female). Most had less than a complete primary school education and thus received accelerated education through the program. Although the broader population of FARC ex-combatants is 77 percent male (CONPES 3931 2018), this study oversampled female participants to determine whether they face particular challenges and, if so, whether these challenges give them a different perspective on the role education played in their reintegration.

PROCEDURES

Before each interview began, the participants were informed about the purpose and scope of the research and their rights as research participants. Interviews were semistructured and conducted in Spanish, the native language of the interviewees. Each ex-combatant was interviewed twice. In the first interview, ex-combatants were asked about their experiences in the TVET institution, whether they experienced the institution as a community, and whether participation in TVET had helped them develop new social supports and networks at the school, in their workplace, and in their neighborhood. In the second interview, particular topics were explored in more detail. The 40 interviews were conducted between October 2018 and April 2019 at two ARN locations in Medellín.

POSITIONALITY

The lead author, who conducted the interviews, is Colombian and a native Spanish speaker. Being an insider facilitated her ability to establish contacts in ARN and SENA and to gain interviewees' acceptance, and it enhanced her understanding of participants' narratives and cultural idiosyncrasies. However, in conducting this research, she was also an outsider. Her position as an educated person living in the United States made her aware of the social divisions between her and the ex-combatants, which created a power imbalance. However, being perceived as a foreigner also helped her build trust, because the participants assumed she was not connected to an armed group or the government.

DATA ANALYSIS

Interviews were transcribed, analyzed, and then translated into English. NVivo was used to assist in the analysis of data. The focus was on participants' experiences with TVET and the networks of trust and cooperation they had established by

interacting with different social groups. Data were analyzed in a three-stage process: first, analyzing each interview separately to identify emerging codes and categories; second, comparing and contrasting interviews to identify emergent codes and categories; and third, identifying the most significant themes in those categories (Miles, Huberman, and Saldaña 2014). After completing this analysis process, the researchers used member checking to ensure the credibility of the analysis. The first author conducted a focus group with the participants to validate the analysis, at which she presented the themes identified and a selection of quotes from the interviews, which she discussed with the participants.

FINDINGS

Three central themes about TVET and social reintegration emerged from the data analysis process: TVET institutions as transitional places, the limited new social networks and supports formed, and the structural constraints on social reintegration. We discuss these themes in the following sections.

TVET INSTITUTIONS AS TRANSITIONAL PLACES FOR PSYCHOSOCIAL RECOVERY, ESTABLISHING NORMALCY, AND LEARNING TO RELATE TO OTHERS

After defecting from their armed groups, the interviewees lost the benefits they had provided, including status, support networks, social recognition, a sense of collective identity and purpose, and social bonds with people of similar rank. As defectors, they became traitors to their former compatriots, and therefore targets for retaliation. Moving from the jungle or an isolated rural area to a large city was also disorienting. Far from their rural communities and families, they arrived in an urban environment where they did not know where to settle or how to move, behave, dress, or talk. Both male and female ex-combatants described the beginning of their reintegration as a difficult time characterized by economic struggles, anxieties, and fear of being killed or imprisoned. They also felt angry and irritable, distrustful of all people, and ill-prepared to interact with strangers. For them, access to and participation in TVET, particularly the interactions with a support team of ARN mentors, counselors, and teachers, contributed to their psychosocial recovery. One female ex-combatant expressed the importance of that support: “People from the technical team are the only ones who take us out of that blinded world we had, and [help us overcome] that shyness, that fear. For me, the technical team was the most important thing when I left that life; otherwise, I would be locked in a house.” Like her, 17 other ex-combatants felt

that the ARN support, psychological services, and education, as a package, were critical to overcoming fears, starting trusting relationships with people from state institutions, and adapting. This process required deconstructing their mistrust of the state, which they had been taught by high-ranking members of their illegal armed groups.

Twelve ex-combatants described ARN mentors as trustworthy people who offered guidance in defining goals, navigating institutional requirements, understanding the benefits of education, and staying motivated. They also described their mentors as being supportive in finding employment opportunities and overcoming personal challenges. All the ex-combatants said counselors helped them address and overcome the fear, anxiety, and distrust that were obstacles to establishing new social links. Psychological interventions helped participants adjust to new social roles and start transforming their mentality from soldier to civilian. As one female ex-combatant noted, “After four and a half years without studying, picking up a pencil again and being among people again was too much. The psychologist had to help me a lot because when I went out, I could not stand people . . . I was too nervous. I heard people and I thought everybody was going to kill me.” For ex-combatants like this woman, who had cut her bonds to the outside world for years, re-establishing the capacity to relate to strangers required psychosocial support.

Sixteen interviewees depicted their teachers as kind, close, patient, supportive, and helpful. They had entered the TVET institutions afraid of being judged because of their pasts and wary of being treated impatiently for being poorly educated adults. They instead found respectful teachers who were willing to teach them and treat them well. One male ex-combatant currently in training stated, “Teachers are very tolerant and look for strategies to be heard and to make students learn something. I have not had any teacher who was rude or impolite. All are very good teachers.” These interactions allowed the ex-combatants to move from a fighter identity to a student identity, and to gain confidence in their ability to learn. Male ex-combatants valued the fact that teachers treated them equally and fairly and with respect. Female ex-combatants developed strong ties with teachers who gave them the advice and emotional support they needed to persist in the education process, were flexible about homework deadlines when the women had problems, and allowed them to bring their babies to class. These teachers’ attitudes enabled students to develop feelings of trust, admiration, and affection.

Male and female ex-combatants also perceived the TVET institution as a transitional place where they could establish a sense of normalcy and learn new norms. For them, reintegration meant a change in mindset—they had to forget the past, adapt to new rules, adopt urban manners, and find their place in society through employment. Attending TVET programs created routines that helped the interviewees occupy their minds and establish a sense of normalcy. One young male ex-combatant, who was studying and working in the garment industry, said:

[When I am] studying, I do not think of anything because I do not have time . . . I think I have a homework I have to do, I think that on Sunday I have to study, I think on Tuesday I have to come here [the TVET institution], that in the month I have an appointment with the psychologist who sees me. Thousands of things, so you do not feel the temptation, . . . I do not think about silly things such as going back there [to the armed group].

These routines forced the interviewees to familiarize themselves with different places and people, find a new purpose that helped them develop a sense of belonging, and avoid being nostalgic about their former life.

Male and female participants both expressed that, through TVET, they learned to transform the aggressive behavior they had developed while with their armed group. One 30-year-old man explained: “Before [when I felt humiliated], I wanted to kill the person, whoever he was. I have resentment, anger, and I exploded with bad words, as it shouldn’t be. Education has given me a way of shaping myself, and to be someone else in life.” Participants said that the TVET programs taught them that to succeed in civilian life they had to control their impulses, follow orders, be humble, and work legally. However, the ex-combatants also recognized that adapting to the requirements of the hierarchical social structure was a long-term effort.

The customer-service class was particularly relevant to ex-combatants in developing prosocial behaviors. This class was offered as an elective in a short-term entrepreneurship course of study and was required in some technical programs. It taught ex-combatants about different kinds of personalities and how to deal with them, and how to respond politely and avoid conflict when interacting with clients and others in the workplace and the community. Through this course, they realized that they needed to improve their character, develop their listening capacity, and express themselves more clearly. One 30-year-old woman explained how she was able to apply the customer-service lessons in different social situations: “You need to implement customer service with the clients, but also with family and with other people that you hardly know, like you and me.” The customer-service class

helped students develop prosocial dispositions, not only when making commercial transactions but also with family members. They understood that having good relationships with others required a shift in perspective from their own to that of another. They also found that, when practicing the customer-service lessons outside of class, people responded positively, which made the students feel that civilians could develop empathy for them and that they could fit into society.

**SEGREGATED SHORT-TERM ENTREPRENEURSHIP COURSES:
STRENGTHENING TIES WITH FORMER COMRADES BUT NOT
BUILDING NEW SOCIAL NETWORKS**

The short-term entrepreneurship courses were only taught to ex-combatants, did not have a prerequisite schooling level, and did not follow a specific sequence. The ex-combatants selected courses according to their interest in the topics. As a result, the classes were comprised of former fighters of diverse ages, genders, time in the reintegration process, previous armed group affiliations, and education levels.

The program design facilitated contact among former comrades and the re-establishment of networks, which helped 13 ex-combatants reintegrate into society. When fighters defected, they broke ties with their armed group; studying with close former comrades in the TVET institution made them feel safe, happy, and in a familiar environment. A female ex-combatant who was in an armed group for 11 years described these strong connections: “I will not change with them [former comrades], because they were practically like my family. Comrades that I had there and came long before or after me and I met in class—ah, what a joy! It was so good to see they left [the armed group]. I will never stop sharing with them, and that will never change.” After re-establishing contact, former comrades often worked on their class activities together and established peer-mentor dynamics. Five reported meeting outside classes to have dinner, go to church, or visit each other’s homes. This socialization was always linked to civilian activities and created space to talk about their shared past, new lives, and future plans. The networks provided important emotional and even economic support in facing reintegration challenges. Through these interactions, the more advanced students shared information with the newcomers, helped them to understand the processes and expectations, and to develop trust with the ARN staff.

However, friendship with close former comrades coexisted with mistrust toward other classmates who had belonged to different guerrilla groups, or even to different factions of the same group. All the ex-combatants in the training shared an overarching concern for their safety and were skeptical about some classmates' intentions. "You do not know who is who," a phrase repeated often by almost all interviewees, meant that some classmates could appear to be regular students while secretly performing counterintelligence jobs or remaining involved in illegal activities. These fears and suspicions were supported by real events, such as the assassination of one classmate at the entrance of a TVET institution some years earlier. Mistrust and distance were also the result of classmates encouraging others to rejoin armed groups, a situation mentioned by four participants. To protect themselves, the ex-combatants did not exchange phone numbers with unknown classmates, reveal their home address or meet classmates outside the TVET institution, or share details about their lives. These measures hindered their ability to develop new connections and to preserve them after finishing their courses.

Despite the programs' intentions to mix people from different armed groups in the same courses in order to foster mutual understanding and dialogue, some graduates reported that mistrust prevailed. They said that confrontations common in the past were reproduced within the TVET institution. One alumnus described how, "at the beginning, [the institution] was horrible . . . In the bathrooms, people were stabbed. Here, several groups studied together, not only FARC or paramilitary . . . I do not know if teachers believed that because they were here, they were going to like each other, but they are different groups, they have their quarrels, their pending grievances." Despite these episodes of violence, no participant mentioned having received any training on how to resolve conflicts peacefully.

Having many ex-combatants gathered in the same place also made them an easy target for re-recruitment offers from criminal organizations, which could contact students easily outside the TVET institution. One woman who had been a mid-rank commander and was invited to rejoin an armed group explained: "I told him no, I already see a future, I am earning a minimum wage and I am skinny [i.e., hungry], but I can see my daughter every day. I am not going there." Some ex-combatants, both female and male, explained that, despite having low-paid jobs, they had refused attractive economic offers because they had decided to change—they valued peace, being able to raise their children, and the opportunities available to them as civilians, such as having their own business and owning a house.

Short-term courses designed to help people develop self-employment and microenterprises at home did not facilitate their development of new social networks beyond the TVET institution or help them find support within the broader population. The courses instead reinforced the isolation and marginalization the reintegration program aimed to ameliorate, a situation that affected women more than men.

Female ex-combatants put high value on their families and made decisions accordingly. Participants explained that motherhood was forbidden in the guerrilla groups, and women fighters who had escaped a forced abortion had their babies taken away from them. Other women defected when they became pregnant. Thus, eight out of the twelve women interviewees started families after demobilizing, often with former combatants. Some couples had been in a relationship since they were fighters, but divorces were common after they left their armed groups. Female ex-combatants stated that their family was their primary social contact, and their strongest bonds were with their children. Ten of the twelve women interviewed had decided to take short-term entrepreneurship courses because it was convenient to have a business at home and simultaneously take care of their children. However, this meant that the women had to handle domestic chores and child care while also running a business. Staying at home limited their development of social support beyond close family members, as one of the women explained: “I do not leave my house often. I take care of my children [and] their school. I spend my days at home. I only go out if I have to.” The women’s isolation was the result of many factors, including fear, mistrust of neighbors, the belief that a good and respectable woman should stay at home, unemployment (often while waiting to receive the government microcredit to start their business), and poverty. In some cases, domestic violence worsened their seclusion.

The women’s isolation contrasted with the men’s situation. All five men taking short-term courses and one graduate socialized and worked outside the home as janitors and construction workers. In their workplaces, they developed relationships of cooperation and trust with their coworkers and supervisors, and they moved around the city, learned new norms and skills, and earned salaries. While women expected the entrepreneurship project to be their sole source of income, men expected the entrepreneurship project to be a side source of income and hired others to manage the businesses while they continued working their jobs. Women and men had access to the same TVET programs and entrepreneurship opportunities, but gender-stereotypical labor divisions and cultural contexts had different effects on their development of new social networks.

**INCLUSIVE TECHNICAL PROGRAMS: DEVELOPING NEW SOCIAL NETWORKS
WITHOUT SOCIAL MOBILITY**

The ex-combatants who pursued technical programs attended specialized TVET centers. These courses were open to the general population, required a high school diploma to enroll, lasted one year, included an internship period, and had cohort structures. The two women and two men who had completed their technical education at SENA interacted with people from civil society who had different experiences than those of war, higher education levels than the average ex-combatant, and broader social networks. Exposure to these different backgrounds gave them new perspectives and facilitated trust with their classmates. A female ex-combatant graduate of a technical program in business management who had opened her own store said, “I still talk with classmates. Yesterday I met and talked to one. She does not know about my [past] life. [I keep the links] because they are people that I could need to work. I already know her; I know she is respectful, responsible.” Participants began relying on their classmates after realizing they were not involved in illegal activities and did not present a risk for them. Those interactions also facilitated network-building.

Each ex-combatant participating in the technical programs was the only demobilized person in their cohort; only the program director and the teacher knew their status. This situation allowed them to hide their pasts, avoid discrimination, and assume new identities. When asked about his relationships with classmates, a male ex-combatant who had finished the technical program in motorcycle mechanics said, “I was normal, we hung out, we played football, we met to do homework.” For him, being normal meant behaving like a regular citizen. Having the opportunity to meet, to party, and to talk made him feel part of a group. This interaction with peers outside class contrasts with the restricted interpersonal relationships of students in the short-term courses.

The technical and technological programs offered safer spaces than the short-term courses. None of the four ex-combatants interviewed mentioned receiving proposals from classmates to join armed groups or any threats. However, they were cautious and selective in their interactions with classmates and kept their pasts a secret. One male ex-combatant who had established ties with a classmate in the technical program explained: “There [in the armed group] we had to fight for survival, we had to be together . . . I really knew who we were. By contrast, here I do not know who is who, that’s the big difference.” By meeting new people, he was stepping outside the group of comrades familiar to him and building new social skills, but trust was incipient.

The technical programs required a six-month internship at a company, which served as a bridge to the job market and helped the ex-combatants understand and adjust to social norms. As one interviewee noted, “[Working in] the company shapes you. As human beings, we are rebels, and we want to do all that we want. However, when you start working in a company you learn that there are norms, rules, schedules, restrictions.” Lawful employment reduced the incentive to rebel. Moreover, during their internships, the four students developed new social networks with their coworkers and supervisors. After completing the program, these networks opened doors to job opportunities and helped them find employment, which enabled them to provide for their families, develop self-confidence, and gain a sense of social belonging. However, their employment and living conditions were very fluid. At the time they were interviewed, two ex-combatants who had completed the program were again unemployed and struggling to meet their basic needs.

Access to technical programs helped ex-combatants build new social networks, but because of the high school diploma requirement, only four of the twenty interviewees had enrolled in these programs. Two of these participants believed a technical diploma was not enough to climb up through the country’s social stratification. One of these participants expressed her frustration with the training she received: “They should help us to go to the university and not distract us with a technical program . . . What I learned helped me a lot in terms of the work I am doing now, but talking about what will happen in the future, if people have a high school diploma, the program should help them to go to college right away.” The program promotes the idea that having a technical diploma, a job, and social networks will allow ex-combatants to advance their careers and have a comfortable life. In practice, however, the opportunities available to ex-combatants were limited, due to high unemployment, low wages, and a lack of information and support after graduation from SENA to help graduates navigate the application process to higher education institutions. These unmet expectations after completing the training created frustration.

WHEN TVET IS NOT ENOUGH: VIOLENT CONTEXTS AND SOCIAL STIGMA

When ex-combatants moved to Medellín, they settled in low-income neighborhoods controlled by gangs. The organized criminals were the authority, and they controlled illegal and legal markets. One woman said, “Where I live is very dangerous. There, if you have a problem you cannot talk to the police, you

have to talk to ‘the boys’ [gang members] who supposedly rule the neighborhood. The problem will always be fixed with them, not with the police.” The presence of local gangs put ex-combatants at risk of attack or forced recruitment. To protect themselves, they hid their pasts, avoided contact with neighbors, and did not participate in social groups.

Contrary to reintegration policies and programs that expect communities to be more receptive to ex-combatants who go through educational processes (UN Inter-Agency Working Group on Disarmament, Demobilization and Reintegration 2014), 13 ex-combatants felt that going through TVET had not helped them gain social acceptance and had not reduced their stigmatization. These ex-combatants believed that, no matter what they did, people would continue to see them as dangerous, unreliable, and violent, despite their belief that their behaviors had changed. One ex-combatant said, “When there were job fairs, I went and took my CV, but one day I felt rejected because right there they said, ‘Ah, are you from the ARN? We will call you later.’” They never did call her, and the ex-combatant subsequently decided to become an entrepreneur.

Ex-combatants also perceived social stigma in their daily lives. They overheard conversations on mass transit and listened to media broadcasts in which they were depicted as killers, kidnappers, and terrorists. As one female ex-combatant noted, “Many times traveling in the subway or on the bus, I have heard people giving opinions, talking. They depict us [ex-guerrilla fighters] as the worst, and I say, ‘Oh my God, if they knew that we are people like them!’” Three participants expressed their frustration after being rejected by civilians because they felt people did not recognize their efforts to change and were denying them the opportunity to build a new life. However, not all participants thought the stigmatization was undeserved. Four recognized the suffering the armed groups they had belonged to had caused. Others noted that, after ARN’s efforts to raise awareness among employers about the positive impact they could generate by giving ex-combatants jobs, the private sector had started to give them some job opportunities.

DISCUSSION AND CONCLUSION

This study reveals that, from the perspectives of the ex-combatants we interviewed, access to and participation in TVET creates opportunities for individuals to experience psychosocial recovery and to adapt to society. These ex-combatants’ experiences show that different TVET programs have different socialization effects, and that these programs have the potential to enhance, but also to undermine,

the configuration of their new social networks and social bonds. The study also indicates the limitations of TVET in promoting social cohesion within violent and stigmatizing environments.

This study has some limitations. First, the relatively small sample limited the implications that are applicable to policy and practice. It also limited our ability to generalize our findings, even to the specific programs attended and the broader experiences of the participants in Medellín, Colombia. However, the study provides contextualized knowledge of these ex-combatants' lives, their environments, and their limited opportunities for social participation, all of which are critical to understanding the development, implementation, and impact of specific DDR education programs. It also provides insights into how these programs could prepare ex-combatants more effectively to overcome their challenges and acknowledges the limitations of education. Second, the purposive sample is not representative of the broader population of ex-combatants. However, the experiences of demobilized individuals who moved to the city could illustrate the challenges faced by FARC ex-combatants who are currently reintegrating. Third, 19 of the 20 interviewees had demobilized individually, and some aspects of their social reintegration experience may be different from the one ex-combatant who was part of a collective demobilization. Fourth, practical restrictions on accessing the population could have introduced bias into the sample. Only a few of the ex-combatants had finished a TVET program, and the graduates were difficult to reach. ARN staff members may have recommended the most committed participants, and the ex-combatants who were finishing the training could be especially resilient individuals. However, the experiences of the ex-combatants who persisted in the reintegration process provide unique and valuable information on the role education played in their social reintegration.

At the individual level, our analysis found that going through the TVET program and receiving support from a network of reintegrators, counselors, and teachers contributed to the ex-combatants' healing and their ability to build trust with new people, transformed their mindsets and behaviors, and eased their adaptation to civilian and urban life. This finding is consistent with reintegration policies that recognize the importance of holistic assistance to facilitate reincorporation (UN Inter-Agency Working Group on Disarmament, Demobilization and Reintegration 2006), and with empirical studies that have shown that education institutions can be protective places that facilitate ex-combatants' psychosocial adjustment, and that psychosocial support and individual factors, such as a desire to have a different life, can help youth exposed to violence overcome the challenges of reintegration and resume a positive life trajectory (Zuilkowski et al. 2016).

At the programmatic level, our analysis of the ex-combatants' experiences attending different TVET institutions revealed that entrepreneurship education programs in which only ex-combatants participated actually reinforced their social exclusion instead of facilitating their ability to establish new social networks. In contrast, technical programs with diverse student populations encouraged the ex-combatants to develop new social bonds and gave them feelings of social belonging. These findings are consistent with policymakers' and scholars' calls to reduce segregated education in divided societies as a way to address mistrust and increase social cohesion (Bush and Saltarelli 2000; Loader et al. 2018).

In the DDR literature, the effects of former armed group members re-establishing ties is debated. While some policies warn against the risk of preserving hierarchical structures and ties among ex-combatants, which could increase the risk of recidivism (UN Inter-Agency Working Group on Disarmament, Demobilization and Reintegration 2006), empirical research has shown that bonds developed during war could in fact contribute to social rehabilitation (De Vries and Wiegink 2011). This study revealed that re-establishing ties with former close comrades was constructive for the ex-combatants we interviewed, as it provided support and collaboration in their transition to civilian life. We also found that, when they perceived that their former comrades wanted them to re-engage in illegal activities, they cut ties. Their decision to keep old social bonds only when they helped them adapt to civilian life was related to their desire to change. This coincides with Nussio's (2018) study, which demonstrates that, as they get older, ex-combatants become less attracted to violence and more interested in a calm family life. In Colombia, ex-combatants are generally portrayed as a security threat, but their actual participation in violent activities is negligible relative to the country's overall criminal dynamics.

In contrast to contact theory, which posits that interaction among former enemies can contribute to conflict transformation (International Labour Organization et al. 2016), this study showed that putting ex-combatants from different armed groups within the same institution did not foster respect, mutual understanding, or dialogue, and that it in fact reproduced old social divisions and led to violence. Studies have warned that contact alone is insufficient when seeking to promote reconciliation. This is because reconciliation requires addressing past truths, present tensions, and setting up systems for transitional justice, forgiveness, and psychosocial healing (Novelli, Lopes Cardozo, and Smith 2017). Others have argued that improving the ability of former enemies to coexist peacefully at education institutions requires prolonged social contact, curricula and pedagogies that foster deep engagement, and organized cooperation to achieve common goals

(Bekerman 2016). SENA teachers did not receive training on how to implement such strategies, or on how to work with ex-combatants. The only criterion for their hiring was having specific content knowledge for the course.

Male and female ex-combatants received the same entrepreneurship training, but the socialization effects were different. For men, entrepreneurship was an opportunity to increase their portfolio of work without restricting their bonds with the outside world. For women, the primary goal was to earn an income while caring for their children. This kept them isolated at home, prevented them from developing social networks that could help them feel included in their new communities, did not provide the social protection of a formal job, and they constantly faced the psychological and economic toll of job insecurity. As Annan and Brier (2010) argue, female ex-combatants experience multiple levels of gender-based violence and inequality after war. More studies are needed to understand the varied effects TVET interventions have on women and men, and the programs should introduce context-specific gender analysis to determine whether women require a different kind of assistance and how to reach them most effectively (Bouta, Frerks, and Bannon 2005).

Contrasting the experiences of ex-combatants who participated in short-term versus technical programs, we found that the technical programs helped ex-combatants build new identities, relate to other civilians, and transition smoothly into the job market. The factors that facilitated this socialization were exposure to civilians, company internships, and being able to “play double” (McFee 2016)—that is, having two different identities that they use according to their needs. Their demobilized identity enables them to access education, while the student identity causes them to hide their past to avoid social stigma. Despite the technical programs’ ability to facilitate the establishment of new social networks, reconciliation did not occur within the TVET institution because people from the general population did not know they were interacting with former fighters and therefore did not have the opportunity to question the negative perceptions they may have had about ex-combatants.

At the macro level, this analysis reveals that, due to the violent environments in which ex-combatants live and their perceptions of being socially stigmatized, TVET programs alone cannot overcome their limited ability to establish social interactions. To protect themselves in these dangerous communities, ex-combatants avoid interacting with strangers, do not participate in community

organizations, and live in anonymity; these findings align with previous research (Nussio 2011). This study reveals that ex-combatants in general feel that access to TVET programs did not alter the civilian population's belief that they were dangerous and unreliable. TVET programs do not address the challenge of social reintegration, which overlooks their social contexts and leaves ex-combatants fully responsible for their own social reintegration (King 2018). TVET programs need to focus not only on ex-combatants but on the community frameworks that support and help to perpetuate the occurrence of violence (Porto, Parsons, and Alden 2007).

These findings have several implications. First, more research must be done to identify the needs, vulnerabilities, capacities, and opportunities of male and female ex-combatants in specific cultural contexts. Incorporating ex-combatants' perceptions of their reintegration experiences is essential to improving interventions. Second, this study shows the limited ability of programs focused on individual economic development to overcome social stigma and contribute to social cohesion. Following Powell and McGrath's (2014) suggestion, we argue that, beyond employability and developing skills that are useful in production processes, TVET programs to reintegrate ex-combatants should emphasize social justice and human rights, including the need for social inclusion and safety. Third, segregated TVET institutions' limitations in helping ex-combatants develop new social bonds support scholarship that states the need to implement educational programs that target both ex-combatants and the broader communities, and to use education institutions to integrate various groups, such as artistic, sports, and women's groups. Expanding the TVET curriculum to include content and activities aimed at increasing cooperation between ex-combatants and their communities could help diversify the ex-combatants' social networks, reduce prejudice in the community, encourage the development of mutual trust, and transform mentalities that perpetuate violence.

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LANDSCAPE ANALYSIS OF EARLY CHILDHOOD DEVELOPMENT AND EDUCATION IN EMERGENCIES

LILIANA ANGÉLICA PONGUTA, KATHRYN MOORE, DIVINA VARGHESE,
SASCHA HEIN, ANGELA NG, ASEEL FAWAZ ALZAGHOUL, MARIA ANGÉLICA
BENAVIDES CAMACHO, KARISHMA SETHI, AND MAJD AL-SOLEITI

ABSTRACT

Despite the vast amount of research that supports investing in early childhood development and education in emergencies (ECDEiE), this area of programming continues to be underprioritized and underfunded. We applied a strategic problem-solving framework to systematically address the challenge of low access to ECDEiE in the global context. Specifically, we addressed three root causes of this problem: low prioritization of ECDEiE across sectors; the lack of a systematic characterization of the ECDEiE institutional and programmatic landscapes; and limited consensus on strategic advocacy for ECDEiE. To address these issues, we applied a mixed methods approach. We administered an online global stocktaking survey to 118 respondents, including those working in humanitarian aid, ECDEiE, government, and academia. We also reviewed the gray literature (N=218 documents). We discuss our six main findings in order to inform strategic initiatives that could be used to increase access to ECDEiE globewide.

INTRODUCTION

Education in emergencies (EiE) can foster inclusion, promote tolerance, enhance awareness of human rights, and provide strategies for conflict resolution (UNESCO 2017). However, despite education being positioned as a basic right, the global community still fails to meet the education needs of children living in crises (World Humanitarian Summit Secretariat 2015; UNHCR 2020; Zubairi and Rose

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2020). Although humanitarian aid allocations to education doubled between 2015 and 2018, only approximately 2.6 percent of the total humanitarian relief spent in 2019 was allocated to education. This is well under the global target of 4 percent (Dupuy, Palik, and Østby 2020; Zubairi and Rose 2020).

Humanitarian aid allocations for early childhood development are particularly underprioritized. Early childhood development, which refers to the multidimensional (e.g., physical, cognitive, linguistic, and socioemotional) development of a child from the prenatal stage through primary schooling (UNICEF 2017), typically involves a wide range of services, programs, and activities in the child-care, protection, health, nutrition, and education sectors. Early childhood development and education, or ECDE, refers to the link between child development and education (e.g., early childhood parenting, preschool, early learning). An analysis found that more than half of humanitarian response plans, flash appeals, and refugee response plans did not include comprehensive early childhood development services, early childhood development in emergencies, or early childhood education in education-sector responses (Bouchane, Curtiss, and Ellis 2016). Furthermore, a recent study reported that early learning and education for children ages 0-5 received less than 1 percent of the funds allocated to crisis-affected countries; financial data were not available for child protection and responsive caregiving interventions (Moving Minds Alliance 2020). The lack of funding for early childhood development and education in emergencies (ECDEiE) has resulted in limited access to and poor-quality educational opportunities for young children living in crises.

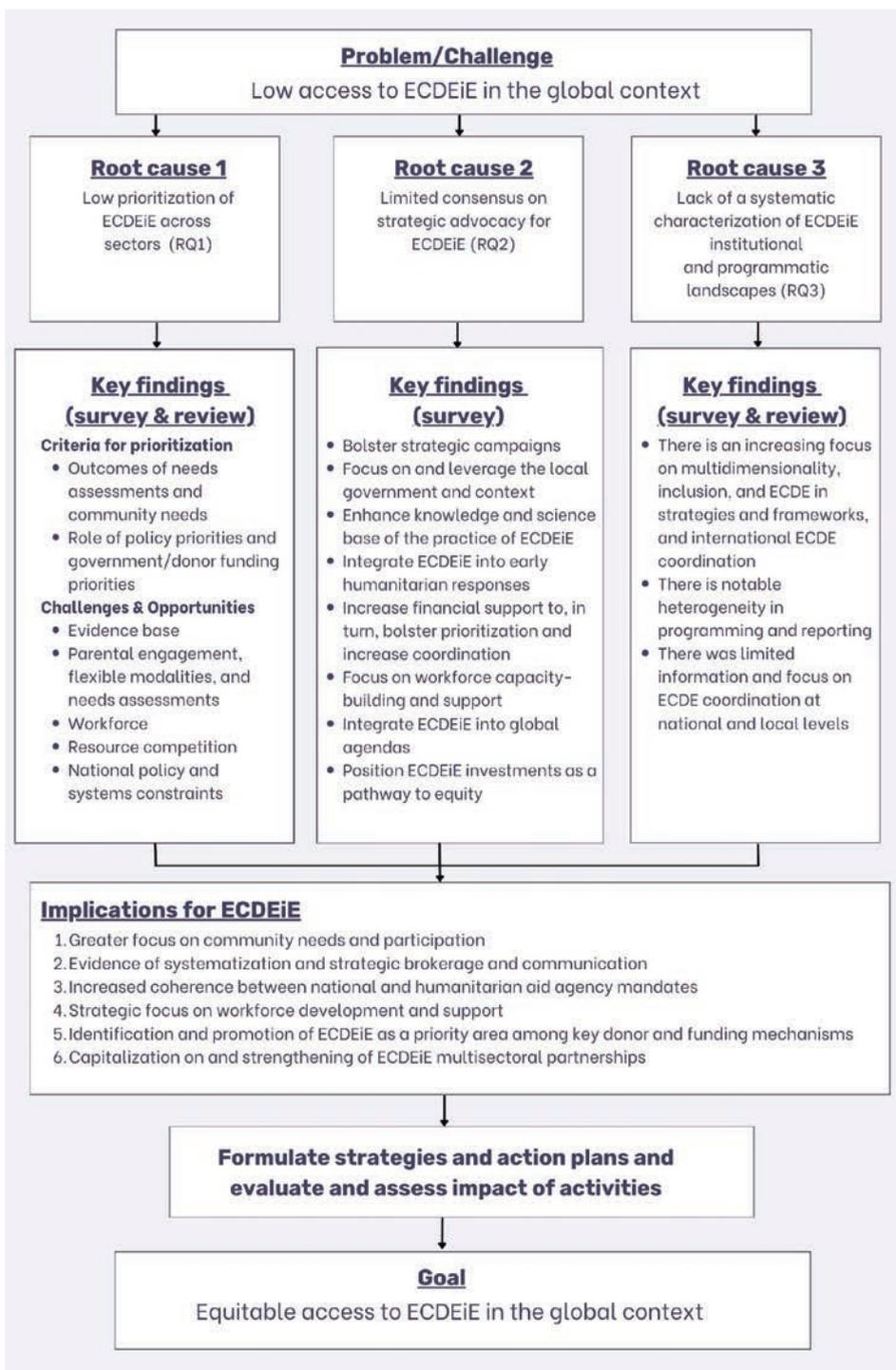
The objective of our study was to provide evidence to inform strategic initiatives that could be used to address this challenge by applying a stepwise problem-solving framework (Rakich and Krigline 1996). We identified three root causes of limited access to ECDEiE in the global context. First, priority-setting processes across multiple stakeholders, which play a role in development, education, and humanitarian emergencies, are at times misaligned (Bennett 2015; Minear and Smillie 2003; UNESCO 2015). We argue that a systematic analysis of stakeholders' perceptions of the role ECDE plays in humanitarian response could inform effective strategies to strengthen ECDEiE investments. Second, a systematic characterization of the institutional and programmatic landscape for ECDEiE is lacking. Education in emergencies research has focused predominately on primary- and secondary-level school-age children. There is limited research on the efficacy of ECDE in humanitarian contexts, which is related to low prioritization, limited funding, and few practical actions focused on the urgent needs of younger

children (Murphy, Yoshikawa, and Wuermli 2018). Global efforts to systematize the ECDEiE organizational landscape could allow the sector to use the existing data more effectively. Third, although the early childhood development field continues to grow, there is a lack of consensus on the most effective global and local levers for ECDEiE advocacy (Ponguta et al. 2020). Exploring stakeholder perspectives on advocacy may lead to more effective strategies at the local and global levels. In this study, we addressed three key research questions:

1. *Research Question 1:* What are stakeholders' perceptions of the challenges to and opportunities for prioritizing ECDEiE in their organizations?
2. *Research Question 2:* What do key stakeholders view as effective global and local strategies for effective advocacy to increase access to ECDEiE?
3. *Research Question 3:* What is the typology of organizations operating in the ECDEiE space and what are the trends in the geographic focus, program models, and evidence of the implementation and impact of programs represented across the gray literature?

To address these questions, we applied a mixed methods approach that combined an online survey and a scoping review of the gray, nonacademic, and nonpeer-reviewed literature (e.g., organization reports, strategic documents, briefs, guidelines, and toolkits). In this article, we present our key findings and discuss the implications for global humanitarian, government, and academic actors in ECDE.

Figure 1: Conceptual and Methodological Framework



METHODOLOGY¹

THE ONLINE SURVEY

DESIGN AND DISSEMINATION

We designed an online survey to assess the experiences and perspectives of five types of respondents: (1) academic researchers; (2) government organizations; (3) organizations working in the context of ECDE policies and programs, though not necessarily humanitarian emergencies; (4) organizations working in ECDEiE specifically; and (5) humanitarian response actors operating in the emergency relief field, though not necessarily in the ECDE space. The opening survey prompt included operational definitions of humanitarian emergencies and early childhood education.² The survey was designed in English and translated into Arabic, French, and Spanish by the research team members. The survey was shared with members of networks that have global and multistakeholder reach in the ECDE and ECDEiE sectors. In addition to using relevant listserves, we approached specific individuals in senior programming, leadership, and humanitarian roles, and in advocacy, academia, knowledge management, and the ECDE and ECDEiE fields. Because we released the survey during the early stages of the COVID-19 pandemic (March 2020), we added one open-ended question to identify early general and ECDEiE-specific pandemic needs and responses.

DATA ANALYSIS

We analyzed the survey data in three steps. First, we characterized the respondents according to the region in which their organization worked, how long they have been working with the organization in their current role, and their organization's category. Second, we analyzed descriptive statistics of answers, including priority areas across organizations, and what they perceived to be barriers (or bottlenecks) and enablers (or opportunities) to prioritizing ECDEiE in their respective sectors or organizations. We excluded academic researchers from the aggregated analyses because they answered questions specific to research activities and processes. Third, we asked open-ended questions about barriers and opportunities to prioritizing ECDEiE and about effective strategies to strengthen ECDEiE advocacy in the global

1 The complementary tables and materials—referred to as Complement Table 1, Complement Table 2, etc.—can be found on the Early Childhood Peace Consortium (ECPC) website: <https://ecdpeace.org/complement-landscape-analysis-of-early-childhood-development-and-education-in-emergencies>.

2 For purposes of conceptual clarity and consistency of terms used throughout this article, research outputs are referred to as ECDEiE, but it should be noted that the survey was released to assess early childhood education in emergencies more specifically.

context. Two research analysts coded and summarized the entries into emergent and common themes.

SAMPLE

Excluding the academic researchers ($n=9$), 118 respondents completed the online stocktaking survey. The largest group of respondents indicated that they worked in ECDEiE specifically ($n=85$, 72%), followed by respondents from government organizations ($n=15$, 12.7%), organizations working in the context of early childhood development/ECDE policies and programs ($n=14$, 11.9%), and a small number of humanitarian response actors ($n=4$, 3.4%). [Complement Table 1](#) shows the summary of the sector, geography, and time working with the organization in the current role as reported by respondents. The analysis of the regions the organizations worked in showed significant geographic diversity. For instance, 33.3 percent of government respondents worked in Latin America and the Caribbean, 26.7 percent in sub-Saharan Africa, and 20 percent in Southeast Asia. Among the ECDEiE respondents, the majority (64.7%) reported that their organization worked in sub-Saharan Africa, followed by Latin America and the Caribbean (40%) and other Asian regions (35.3%). In contrast, relatively few respondents indicated that their organization was active in Australia or New Zealand (ECDEiE $n=9$, 10.6%; ECDE $n=1$, 7.1%), Melanesia (ECDEiE $n=12$, 14.1%), Micronesia (ECDEiE $n=11$, 12.9%; ECDE $n=1$, 7.1%), and Polynesia (ECDEiE $n=10$, 11.8%; ECDE $n=1$, 7.1%). The majority of respondents across all categories indicated that they had worked in their current role between one and five years. National and international nongovernmental organizations and UN organizations were the most frequent types of organizations the respondents worked for, particularly the ECDEiE respondents.

A SCOPING REVIEW OF THE GRAY LITERATURE

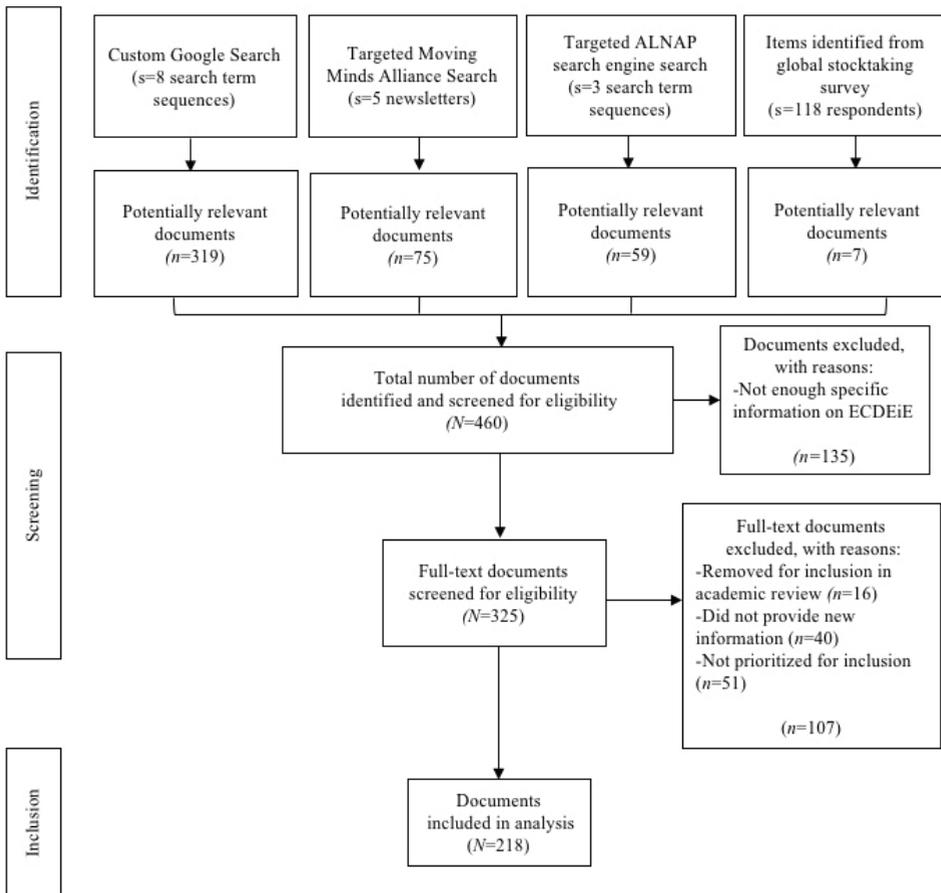
To review the gray literature, we followed a five-stage approach laid out by Arksey and O'Malley (2005), which is outlined below.

IDENTIFY RELEVANT STUDIES/DOCUMENTS

In order to collect a broad range of the available literature, we adopted wide definitions for the key words in our search. We also developed key concepts and search terms to capture literature, documents, and resources related to humanitarian emergencies and ECDE. The terms we developed to guide the search are specified in [Complement Table 2](#). The team collected the documents between

January 2019 and July 2020 through a series of searches across relevant search engines and repositories (e.g., Google, ALNAP, the Moving Minds Alliance). We also employed a snowball search approach to locate additional web pages, hyperlinks to specific documents, and advanced search functions using additional sequenced search terms. The online global stocktaking survey included a request for relevant documents. We cross-checked documents, itemized them, and compiled them into a database. We selected literature from the last 20 years in order to identify trends in, and the volume and types of, ECDEiE literature. We fully screened a total of 460 documents for eligibility (see Figure 2).

Figure 2: Document Identification, Screening, and Inclusion



DOCUMENT SELECTION AND CATEGORIZATION

The purpose of our review was to generate a taxonomy of the gray literature, identify approaches to ECDEiE programming, and identify entry points for strategic ECDEiE advocacy. We excluded documents during the initial and full-text screening if (1) they did not contain key search terms, (2) they were part of the academic literature review, and (3) they offered complementary information about an organization or program already included.³ We identified 218 documents for full data extraction and categorization. These were categorized by document types into organization reports and papers ($n=75$); communication materials ($n=51$); plans, policies, and strategies ($n=46$); tools, guidelines, and methodology ($n=39$); and conference, training, and meeting documents ($n=7$) (see [Complement Table 3](#) for a tally of documents per organization and document type).

DATA CHARTING AND COLLATION

A data extraction guide was generated by the study authors (see [Complement Table 4](#)); the categories and subcategories were partially based on the harmonized domains from the internationally recognized humanitarian program cycle and from early childhood development governance (Britto et al. 2014; IASC 2015; Ponguta et al. 2019; Ponguta et al. 2020). To identify trends in the literature on ECDEiE program approaches, we selected 124 documents from 62 organizations working in the ECDEiE space. We framed the results by showcasing the frequency of the categories and subcategories we extracted and consolidated from documents from 62 organizations (see [Complement Table 5](#) for a list of documents analyzed). The frequencies are reported in organizational type “clusters,” such as ECDEiE implementing organization, other ECDEiE implementing organizations, multilateral organizations, funders, networks and think tanks, and humanitarian coordination organizations. The data were clustered by organization type, rather than by the frequency of data extracted from individual organizations. [Complement Table 6](#) specifies the classification of organizations operating in the ECDEiE space and which were included in the scoping review.

³ The scope of the academic review was narrowed to include only items published in peer-reviewed academic journals. This review is registered under PROPERSO ID CRD42020170435. The scoping review included nonpeer-reviewed published and unpublished literature available via online searches of the public domain, and/or provided by respondents to the stocktaking survey or members of the study’s Global Reference Group.

ETHICAL REVIEW AND APPROVAL

All protocols were reviewed by the study's Global Reference Group; namely, representatives from the Aga Khan Foundation, ChildFund International, the Global Education Cluster, the International Rescue Committee, Open Society Foundations, Plan International, and Save the Children. Online survey respondents were given an informed consent form that outlined procedures for confidentiality, risks, and benefits of the study. All protocol, recruitment, and data-collection and management procedures were approved by Yale University's Institutional Review Board (Protocol no. 2000024970).

RESULTS

Below we present the results according to our research questions, and per the stocktaking survey (questions 1 and 2) and scoping review (questions 1 and 3), respectively.

Research Questions 1 and 2: What are stakeholders' perceptions of the challenges to and opportunities for prioritizing ECDEiE in their organization? What do key stakeholders view as effective global and local strategies for effective advocacy to increase access to ECDEiE?

Criteria for prioritization. Respondents to the stocktaking survey agreed on the following criteria and processes for prioritization: outcomes of needs assessments, and the needs raised or manifested by the community (Figure 3). There was less agreement on the role of policy priorities and government funding priorities, which were rated as the most important by government-sector respondents and least important by humanitarian-sector respondents.

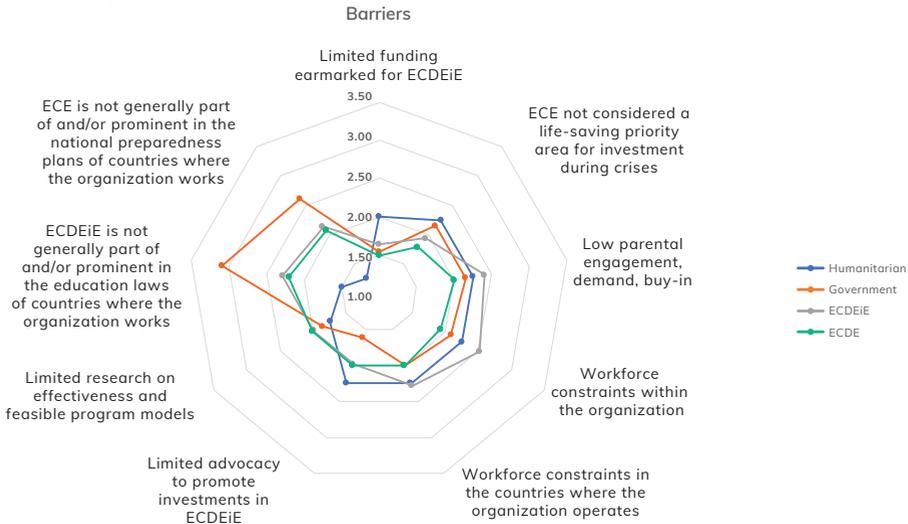
Figure 3: Radar Plot of the Priority-Setting Process by Sector



Note: The guiding question was, “Please state if you strongly agree, agree, disagree, or strongly disagree that the criteria listed are key to setting the priorities for programming and/or investing in your agency.”

Opportunities/enablers for prioritizing ECDEiE. As for perceptions of the enablers/opportunities to ECDEiE across organizations, the response options generally received a high number of endorsements with mean scores below 2 for all types of respondents. The perceived enablers or opportunities that were similarly rated as important were (1) prioritizing conducting, funding, and/or raising awareness about ECDEiE-specific research; (2) linking ECDEiE to sustainable development; (3) the use of ECDEiE measures in needs assessments; (4) increased investment in workforce capacity; and (5) increased in-country ECDEiE advocacy (see Figure 4). We next coded the open-ended questions on perceived enablers or opportunities to prioritizing ECDEiE across organizations. Three overarching themes emerged: (1) positioning ECDEiE in the context of continuity of learning and as a component of parental support; (2) clearly positioning and integrating ECDE into programmatic responses in other sectors; and (3) generating and brokering the evidence base for ECDE in low-resource and humanitarian settings.

Figure 4: Radar Plot of the Priority-Setting Enablers by Sector



Note: The guiding question was, “Please state if you strongly agree, agree, disagree, or strongly disagree that the criteria listed below are possible barriers to prioritizing ECDEiE in your agency.”

To explore enablers and opportunities for prioritizing ECDEiE, we analyzed the contents of 124 documents from 62 organizations that were part of the scoping review. This analysis revealed that a large proportion of and types of organizations cited five key enablers to prioritizing ECDEiE:

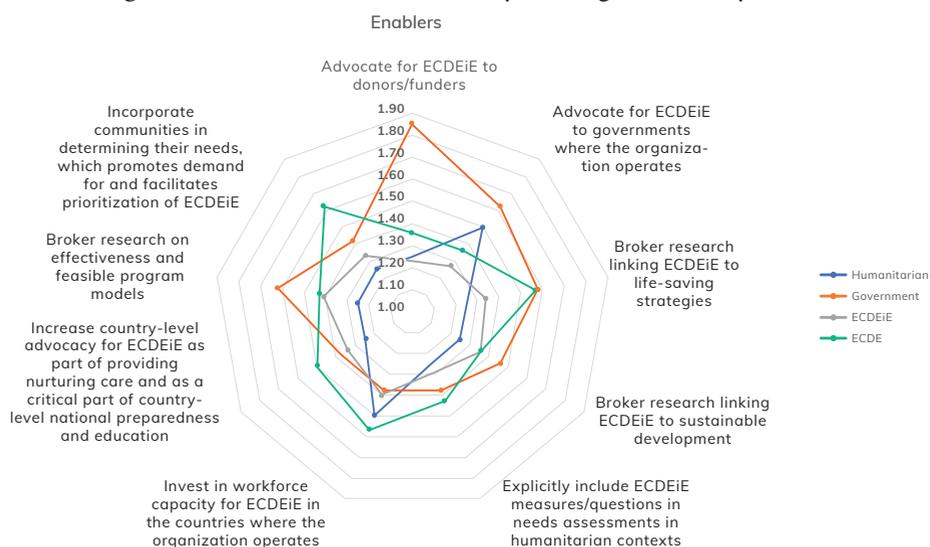
1. The endorsement and framing of responses around global development and rights conventions, goals, and frameworks
2. The presence of ECDE in donor priorities
3. Organization-specific equity and inclusion mandates, rationales, approaches, and/or interventions
4. A growing evidence base on early childhood development as a foundation for lifelong learning and positive development
5. Research agendas and the establishment of academic partnerships to build the evidence base (e.g., to demonstrate impact or programmatic objectives, inform implementation, and/or identify strategies for scale-up)⁴

⁴ This could include the organization’s mandate or targets to identify and provide services and responses for the most marginalized populations (e.g., including but not limited to refugees, ethnic and linguistic minorities, girls and women, persons with disabilities); the organization aims or broad approaches to reach the most marginalized populations; a rationale for targeting the most marginalized populations and/or specific interventions for the most marginalized populations, according to organization definitions and targets of the most marginalized.

We identified multilateral organizations that prioritized early childhood development primarily to complement government priorities. In contrast, networks and think tanks emphasized documenting, promoting, and disseminating unbranded and lesser-known programmatic efforts in order to leverage ECDE prioritization in humanitarian contexts.

Challenges/barriers to prioritizing ECDEiE. Three stocktaking survey responses were rated as key barriers to prioritizing ECDEiE: (1) low parental engagement; (2) ECDE not being a priority in normative (or nonemergency) contexts; (3) and workforce constraints within organizations and in a country (see Figure 5).⁵ In contrast, ECDE not being part of the preparedness plan or the education laws was not perceived as a barrier. This particular view was reported by government respondents more than by other types of respondents, such as humanitarian aid organizations.

Figure 5: Radar Plot of the Priority-Setting Barriers by Sector



Note: The guiding question was, “Please state if you strongly agree, agree, disagree, or strongly disagree that the criteria listed are key to setting the priorities for programming and/or investing in your agency.”

5 The respondents were asked to provide their appraisal in their responses to the questions on the stocktaking survey. Their answers could be reflective of several factors, including their overall professional experience. There was no way to ensure that they answered on behalf of the organization for which they worked at the time they answered the survey questions.

Three overarching themes emerged from the open-ended items in the stocktaking survey in regard to challenges to prioritizing ECDEiE: (1) persistent underprioritization of early childhood programs and services on many donor agendas; (2) resources thinning after the sudden onset of COVID-19; and (3) challenges in documenting, monitoring, and evaluating the results of ECDEiE implementation processes in education responses. Limitations emerged in terms of understanding community-specific ECDEiE responses and inclusive ECDEiE (e.g., localized, culture-specific approaches to ECDEiE, or ECDEiE approaches for non-neurotypical children). Specifically, respondents from the academic sector noted a lack of expertise in cross-cultural research, a lack of departmental focus on education at some of the sampled institutions, and a scarcity of approaches to addressing the needs of non-neurotypical children in global contexts.

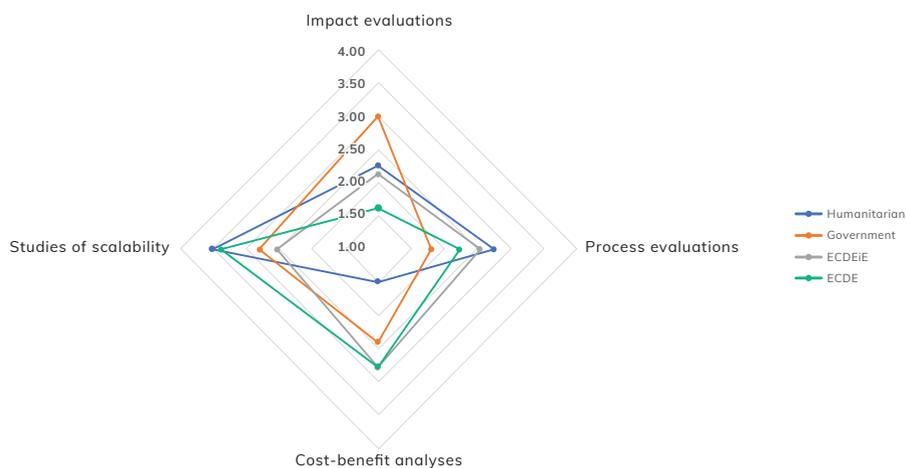
We identified the following challenges to prioritizing ECDEiE in documents from the scoping review: (1) government capacity (human and financial) to provide access to ECDE social services (e.g., preschool, birth registration) before and during crises; (2) families' unmet needs and poverty, which threaten their livelihoods, and barriers to accessing ECDE services for themselves and their young children (e.g., a need for flexible arrangements and child care); (3) the overall underprioritization of ECDE across organizations and actors, including public financing; (4) a limited evidence base on the 0-3 and 0-5 age groups and their families/caregivers during crises, including how best to promote learning for young children and the need for measurement frameworks. A few documents noted political barriers (e.g., political instability, hostility toward refugees), which were identified as risks to the prioritization and funding of ECDEiE and other services at the national level. An additional ECDEiE challenge reported was the exclusion of ECDE from humanitarian appeals and assessments, and from organizations' funding proposals.

Challenges to implementation, coordination, and finance. Survey respondents expressed concerns about sustainability of ECDEiE programs/services. They also noted structural/environmental challenges (e.g., environments unfit for play, risk of communicable diseases). Limited training and professional development opportunities for ECDE service providers (e.g., teachers) were also mentioned as key barriers to implementation. Commonly cited challenges from the scoping review included structural barriers (e.g., limited school placements available for refugee children; service sites such as schools damaged or occupied; limited viable spaces in camps for ECDE services; great distance required to travel to receive/provide ECDE services; and limited internet accessibility for affected populations; to access the detailed coded information, see [Complement Table 7](#)). A few organizations noted barriers stemming from a lack of a formal national early childhood education

curriculum and learning objectives specific to ECDE and/or ECDEiE. General administrative challenges were also cited, such as staff turnover. Other findings highlighted the need to integrate ECDE into existing humanitarian coordination mechanisms in a meaningful way. Several documents mentioned having limited financing for scaling ECDEiE programs and services. One specific scalability limitation was a reliance on variable and unpredictable external support and investments.

We asked survey respondents to identify factor(s) that strengthen ECDEiE advocacy globally. A total of 9 emergent codes were identified from 87 statements (see Table A1 in the Appendix for their operational definition and illustrative quotes). In descending frequency, the emergent codes were (1) bolster strategic campaigns, including marketing and evidence brokering; (2) focus on and leverage local government and context; (3) enhance the knowledge and evidence base of the practice of ECDEiE; (4) integrate ECDEiE into early humanitarian response; (5) increase financial support for ECDEiE in order to bolster prioritization; (6) increase coordination of programs and services; (7) focus on capacity-building and workforce support; (8) integrate ECDEiE into global agendas; and (9) position ECDEiE as a conduit to equity. Ranking research priorities showed that, across the four types of respondents, impact evaluations were seen as the highest priority ($M=2.25$), followed by process evaluations ($M=2.33$) and cost-benefit analyses ($M=2.37$). Studies of scalability were ranked lowest in terms of perceived priority ($M=3.05$; see Figure 6). The descriptive statistics of all surveys by respondent type are included in Table A2 (see Appendix).

Figure 6: Radar Plot of the Ranking of Research Priorities



Research Question 3: What is the typology of organizations operating in the ECDEiE space and what are the trends in the geographic focus, program models, and evidence of the implementation and impact of programs in the gray literature?

We identified a total of 62 organizations operating in the ECDEiE space (Table 1; also see [Complement Table 6](#)). Of the 218 documents charted, the majority were from multilateral organizations ($n=58$), followed by networks and think tanks ($n=53$), ECDEiE implementing organizations ($n=44$), funders and donors ($n=26$), other implementing organizations ($n=26$), humanitarian coordinating organizations ($n=3$), and news outlets ($n=8$).⁶ We applied six categories that were based on our assessment of their role in ECDE, humanitarian aid approaches, and institutional missions (Table 1; also see [Complement Table 6](#)).

⁶ Note that news outlets are not considered ECDEiE operating organizations; however, news outlets did report on ECDEiE programs and initiatives.

Table 1: Trends in ECDEiE Information Available in Open-Source Literature or Literature Shared by Agencies

ECDEiE Information in the Open-Source Literature or Literature Shared by Agencies	Agency Types						Total Frequency
	17 ECDEiE Implementing Agencies	16 Other ECDEiE Implementing Agencies	3 Multilateral Agencies Implementing ECDEiE	10 Funders	3 Humanitarian Coordination Agencies	13 Networks/Think Tanks	
ECDEiE Definition							
General ECD definition	2	1	1	1	1	5	11
Specific ECDEiE definition	3	1	2	6		5	17
Not identified	12	14		3	2	3	34
ECDEiE Target Population⁷							
Children ages 0-3	1	3		1			5
Children ages 3-6	1	4		1			6
Children ages 0-8	2		1	2	1	2	8
Children—other ⁸	13	11	3	7	2	10	46
Parents	7	4	2	5		8	26
Mothers only	3	2				2	7
Fathers only	1						1
Teachers and Service Providers	8	2	3	3		4	20
Other ⁹	2	1	1	1		3	8
Not identified					1	1	2

7 Some agencies' information was classified in multiple categories according to how it was represented in the various documents synthesized.

8 "Other" refers to agencies that classified their target population with terms such as "young children," "preschoolers," or "preschool age" children in ECD centers, kindergartens, and/or other age ranges.

9 "Other" refers to caregivers generally, community leaders or members, and/or women generally.

ECDEiE Information in the Open-Source Literature or Literature Shared by Agencies	Agency Types						Total Frequency
	17 ECDEiE Implementing Agencies	16 Other ECDEiE Implementing Agencies	3 Multilateral Agencies Implementing ECDEiE	10 Funders	3 Humanitarian Coordination Agencies	13 Networks/Think Tanks	
ECDEiE Approaches and/or Services Provided or Reported by the Agency							
Holistic development	10	4	2	5		9	30
Child protection and safety, includes safe spaces and temporary learning shelters	13	6	2	2	1	11	35
Psychosocial support and/or social-emotional learning	9	4	3	5		9	30
Early learning and school readiness (includes access to early childhood education and development services provided at ECD centers and formal or nonformal preschool provision)	14	8	3	8	1	12	46
Center-based or community-based parental support and wellbeing	5	4	2	4		7	22
Home visiting parental support and wellbeing	1	1		3		4	9
Teacher or service provider training	10	6	3	6	1	6	32

LANDSCAPE ANALYSIS OF ECD AND EiE

ECDEiE Information in the Open-Source Literature or Literature Shared by Agencies	Agency Types						Total Frequency
	17 ECDEiE Implementing Agencies	16 Other ECDEiE Implementing Agencies	3 Multilateral Agencies Implementing ECDEiE	10 Funders	3 Humanitarian Coordination Agencies	13 Networks/Think Tanks	
Media campaign	1			3		3	7
Teaching, learning, and/or play material distribution	5	1	3	3		6	18
ECD services geared toward the inclusion of marginalized groups, such as children or persons with disabilities, marginalized ethnic and linguistic minority groups, refugees, etc.	6	4	3	3	2	7	25
Agency strategy and/or framework specific to ECDEiE	9		1	1			11
General agency strategy and/or framework not specific to ECDEiE but inclusive of ECD and crisis, fragility, emergencies, etc.	4	3	3	4	3	4	21
Other ¹⁰	1	5	1	5		5	17
Not identified				1			1

¹⁰ “Other” is inclusive of interventions such as adult education, child care, conflict resolution, promotion of comprehensive family services, interventions focused solely on learning through play, national systems’ strengthening initiatives, nutrition referrals, and kindergarten construction.

ECDEiE Information in the Open-Source Literature or Literature Shared by Agencies	Agency Types						Total Frequency
	17 ECDEiE Implementing Agencies	16 Other ECDEiE Implementing Agencies	3 Multilateral Agencies Implementing ECDEiE	10 Funders	3 Humanitarian Coordination Agencies	13 Networks/Think Tanks	
ECDEiE Program Implementation Characteristics							
Implementation process information (e.g., who are implementers, how is the program implemented, frequency/dosage of implementation)	11	12	3	6		7	39
Curriculum description/information	11	3	1	1		6	22
Workforce development and support information	10	7	3	3	1	7	31
Needs and additions to enhance ECDEiE programming	9	1	3	3	1	11	28
Equity and inclusion considerations	8	8	3	5	2	10	36
Tools and resources specific to ECDEiE	5	3	3	2	3	8	24
Other		1					1
Not identified	4	1		4			9
ECDEiE Research, Monitoring, and Evaluation							
Anecdotal data reported	12	1	2	1		6	22

LANDSCAPE ANALYSIS OF ECD AND EiE

ECDEiE Information in the Open-Source Literature or Literature Shared by Agencies	Agency Types						Total Frequency
	17 ECDEiE Implementing Agencies	16 Other ECDEiE Implementing Agencies	3 Multilateral Agencies Implementing ECDEiE	10 Funders	3 Humanitarian Coordination Agencies	13 Networks/Think Tanks	
Monitoring information reported	5	3	1	3	1		13
Evaluation outcome data reported	8	5	2	2		3	20
Number of affected population reached	9	3	3	2		5	22
ECDEiE research agenda	4	1		5		4	14
Other		3					3
Needs assessments	5		1	1	1	4	12
Not identified	4	6		1	2	3	16
ECDEiE Financing							
Foundation funding	5	1	1	4		5	16
Global fund	2					3	5
Bilateral donors	1	2	1	1		3	8
National government budget						2	2
Humanitarian financing mechanism (e.g., pooled funding, sector-specific humanitarian funds)	1	1					2
Agency-specific programmatic funds	3		1			1	5
Other	1	4	1	5	1	1	13

ECDEiE Information in the Open-Source Literature or Literature Shared by Agencies	Agency Types						Total Frequency
	17 ECDEiE Implementing Agencies	16 Other ECDEiE Implementing Agencies	3 Multilateral Agencies Implementing ECDEiE	10 Funders	3 Humanitarian Coordination Agencies	13 Networks/ Think Tanks	
Not identified	8	10	1		2	4	25
ECDEiE Coordination							
National coordination mechanisms	9	2	3	4	1	7	26
Community-based, local coordination mechanisms, local civil society	8	3	2	3		2	18
International interagency coordination	9		3	8	2	11	33
Other (e.g., academia)				2		3	5
Not identified	6	3		1	1	1	12
ECDEiE Challenges Documented/Reported							
Yes	11	7	3	8	1	13	43
No	6	9		2	2		19
Geographic Areas Targeted and/or For Which ECDEiE Information Was Reported							
Multiple/Global		1	2	5	2	9	19
Central and Eastern Europe	7	1	3	6			17
East Asia and the Pacific	11	9	5	1		1	27

LANDSCAPE ANALYSIS OF ECD AND EiE

ECDEiE Information in the Open-Source Literature or Literature Shared by Agencies	Agency Types						Total Frequency
	17 ECDEiE Implementing Agencies	16 Other ECDEiE Implementing Agencies	3 Multilateral Agencies Implementing ECDEiE	10 Funders	3 Humanitarian Coordination Agencies	13 Networks/ Think Tanks	
Latin America and the Caribbean	8	7	3	8		1	27
Europe	3	1		1		1	6
Middle East and North Africa	32	14	19	15		12	92
North America	1	3		1			5
South Asia	9	6	3	3		1	22
Eastern and Southern Africa	13	8	10	8		1	40
West and Central Africa	15	9	13	8	1	2	48

DIVERSITY IN IMPLEMENTING SECTORS AND ORGANIZATION TYPES

ECDEiE implementing organizations ($n=17$, 27%) corresponded to organizations that directly provided ECDEiE programmatic responses or interventions in one or more fragile and crisis-affected context. These organizations characterize themselves as humanitarian, development, relief, and/or faith based. In our exploration of their online platforms, nine of these organizations offered a framework or strategy specific to ECDEiE. Four organizations included ECDEiE exclusively in their organization-wide or sectoral frameworks and strategies.

Other ECDEiE implementing organizations ($n=16$, 26%) were those that directly provided ECDEiE programmatic responses as stand-alone responses, interventions, or part of broader sector responses (e.g., EiE responses where early childhood was specified as a programmatic area). These organizations variously characterized themselves as humanitarian, development, relief, nonprofit, faith-based, and knowledge organizations, associations, and government institutions. In some cases, the organizations mentioned ECDE as part of their organization strategy or approach. Other documents contained ECDEiE programmatic response information for at least one program in one or more categories from the charted data. Documents from three organizations suggested that ECDEiE is categorically part of a broader organization, sectoral framework, or strategy. Significantly, only three organizations represented government ECDEiE efforts, two of which were in high-income countries. Information that was less specific to ECDEiE was available from other ECDEiE implementing organizations within and across the data-extraction categories and subcategories. The data extracted suggested that these organizations do implement ECDEiE interventions to some extent, but more research is needed to comprehensively understand their ECDEiE operations.

Networks and think tanks ($n=13$, 21%) referred to either international or regional networks, think tanks, or research institutes. These institutions have included ECDEiE in their strategies and/or frameworks, or have disseminated research or communication pieces focused on ECDEiE (e.g., blogs, articles). We identified five organizations that are focused solely on ECDE and/or ECDEiE; the remainder included ECDEiE as part of their broader education, protection, emergencies, research, and advocacy portfolios.

Funders and donors ($n=10$, 16%) were either bilateral donors, foundations, or global funders that contributed funds to ECDEiE programs, networks, and/or research. According to the documents reviewed, one had a strategy or framework specific to ECDEiE and four included ECDEiE in their broad sector or emergency portfolios. Multilateral organizations ($n=3$, 5%) provided ECDEiE responses and interventions. All of them included ECDEiE in their broad organizational frameworks and strategies. One organization also reported a regional early childhood development strategy that included ECDEiE as a priority area. Humanitarian coordination organizations ($n=3$, 5%) are part of the global humanitarian architecture representing the Inter-Agency Standing Committee's cluster approach (UN OCHA 2020). These organizations included children within the early childhood development age range in their broad organizational strategies and/or frameworks.

HETEROGENEITY IN RESEARCH APPROACHES AND REPORTING

FIT-FOR-PURPOSE AND FIT-FOR-AUDIENCE PUBLICATIONS YIELD LIMITED TECHNICAL REPORTING¹¹

Documents from multiple organizations provided snapshots of ECDEiE programs. However, the number of technical and implementation details yielded was relatively low and was inconsistent within and between organizations. Descriptions of ECDEiE approaches and interventions were available in documents from funders, networks and think tanks, multilateral organizations, and other ECDEiE implementing organizations. The documents included annual appeals, white papers, additional documents, and organization reports on specific thematic programs, such as Catholic Relief Services' Community-Led Disaster Risk Management. Some entire organization reports or documents on operational standards were sourced from the EiE and child protection in emergencies sectors. The sectoral documents included only one or two references to ECDE. As expected, more detailed ECDEiE information on framing (e.g., definitions of and rationales for providing ECDEiE) and programmatic implementation characteristics were featured in the ECDEiE reports and tools. However, the type of implementation information and detail level varied. Reports, standards or tools, and resources specific to ECDEiE (e.g., an evaluation of an ECDEiE intervention) contained substantially more ECDEiE programmatic information than other document types. Implementing and multilateral organizations' broader

¹¹ We refer to fit-for-purpose and fit-for-audience publications as those that are geared toward a specific sector; thematic area, such as disaster risk reduction or gender equity; audience, such as a donor; or purpose, such as training, planning, and coordination; or to detail a case study.

frameworks, standards, or tools that were not ECDEiE specific did mention early childhood development, but they had limited ECDEiE framing and programmatic information (e.g., a case study or white paper on a thematic topic, such as child-friendly spaces or psychosocial support).

DETAILS ON IMPLEMENTATION, INCLUSION, AND FINANCING ARE LESS READILY ACCESSIBLE

Although more than half of the organizations ($n=39$ of 62, 63%) reported some type of implementation data, the information varied considerably in scope and depth. Many organizations included information on who the implementers were (e.g., teachers or staff members of organizations that train caregivers), but less information was provided for other subcategories, such as program dosage (duration, frequency, and/or attendance), capacity development, quality and accountability standards and mechanisms, and the extent to which the implementation process was monitored and evaluated. Over half of the documents mentioned strategies to address equity and inclusion ($n=36$, 58%) and offered information about ECDEiE service-provider workforce development and support opportunities ($n=31$, 50%). Very limited information on ECDEiE financing was available in the documents, as nearly half of the organizations ($n=24$, 38%) did not report how ECDEiE programs or interventions were financed. Foundations emerged as an important funder of ECDEiE initiatives across organizations ($n=16$, 26%); other mechanisms (e.g., public-private partnerships, joint procurement efforts; $n=13$ organizations, 21%) and bilateral donors ($n=8$, 13%) were mentioned in some instances.

A GROWING EVIDENCE BASE, WITH VARIATIONS IN SCOPE AND RESEARCH METHODS

A limited number of organizations reported needs assessments ($n=12$, 19%) or other forms of evidence, such as anecdotal data ($n=22$, 35%), monitoring ($n=13$, 21%), and evaluation outcomes ($n=20$, 32%). Several organizations reported evaluations of pilot programs, which did not include details on process indicators or outcome-level data. Available information, primarily from the last four years, suggests that some organizations have made a concerted effort to establish ECDEiE research agendas. In some cases, goals also included integrating ECDEiE into sector-specific needs assessments. For instance, some organizations reported including questions geared specifically toward early childhood as part of their needs assessments. In these assessments, data were disaggregated by sex and age to differentiate between the youngest children and the needs of preprimary-age children and service providers.

INCREASED DISSEMINATION AND SHARING OF INFORMATION ON ECDEiE OVER THE LAST TWO DECADES

In terms of when the ECDEiE documents were dated, reviewed, and published, 10 of 123 documents that were dated were published between 2000 and 2010, 28 between 2011 and 2015, and 85 between 2016 and 2020. The data suggest that there was an increase in the dissemination and sharing of ECDEiE approaches and programmatic interventions across organization type. This was particularly evidenced over the last five years (ECDEiE implementing organizations=26 documents; networks and think tanks=22 documents; funders=14 documents; other implementing organizations=13 documents; multilateral organizations=9 documents; and news outlets=5 documents).

PROGRAM DIVERSITY AND THE SCOPE OF ECDEiE PROGRAMMING

DIVERSITY IN TARGETED COMPETENCIES AND PROGRAMS

Many of the 62 organizations' programmatic approaches identified in the documents were geared toward promoting "soft" competencies, skills, tailored services, and broad sectoral services. These included young children, parents/caregivers, and service providers. A nearly equal number of organizations used ECDEiE approaches geared toward supporting parents/caregivers ($n=31$, 50% reported community- and home-based parental support and wellbeing programs) and training for teachers and ECDEiE service providers ($n=32$, 52%). This suggests that, where ECDEiE programs and interventions are offered, funded, and reported, the adults in young children's lives are engaged with and/or receive services. These services are provided in the home and the community. Information from 52 specific programs provided by 17 ECDEiE implementing organizations and one additional organization were identified in the review.¹² Information on these programs was extracted from 34 of the 124 documents. Of these 52 programs, 18 (35%) focused on a single intervention (e.g., early learning and school readiness programs, $n=11$, 21%; child protection and safety programs, $n=4$, 8%; psychosocial support and social emotional learning programs, $n=2$, 4%; community-based caregiver support and wellbeing programs, $n=1$, 2%),

¹² While other ECDEiE services, interventions, and efforts were identified in documents from "other" ECDEiE implementing organizations and multilateral organizations, the information was not comprehensive enough across data extraction categories to fully classify these efforts. The list of "other" ECDEiE implementing organizations' efforts shown in [Complement Table 8](#) identifies an additional noteworthy ECDEiE effort for future exploration. In the case of multilateral organizations, ECDEiE interventions in approximately 50 geographic contexts were noted from the documents reviewed. The evidence suggests that important, lesser known ECDEiE interventions may be conducted, or those on a smaller scale and/or without comprehensive documentation available externally, beyond what is reported in detail in publicly available documents.

while 28 programs (54%) reported a combination of multiple interventions or services. Common combinations were teacher training and early learning and/or school readiness, child protection and safety, and/or psychosocial support and social emotional learning. Also identified were early learning and community-based caregiver support and wellbeing interventions, as well as early learning and psychosocial support initiatives. Approaches and interventions reported less commonly and classified as “other” ($n=6$, 12%) included, but were not limited to, media campaigns, disaster risk interventions, infrastructure rehabilitation efforts, early childhood care and development mapping exercises, and enrichment programs.

INCREASED ATTENTION TO ECDEiE AT THE INSTITUTIONAL LEVEL

Among the institutional ECDEiE approaches reported were the distribution of materials or single-activity interventions, which included early childhood development kits or one-off infrastructure/access-related activities; rehabilitating early childhood development centers; promoting the child-friendly spaces approach; and providing teaching and learning materials. ECDEiE has become a more prominent target of institutional responses in the last five years, and it is explicitly addressed in several organizational strategies, plans, and monitoring frameworks. These include a focus on ECDEiE, such as the Early Childhood Development Framework for Action of the UNICEF Eastern and Southern Africa Regional Office (2019), which conducted a rapid ECDEiE assessment in the region (UNICEF Eastern and Southern Africa Regional Office 2020). Furthermore, programmatic shifts from the content analysis appeared in some documents. For example, UNHCR reports featured a marked increase in attention to ECDEiE, including providing comprehensive services for young children’s caregivers (e.g., UNHCR 2005, 2012, 2016). Our analysis also noted a shift in the technical tools, guidance, and communication materials published. Earlier technical guidance included ECDE as a “footnote” or mentioned it briefly as part of general thematic areas. There was limited mention of ECDE in crises, and no distinction between children of different ages (e.g., Consultative Group on Early Childhood Care and Development 2008; Save the Children 2002, 2009; UNICEF 2009; World Vision 2006; Rowena Einloth 2010). However, there was an increase in the number of ECDEiE-focused thematic and integrated programmatic guidance and communication materials published over the last ten years (e.g., ACEV 2012; Anera 2018; HundrED 2019; Wilton et al. 2017; Moving Minds Alliance 2018; NAEYC 2019; No Lost Generation 2017; Plan International 2013; Zubairi and Rose 2019; Ullmann 2019; UNICEF 2011, 2014).

Another trend included providing multiple integrated ECDEiE services, rather than one-time efforts. The information we analyzed also yielded evidence of a broader shift in ECDEiE programming, from material distribution and access-related efforts to integrate programming-sector interventions (e.g., health, protection, disaster, and nutrition) and enhance quality (e.g., developing, implementing, and upholding learning standards; emphasizing the learning process and learning outcomes rather than only increasing access; and recognizing the importance of integrating mental health and psychosocial support into programs and services). For example, child protection interventions were reported to be a more prominent part of ECDEiE programs and interventions, including psychosocial support tailored to young children, inclusive ECDEiE interventions, media interventions, play-based interventions, and accelerated school-readiness programming. Nutrition programs, disaster preparedness, and birth registration were also integrated into ECDE efforts.

ECDEiE IS DEFINED AND TARGETED DIFFERENTIALLY WITHIN AND ACROSS ORGANIZATIONS

General early childhood development and specific ECDE definitions were not often featured in documents across organization types, funders being the one exception. Fewer than half of the organizations ($n=28$, 45%) documents synthesized included a general or specific definition for ECDE and/or ECDEiE. Our analysis of definitions suggests that organizations featuring a definition of ECDEiE positioned it as one or more of the following: a life-saving priority, a rights-based necessity, foundational to lifelong holistic development and to mitigating adverse childhood experiences, essential to ensuring sustainable development, and contributing to social justice, cohesion, resilience, and/or peace. Furthermore, age targets and types of stakeholders, which included beneficiaries of and populations reached by ECDEiE services and approaches, varied within and across organizations. The majority of organizations' ($n=46$, 74%) publicly available documents lacked disaggregated data on children's specific age range. The terms used were "young children," "preschoolers," and attending "kindergarten" or "early childhood development centers." In other documents, young children's ages were included as part of a broad general target, with phrases such as "children 3-18 years old." Parents, mothers, fathers, and "others" (i.e., caregivers, community members, and faith-based leaders; $n=42$ organizations, 68%) were commonly mentioned as participants in ECDEiE approaches and interventions. Less prominent actors across organizations were

teachers and other ECDEiE service providers ($n=20$ organizations, 32%). However, 32 organizations (52%) specified that training for teachers and service providers was part of their ECDEiE approach or services.

INCREASING THE FOCUS ON MULTIDIMENSIONALITY AND COORDINATION

APPROACHES TO ECDEiE TEND TO BE MULTIDIMENSIONAL AND CUT ACROSS SECTORS

Organizations implementing ECDEiE, along with networks and think tanks, reported the most information on their approaches and services. This was done either directly by an organization and its partners, or by the organization featured in the documentation. This suggests that implementers play a prominent role in making information publicly available, and that networks and think tanks are supporting ECDEiE knowledge management and dissemination efforts. Promoting early learning and school readiness, including access to ECDE services at early childhood development centers and the provision of preschool, was the most prevalent ECDEiE approach and the service offered most frequently across organizations ($n=46$, 74%). Other interventions the organizations frequently reported were child protection and safety interventions ($n=35$, 56%). This included the provision of temporary learning spaces or safe spaces dedicated explicitly to or inclusive of young children. The provision of psychosocial support and/or social-emotional learning programming specifically for or inclusive of young children and their caregivers were also prevalent ($n=30$, 48%). Interventions to promote holistic development ($n=30$, 48%) that were reported frequently included health, nutrition, education and early learning, protection and safety, and responsive caregiving. Training for teachers and ECDEiE service providers was also cited by 32 organizations (52%). It is worth noting that 54 (87%) organizations reported on two or more types of ECDE interventions or services that were funded or implemented by the reporting organization. Less commonly reported approaches and interventions were media campaigns ($n=7$, 11%); distribution of teaching, learning, and play materials ($n=18$, 29%); and inclusive ECDEiE approaches and services for marginalized groups ($n=25$, 40%).

MENTION OF COORDINATION ACROSS ACTORS IS PREVALENT

More than half of the organizations ($n=33$ of 62, 53%) asserted international coordination with multilateral organizations, funders, and ECDEiE-implementing organizations. Nearly half of the documents ($n=26$, 42%) indicated that there was coordination with national actors. Less prevalent were coordination with local

actors, such as nongovernmental organizations, faith-based partners, civil society, and local leaders ($n=18$, 29%). Further exploration is needed to understand the extent to which multilevel, vertical, and horizontal coordination efforts within and across organizations and sectors may influence organizational strategies and frameworks.

IMPACT OF THE COVID-19 PANDEMIC ON PROGRAMMATIC AND ORGANIZATIONAL RESPONSES

Humanitarian aid organizations released COVID-19 emergency response plans to combat the crisis by adapting and leveraging local networks. Many of the organizations that featured in-person developmental and learning curricula have been affected by the pandemic. Early in the crisis, most ECDEiE organizations relied on technology, messaging applications, TV, radio, and other forms of video conferencing to maintain communication and coordination. Another concern among government agencies was coordinating precautionary health interventions, such as safe water, sanitation, and hygiene measures. Open-source platforms and online webinars provided psychosocial supports that facilitated home learning for young children.

DISCUSSION

IMPLICATIONS FOR THE SECTOR

The global community has failed to guarantee access to equitable ECDEiE (Bouchane et al. 2016; Moving Minds Alliance 2020). We sought to address three root causes of this failure by applying a strategic problem-solving framework. Based on this broad mixed method analysis, we identify six main findings in order to inform strategic initiatives that could be used to increase access to ECDEiE worldwide.

GREATER FOCUS ON COMMUNITY NEEDS AND PARTICIPATION

Particularly relevant to ECDE and ECDEiE practitioners and humanitarian organization stakeholders is the importance of identifying and leveraging community needs and assets. This is linked to making ECDEiE more visible. Survey respondents identified the need to prioritize the results of needs assessments and the needs raised or manifested by the community, regardless of the type of organization. Although these findings are consistent with a large body of literature that positions them as the core of humanitarian response (IASC 2015; Darcy and

Hofmann 2003), capturing the needs, values, and priorities of affected communities is complex. The extent to which this is systematically done for families and young children in the education context remains largely undocumented, with more relative documentation on psychosocial support and trauma responses (Bennett 2015; Cobham and Newnham 2018; Jones 2008; Nicolai and Hine 2015). Our scoping review yielded only 12 organizations that explicitly mentioned ECDE in their needs assessments, out of the 62 included in our analysis. This also suggests that the humanitarian needs of young children, caregivers, and service providers should be addressed more efficiently. Our survey results and the scoping review indicated that low parental/caregiver engagement was identified as a common challenge in ECDEiE across organizations. Although family and community involvement with planning, decisionmaking, and improving early childhood care and education is critical to driving the provision of services (Fantuzzo et al. 2004), the scoping review revealed scant documentation suggesting that the needs of ECDEiE are assessed and integrated into emergency responses. The review also yielded limited mention of ECDE in documents from humanitarian organizations, which suggests that the extent to which ECDE is explicitly addressed in humanitarian response protocols and procedures likely varies and requires further exploration. This is crucial, as families identify education as their top priority, even in critical emergencies (Nicolai and Hine 2015). The evidence clearly points to the need for increased integration of ECDE into early response strategies, based on needs assessments.

EVIDENCE SYSTEMATIZATION AND STRATEGIC BROKERAGE AND COMMUNICATION

The scoping review revealed that research, monitoring, and evaluating ECDEiE initiatives need improvement; only about half of the organizations reported monitoring and evaluation information. However, robust multipartner ECDEiE research agendas that have emerged in recent years could, if funded alongside systems-level and at-scale initiatives, continue supporting national, regional, and international interagency ECDEiE efforts. This has gained attention from stakeholders, but we recognize the importance of designing transparent, open-access ECDEiE databases, and their related search and knowledge management functions, in a manner that offers equitable geographic representation. This is consistent with recent calls to recognize a more diverse representation of crises and to decolonize humanitarian governance and aid (Zubairi and Rose 2020; Saez, Lagaida, and Worden 2021). Furthermore, our content analysis revealed diverse conceptualizations of ECDEiE. We argue that the lack of a common ECDEiE language in the open-source literature may result in shortcomings in the identification and brokerage of emerging evidence.

INCREASED COHERENCE BETWEEN NATIONAL AND HUMANITARIAN AID AGENCY MANDATES

There is a need to harmonize humanitarian and national systems for education and relief, which includes how these systems enable or challenge equitable ECDEiE in multiple contexts (Ponguta et al. 2020). The scoping review yielded limited information on the extent to which ECDEiE efforts and trends are reflected in national systems. Information on local ECDEiE programmatic and coordination efforts was also scarce. Fewer respondents working for government and for humanitarian aid organizations without a specific ECDE mandate took part in the global stocktaking survey than other respondent groups (e.g., ECDE practitioners). This lack of diversity in respondent type therefore limits the conclusions that can be drawn from the intergroup comparison of survey responses. Documents from humanitarian coordination organizations and governments yielded less information specific to ECDEiE, yet our results highlight the need to better understand the drivers of funders'/donors' and governments' prioritization of responses. One of the more notable discrepancies between respondent type perceptions in our sample was the extent to which government respondents and humanitarian aid sector respondents perceived the position of ECDE in national education policy as a barrier to ECDEiE. This is consistent with research that illustrates the importance and complexity of alignment between government and humanitarian aid stakeholders (Bennett 2015).

STRATEGIC FOCUS ON WORKFORCE DEVELOPMENT AND SUPPORT

Workforce constraints and potential opportunities were prevalent in ECDEiE prioritization, programming, and advocacy. At-scale investment in the ECDE workforce remain crucial to the sector's growth and unmet needs, which is relevant to all stakeholders. The survey respondents highlighted other barriers to the sector, such as workforce constraints within organizations and in some countries that pose systemic barriers to ECDE in normative and non-normative contexts (Neuman, Josephson, and Chua 2015). The scoping review identified teachers and service providers who are poorly trained, paid, and qualified as another common challenge. For example, only about half of the 62 organizations that reported providing teacher and service provider training, workforce development, and support were part of ECDEiE interventions. A multistrategy response to strengthening the ECDE workforce is needed to address training and support needs before and during crises. This will be dependent on the recognition of service providers as critical players in humanitarian relief and development, which includes recognizing ECDE workforce development as crucial to national policy

and as a priority by national and humanitarian actors. This challenge is consistent with evidence highlighting the parallel need to strengthen the EiE and the early childhood development sectors' workforce capacity (ODI 2016; Neuman 2019). Although other challenges are critical in prioritizing ECDEiE, areas identified as crucial to strengthening within the EiE and ECDEiE workforce may inform critical areas of short-, mid-, and long-term advocacy, policy, and preparedness efforts.

IDENTIFYING AND PROMOTING ECDEiE AS A PRIORITY AREA OF KEY DONOR AND FUNDING MECHANISMS

In the scoping literature review, we did not find sufficient documentation on how organizations position and broker ECDEiE on donor agendas and in humanitarian funding processes, with the exception of foundations. This is despite ECDE emerging as a donor priority, which was noted as an opportunity/enabler in the review. It is important for organizations, governments, and humanitarian stakeholders that implement ECDEiE and ECDE to consider this finding as they develop and refine resource mobilization strategies that position ECDEiE as a critical programmatic area, in particular when communicating with a variety of donors before and during crises. It is also important that organizations already operating in and funding the ECDE and ECDEiE spaces promote the flexibility and sustainability of ECDEiE interventions during crises. There was common opinion across stakeholder types for the need to bolster strategic ECDEiE campaigns, including marketing and evidence brokering. The scoping review reveals that, in recent years, ECDEiE has been able to reach a diverse audience and stakeholder population through news outlets. These opportunities are critical to the ECDEiE sector.

CAPITALIZING ON AND STRENGTHENING MULTISECTORAL PARTNERSHIPS AND EQUITY IN ECDEiE

The multisectoral nature of ECDE requires integrated or coordinated efforts, which is a crucial characteristic for providing effective ECDEiE services in emergencies. Future strategic approaches that embrace successful frameworks for ECDEiE coordination have considerable potential to influence ECDEiE globally. There is a need to more fully understand the existing EiE evidence, identify and address key knowledge gaps, and employ more effective mechanisms to achieve sustained and significant EiE investments (Cambridge Education 2017). The lack of financial data on ECDEiE, including from our scoping review, confirms that ECDEiE interventions remain significantly underfunded. They also could be

underreported if under the umbrella of another sector or general early childhood development interventions (Moving Minds Alliance 2020). The shift to integrated ECDEiE interventions that was highlighted in our scoping review suggests that more research is needed to determine whether the funded sector-specific or multisectoral ECD interventions include pivoting to respond to or address ECDE needs in crises. Importantly, the scoping review yielded information on how organizational mandates consider equity and inclusion, including, in some cases, as part of ECDEiE programs or interventions. However, inclusive ECDEiE emerged in the survey as an area that is little understood. This discrepancy between the scoping review and the survey suggests a need for further examination in order to understand the extent to which equity and inclusion mandates are operationalized in ECDEiE programs and approaches.

LIMITATIONS AND FUTURE DIRECTIONS

Our methodological approach has several limitations. Although online surveys are important tools for capturing a wide range of perspectives, their dissemination may contain bias toward agents and stakeholders who have internet access and access to the global networks we purposefully recruited respondents from. Our respondents were primarily actors in the ECDE sector, but there is a need to explore challenges to and opportunities for the prioritization of ECDEiE by actors in other sectors, such as humanitarian aid and government, who do not traditionally operate in the early childhood realm or who have limited access to information, communication, and technology, due to a variety of geographic and socioeconomic factors. Additionally, scoping reviews include mapping literature on a topic area, which creates a potentially large and diverse overview without a critical appraisal of individual studies (Arksey and O'Malley 2005). Our aim was to present an overview of the landscape and identify critical areas for further exploration. We expect that complementary systematic reviews will emerge in answer to specific questions. We also acknowledge that our review includes a subsample of organizations that is not exhaustive and is based on the search terms and categorization processes we employed. The release of our survey and scoping review data coincided with the onset of the COVID-19 pandemic, which enabled us to capture an early snapshot of how the pandemic impacted organizational responses. At the time the scoping review data were charted, many of the ECDEiE organizations identified were actively collecting and consolidating COVID-related early learning and development tools. This included the resources of actors not considered in the scoping review. Our survey analysis indicated greater use of media and digital technology for early learning. This finding highlights the importance of digital equity and the need to consider early learning systems

that are more resistant to shocks. It also highlights the need to prioritize pre- and in-service training of early childhood development service providers and teachers in early onset response efforts. Furthermore, it is important to understand the extent to which media campaigns and digital platforms effectively meet the needs of children, caregivers, and communities living in crises. It is also important to recognize the extent to which these campaigns reach the majority of the global population, including marginalized individuals. Other areas to explore include the extent to which these services are offered by state and nonstate actors, such as humanitarian organizations and private companies, as part of systemic, equitable ECDEiE efforts.

The aim of our study was to inform future strategic initiatives of practitioners, advocates, researchers, policymakers, and other relevant stakeholders, with the overarching goal of increasing access to ECDEiE globally. Data from the extant literature and key actors point to six areas that drive strategic initiatives in national and global contexts: a greater focus on community needs and participation; systematization of evidence and strategic brokerage and communication; coherence between national and humanitarian aid agency mandates; a focus on workforce development and support; identification and promotion of ECDEiE as a priority area among key donors and funders; and capitalizing on and strengthening ECDEiE multisectoral partnerships. More research is needed in these areas, including further and more robust consensus and specific actions on global advocacy in order to drive the prioritization and financing of ECDEiE most effectively.

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APPENDIX

Table A1: Factors to Promote Effective Advocacy, According to Respondents

Emergent Theme	Operational Definition	Illustrative Quotes
<p>Strategic campaigns, marketing, and evidence brokering</p> <p>(Relative frequency=27)</p>	<p>Improve and increase marketing strategies to raise awareness and attention given to ECDEiE, including using cost-benefit analyses for high-level advocacy; highlight the high economic and social returns on investment; increase presence of the sector in media and among wider audiences, including academic institutions.</p>	<p>“Campaigns should spread facts about the real situation in numbers, about the extent of the repercussions of emergency situations and disasters on the future and fate of future generations, and ensure that information reaches all means of communication, especially to institutions of higher education.” (Organization type: academic; Role: associate professor)</p> <p>“The most significant factor to effectively promote or advocate for prioritization of ECDEiE is continuous demonstration/presentation of cost and benefit analysis of investing in ECE.” (Organization type: ECDEiE; Role: education officer)</p>
<p>Leverage and focus on local context and local government responses</p> <p>(Relative frequency=23)</p>	<p>Shift attention to the local contexts, communities, and governments by working on more context-sensitive effective practices and local sustainable development within countries; ensure that family/social dynamics, local resources, and potential local partners in every community are leveraged, and that communication with parents across communities is enhanced; focus on local politics and political advocacy to engage governments and formulate/establish policies.</p>	<p>“ECDEiE, together [with] child protection, should be a priority in any emergency setting, despite other pressing needs, and an advocacy strategy needs to be stepped up among the host local government.” (Organization type: ECDEiE; Role: child protection and education program officer)</p>

Emergent Theme	Operational Definition	Illustrative Quotes
<p>Enhance knowledge and science base of the practice of ECDEiE</p> <p>(Relative frequency=19)</p>	<p>Improve knowledge of effective interventions in ECDEiE and evaluate their impact and benefits for families, children, and communities, thus establishing compelling data and strong evidence from practical research.</p>	<p>“We need more research and impact evaluations, showing how ECE stimulates learning and brain development, and reinforces transition from ECE to primary, strengthens retention, and reinforces children starting primary at the appropriate age.” (Organization type: ECDEiE; Role: country lead)</p>
<p>Integrate ECDEiE into early humanitarian responses</p> <p>(Relative frequency=11)</p>	<p>Integrate ECDEiE into early response programs; build strong ECDEiE early response programs; standardized materials used in the standard humanitarian response.</p>	<p>“Right now, ECDEiE is not well positioned in the humanitarian architecture in terms of early stage response. Education in general has struggled to gain a foothold [in] getting priority early on in responses, but ECE often takes twice as long to come to the table. Education professionals who are deployed in the early stages of an emergency often know very little about ECE, and ECE professionals who want to operate in EiE more generally (like myself) often struggle to get hired into the early deployment roles because (in a true catch-22) they don’t have enough EiE experience. Progress is being made, but progress will be made faster if ECE professionals are able to get into responses earlier and are supported by organizations to establish ECDEiE programs” (Organization type: ECDEiE; Role: education in emergencies specialist)</p>

Emergent Theme	Operational Definition	Illustrative Quotes
<p>Increase financial support to bolster prioritization</p> <p>(Relative frequency=10)</p>	<p>Increase funding to strengthen prioritization and the design and implementation of ECDEiE programs.</p>	<p>“Prioritization will only happen with funding success. There are a lot of critical steps to getting funding, including building a body of research, showing the positive effects on displaced populations over long periods of time, [and] integrating it into more traditionally life-saving interventions (similar to how GBV is cross-cutting).”</p> <p>(Organization type: ECDEiE; Role: senior director)</p>
<p>Increase coordination</p> <p>(Relative frequency=9)</p>	<p>Increase communication, coordination, collaboration, and collective action among all actors; draw in key sectors that affect the field of ECDE directly and indirectly in the process of designing and implementing ECDEiE programs.</p>	<p>“Collective action, rather than individual organizations having similar agendas but not coming together, is essential.”</p> <p>(Organization type: ECDEiE; Role: education advisor)</p>
<p>Focus on capacity-building and support</p> <p>(Relative frequency=5)</p>	<p>Increase support and capacity-building for the actors in all sectors related to ECDiE; provide better training for teachers.</p>	<p>“A significant factor to promote the prioritization of ECDEiE is to promote teaching at the right level.”</p> <p>(Organization type: humanitarian; Role: program officer)</p>
<p>Integrate ECDEiE into global agendas</p> <p>(Relative frequency=3)</p>	<p>Integrate into global agendas; provide clearly defined frameworks and guidelines to complement plans.</p>	<p>“Include ECE on [the] global agenda for all development frameworks.”</p> <p>(Organization type: ECDEiE; Role: education specialist)</p>
<p>Position ECDEiE as a conduit to equity</p> <p>(Relative frequency=2)</p>	<p>Ensure equal rights for everyone and end or reduce poverty, especially in rural areas.</p>	<p>“Promote equality, since we must raise the need to care for everyone equally and [ensure] that they have the same possibilities of receiving health, education, and protection, regardless of the circumstances.”</p> <p>(Organization type: ECDEiE; Role: national education advisor)</p>

Table A2: Descriptive Statistics of Survey Questions in Four Domains

	Humanitarian (N=4)			Government (N=15)			ECDEiE (N=85)			ECDE (N=14)		
	n	M	SD	n	M	SD	n	M	SD	n	M	SD
Priority Areas												
Results of needs assessments	4	1.25	0.5	13	1.31	0.63	83	1.41	0.54	14	1.36	0.50
Funding priorities of donors and/or funders	3	1.33	0.58	13	1.69	0.75	82	1.77	0.67	14	1.86	0.86
Funding priorities of governments where the organization operates	4	2.25	0.96	13	1.62	0.87	82	1.84	0.66	14	1.86	0.77
Policy priorities of governments where the organization operates	4	2.00	0.82	13	1.54	0.66	82	1.77	0.67	14	1.79	0.58
Organization's historic priorities (e.g., a predetermined historic mission/priority)	4	1.25	0.5	13	1.46	0.66	83	1.76	0.77	14	1.93	0.48
Human/international rights frameworks or priorities	4	1.25	0.5	13	1.31	0.48	83	1.46	0.57	14	1.86	0.66
Programmatic priorities set by the Education Cluster/ Education in Emergencies Working Group	4	1.75	0.5	12	1.67	0.88	83	1.7	0.69	14	2.07	0.83
Needs raised or manifested by the community	4	1.50	0.578	11	1.45	0.52	78	1.56	0.66	14	1.64	0.63
Barriers												
Limited funding earmarked for ECDEiE	4	2.00	0.82	13	1.54	0.52	83	1.65	0.74	14	1.5	0.65

	Humanitarian (N=4)			Government (N=15)			ECDEiE (N=85)			ECDE (N=14)		
ECE not considered a life-saving, priority area for investment during crises	4	2.25	1.26	13	2.15	0.90	83	1.95	0.90	14	1.79	0.80
Low parental engagement, demand, buy-in	4	2.25	1.26	13	2.15	0.80	83	2.4	0.81	14	1.93	1.00
Workforce constraints within the organization	4	2.25	1.26	13	2.08	0.49	82	2.52	0.74	13	2	0.71
Workforce constraints in the countries where the organization operates	4	2.25	1.26	13	2	0.41	82	2.28	0.78	13	2	0.71
Limited advocacy to promote investments in ECDEiE	4	2.25	1.26	13	1.62	0.65	83	1.98	0.78	14	2	0.78
Limited research on effectiveness and feasible program models	4	1.75	0.96	13	1.85	0.69	83	1.98	0.80	14	2.21	0.80
ECDEiE not generally part of and/or prominent in the education laws of countries where the organization works	4	1.50	0.58	12	3.08	0.67	83	2.29	0.86	14	2.07	0.73
ECE is not generally part of and/or prominent in the national preparedness plans of countries where the organization works	4	1.25	0.5	13	2.62	0.77	83	2.13	0.84	14	2.07	0.83
Enablers												
Advocate for ECDEiE to donors/funders	4	1.25	0.5	13	1.85	0.89	83	1.23	0.42	14	1.36	0.63

LANDSCAPE ANALYSIS OF ECD AND EiE

	Humanitarian (N=4)			Government (N=15)			ECDEiE (N=85)			ECDE (N=14)		
Advocate for ECDEiE to governments where the organization operates	4	1.50	0.58	13	1.62	0.65	83	1.27	0.44	14	1.36	0.50
Broker research linking ECDEiE to life-saving strategies	4	1.25	0.5	13	1.58	0.52	83	1.34	0.48	14	1.57	0.51
Broker research linking ECDEiE to sustainable development (e.g., peace, social cohesion, economic return)	4	1.25	0.5	13	1.46	0.52	83	1.36	0.53	14	1.36	0.50
Explicitly include ECDEiE measures/questions in needs assessments in humanitarian contexts	4	1.25	0.5	13	1.38	0.51	83	1.29	0.48	14	1.43	0.51
Invest in workforce capacity for ECDEiE in the countries where the organization operates	4	1.50	0.58	13	1.38	0.65	83	1.4	0.54	14	1.57	0.51
Increase country-level advocacy for ECDEiE as part of providing nurturing care and as a critical part of country-level national preparedness and education	4	1.25	0.5	13	1.38	0.51	83	1.34	0.48	14	1.5	0.52
Broker research on effectiveness and feasible program models	4	1.25	0.5	13	1.62	0.51	81	1.41	0.49	14	1.43	0.51

	Humanitarian (N=4)			Government (N=15)			ECDEiE (N=85)			ECDE (N=14)		
Incorporate communities in determining their needs, which promotes demand and facilitates prioritization of ECDEiE	4	1.25	0.5	12	1.42	0.52	78	1.33	0.50	13	1.62	0.65
Ranking of research priorities												
Impact evaluations (e.g., what works in ECDEiE, what outcomes are most often impacted, and in what contexts?)	4	2.25	1.258	10	3	1.25	78	2.14	1.05	13	1.62	1.04
Process evaluations (e.g., how do ECDEiE interventions/ programs work?)	4	2.75	0.957	10	1.8	0.79	78	2.54	1.18	13	2.23	0.73
Cost-benefit analyses	4	1.50	1	10	2.4	1.08	78	2.79	1.07	13	2.77	1.01
Studies of scalability (e.g., how is ECDEiE effectively brought to scale in humanitarian relief contexts?)	4	3.50	0.577	10	2.8	1.14	78	2.53	1.09	13	3.38	0.96

LEARNING TO BECOME SMART RADICALS: A REGENERATIVE LENS ON THE POTENTIAL FOR PEACE AND RECONCILIATION THROUGH YOUTH AND EDUCATION SYSTEMS

MIEKE T. A. LOPES CARDOZO

ABSTRACT

Media coverage and foreign policy around the globe often spread messages of fear about the possible radicalization of the world's growing youth population. More nuance was brought into these debates in 2015 by UN Security Council Resolution 2250 and the subsequent Global Study on Youth, Peace, and Security (Simpson 2018), while specific attention was directed at the potential of education to support young people's agency for peacebuilding. In this reflective piece, I aim to bring a fresh perspective to current education in emergencies thinking and offer insights into how a regenerative approach to education can help reshape it to prepare the younger generations to respond effectively to peacebuilding and to the related "wicked challenges." I bring together two existing conceptual frameworks—the 4Rs (Novelli, Lopes Cardozo, and Smith 2017) and Tomaševski's 4As (2005; see also Shah and Lopes Cardozo 2019)—that are directly relevant to the education in emergencies field. Building on this conceptual work, I adopt a regenerative lens on reconciliation and engage a law of three framework to encourage a deeper understanding of education's transgressive potential to inspire alternative, reconciliatory paths toward peacebuilding. I will invite and encourage you, the reader, to apply these regenerative conceptual explorations to your own experience. The aim of this conceptual exploration is to inspire the development of "smartly radical" questions; to support research, policy, and practice design that is more critically informed and consciousness driven; and, finally, to support the transformative potential of

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education systems and stakeholders to serve younger generations more effectively and enable them to respond to “glocal” challenges in ways that are mindful, conscious, and effective.

INTRODUCTION

“Building and sustaining peace through the transformative potential of young people demands a seismic shift and bold reorientation from governments and the multilateral system, for which Security Council resolution 2250 planted the seeds.” (Simpson 2018, xiii)

Young people’s unique potential to influence peacebuilding processes has gained momentum since the December 2015 adoption of UN Security Council Resolution (SCR) 2250 on Youth, Peace, and Security. By urging member states to increase the representation of youth in decisionmaking at all levels, SCR 2250 shifted the international focus on youth from seeing them as passive victims or a security threat to recognizing them as a large sector of the population that has the potential to contribute to constructive change. In this same period, increasing attention was given to both the constructive and the undermining roles education can play in addressing youths’ needs and fostering peacebuilding. This latter development is largely due to advocacy by education specialists and members of the Inter-agency Network for Education in Emergencies, increased recognition in UN circles of the connection between education and peace and conflict, and a growing body of scholarship.

Findings from recent studies on education in emergencies (EiE) emphasize education’s potential to play a constructive, transformative role in peacebuilding processes. At the same time, the scholarship shows a need to uncover and address the ways education systems and actors may (re)produce inequalities and various forms of violence, thereby becoming key drivers or potential triggers of conflict. Addressing peacebuilding issues in a way that can transform—or, rather, transgress (Peters and Wals 2016)—existing structures and systems requires a complex understanding of the role education plays in multiple global-to-local, or “glocal,” “wicked challenges” (Flemming et al. 2021; Davies 2016). Hence, a more complex understanding is needed of the intersectional relations between increased inequality and conflict, among other dimensions, of the impact of global health pandemics, and of the continued effects of neocolonial power relations and climate crises.

Masses of young people are taking to the streets in cities around the world, carrying banners that cry for recognition of the climate crisis and for changes in the way we treat our earth—and each other. Courageous young individuals, such as Malala Yousafzai and Greta Thunberg and numerous less well-known yet equally important smart, radical thinkers, carry the voices of a younger generation. They are speaking up, loud and clear, for the need to disrupt the status quo of ongoing climate crises, of institutional forms of racism and exclusion (including in education), and of the need for young women and men to have a seat at the peace negotiation table. At the same time, media coverage and internal and foreign policies in many contexts are spreading a message of fear about the radicalization of the world's growing youth population. How can we bring more nuance into these debates and recognize the potential of both youth and education systems to promote radically new ways of thinking, acting, and being? These and similar questions were at the heart of the Advisory Group of Experts for the Progress Study on Youth, Peace, and Security meetings, which were led by author Graeme Simpson and Cécile Mazzacurati, who heads the UN Population Fund/UN Peacebuilding Support Office (UNFPA/PBSO) secretariat for the Progress Study. Members of this advisory group expressed the urgent need to reclaim the language on radicalism and youth civic engagement, to move away from a discourse that narrowly emphasizes the danger of radicalizing youth, and to recognize the powerful transgressive potential of young people as “smart radicals.” This requires rethinking the often-automatic negative connotation of the term “radical,” as well as a more agentic understanding of young people's roles in the world and their potential to reconsider, inspire, and even lead in changing and evolving the ways in which we as humans coexist with each other, with the systems we have built, and in relation to our living environment.

Education systems are potentially powerful arenas for nurturing, or hindering, the younger generations' development into smart radicals. So, how can education become a nurturing space where today's youth can develop appropriate, constructive ways to address demands for radical change? And how do current education systems support the younger generation's development of the reflective capabilities and attitudes they will need to address such highly complex issues? In this article, I argue for the need to think beyond educating to sustain peace (Reed 2007) and to instead examine the potential of education systems and stakeholders to support regenerative development—that is, to redesign education systems so that the younger generations will be fully able to respond to ongoing and emerging global challenges in ways that are mindful, conscious, and effective.

Building on former work by myself and my colleagues, I acknowledge in this article that education systems alone cannot build peace. My aim here is to expand the conceptual thinking developed in my work with a range of colleagues on the potential role education can play in peacebuilding and social transformation. I begin with a discussion of key concepts and debates in the literature on education, sustainable and regenerative development, youth, and peacebuilding. In the second section, I introduce two relevant conceptual frameworks that bring together insights from the 4Rs framework (Novelli et al. 2017), which was inspired by Fraser's (2005) social justice framework and the rights-based 4As model developed by Tomaševski (2003; Shah and Lopes Cardozo 2019). I also discuss the complementary benefits of engaging with these two frameworks when designing and implementing empirical research or practical interventions, and of continuing to explore the concept of reconciliation in relation to education.¹ In the next section, I introduce a regenerative perspective (Mang and Haggard 2016) on education's role in peacebuilding and apply the law of three framework—the activating, restraining, and reconciliatory forces at work—to reflect on the transgressive potential of education systems, actors, and processes to move our thinking, acting, and ways of being onto an alternative, reconciliatory path toward peacebuilding.

My aim in this reflective piece is to bring a fresh perspective to current EiE thinking, to move beyond the current rhetoric to “build back better,” and to increase the resilience of education systems and actors facing adversity and emergencies (Shah, Paulson, and Couch 2019). I offer insights into how we can rethink and reshape education to prepare younger generations to respond more effectively to peacebuilding and to the related “wicked challenges” (Davies 2016), such as pandemics, climate change, and community violence. Throughout this text, I will invite you to pause and reflect on an actual issue or example relevant to your own work and life. My intention is that, by testing and applying the frameworks offered in this piece to your own work, you will be encouraged to experiment with developing radically smart questions, approaches, and communities. In so doing, I hope to inspire you to formulate bold, “smartly radical” questions that will spark informed debate on the potential and pitfalls of educating youth for a more peaceful, regenerative future.

1 This analytical exercise is not meant to be a revision of the initial 4Rs framework I developed with colleagues, but to provide further insight into what it means to see theory-building as a continuous process of reflection and revision, as we suggest in our earlier work (Novelli et al. 2017).

KEY CONCEPTUALIZATIONS AND DEBATES

EDUCATION AND LEARNING

In this paper, I employ a broad conceptualization of education and learning that promotes understanding of the various learning environments available to diverse groups of youth around the world. This includes both formal forms of schooling (government led, with a formal curriculum) and nonformal learning spaces (nongovernmental, civil society or community led). As emphasized in Sustainable Development Goal 4, which addresses providing quality education, when understanding education systems as part of broader societal processes, focusing on access to education alone will not suffice. A more inclusive development approach is needed, one that addresses the quality, relevance, and safety of the education available to various constituencies of young people (Gupta and Pouw 2017; Gupta, Pouw, and Ros-Tonen 2015; Lopes Cardozo and Scotto 2017). And while the Sustainable Development Goals provide an important frame of reference for development practitioners, policy designers, and researchers, scholars who have a more regenerative focus argue that adopting these goals could lead to an “optimization frame” that would leave intact—and unquestioned—such underlying mechanisms as neoliberal thinking, individualism, and anthropocentrism (Wals 2021, 1).

Interestingly, SCR 2250 includes several direct references to the importance of education in young people’s lives. This notwithstanding, it has a relatively narrow view of the role education plays in supporting “youth entrepreneurship and constructive political engagement” (UN Security Council 2015, 4). This is also reflected in the findings of a comparative four-country study conducted by the Research Consortium on Education and Peacebuilding (Lopes Cardozo, Higgins, and Le Mat 2016). In their synthesis report on youth agency for peacebuilding, the consortium concluded that most interventions in an education context focus first on fostering economic empowerment and, second, on political participation. The sociocultural aspects of young people’s sense of identity and agency are often underestimated and its educational support systems remain underfunded, while both formal and nonformal education have a limited focus on creating spaces for reconciliation, which is a key aspect of a transformative approach to peacebuilding (Novelli et al. 2017).

The dialectic relation between education and conflict is highly complex. In postconflict periods, education can support young people’s psychosocial recovery, provide a sense of normalcy and hope, and inculcate the values and skills they

will need to build and maintain a peaceful future (Sommers 2002). Drawing from Salmi (2000, in Seitz 2004), we can view two significant ways violence is related to education: (1) direct violence, where schools become ideological battlegrounds for control and/or where physical harm is being done (e.g., physical punishment or attacks on students and teachers); and (2) indirect violence, through which social injustice and inequality are perpetuated and legitimized in discriminatory or culturally, linguistically, and politically biased schooling practices, which maintains social exclusion and sows the seeds for further violence.

Progressive voices in academia, which often are inspired by critical pedagogues such as Paolo Freire, call for education systems to provide transgressive forms of learning (Wals 2021; de Sousa, Loizou, and Fochi 2019), which refers to ways of learning that move beyond existing standardized boundaries, focus on holistic human and planetary development, and (re)imagine education as the practice of freedom (hooks 1994). Prior to her published work on so-called wicked problems, Davies (2006) coined the term “interruptive democracy” in the field of peace education. In her broader work, Davies (2008, 2004) argues that “positive conflict” can be a force for overcoming passivity and inertia and moving toward transformation. Thus, conflict is not necessarily something to avoid in educational spaces; it is, in fact, an inherent part of life and learning. When conducted constructively, positive forms of conflict can be one of the most powerful outcomes of an education. To make this directly relevant to the field of EiE, researchers must explore what positive forms of conflict might look like in places where students and teachers are confronted daily with violence, and/or where the conditions are such that youth have limited agency to express or engage in constructive nonviolent approaches to conflict.

Educating young people to become smart radicals thus requires a more holistic, even a transgressive approach to education. Such an education would encourage smart, or critical, thinking through a Socratic, question-based approach to gaining deeper knowledge and wisdom (Sanford 2020). According to Wals (2021), to become transgressive, education needs to move beyond the cultivation of so-called sustainability competencies, such as dealing with ambiguity and complexity, imagining alternative future directions, and taking action in mindful and empathetic ways. Wals states further that transgressive and regenerative forms of learning also require

the capacity to disrupt, to make the normal problematic and the ordinary less ordinary, to provoke and question, to take risks for the common good, to complicate matters rather than to

simplify them, to become uncomfortable—together—by asking moral questions and posing ethical dilemmas, and to learn from the pushback and the resistances from the normalized unsustainable systems all the above creates. (2021, 2)

YOUTH

Definitions of the term “youth” remain contested (Lopes Cardozo et al. 2015), as finding a meaningful definition is an apparent mission impossible. How can we provide a universally valid definition of a massive segment of the population that is characterized by diversity? One common representation of youth connects them with a variety of deep-rooted fears, ambivalence, and unsettling anxieties (Sayed and Novelli 2016). For the purpose of this article, it makes sense to work with the SCR 2250 age range for youth of 18-29, bearing in mind the limitations of any definition and the need to consistently acknowledge the intersectional heterogeneity—age, gender, ethnicity, race, socioeconomic class, geographic location, political views, sexual orientation, religion, disability—of any collective of young people. It is also important to take into account a long-term perspective: today’s youth, who are dealing with inequality, violence, social transformation, and peacebuilding, were yesterday’s children being affected by armed conflict, and they will be tomorrow’s adult citizens who shape the future of their communities. The Progress Study on Youth, Peace, and Security calls for moving beyond narrow perceptions and stereotypes of youth as a threat to peace or as victims of violence and to focus instead on their agency:

The consequence of these stereotypes has been a failure to adequately appreciate and harness the agency, creative practice and resilience of young people, most of whom are *not* involved in violence and are just eager to get on with their lives, and some of whom are actively invested in crafting more peaceful societies for themselves and their communities. (Simpson 2018, 17)

PEACEBUILDING

My understanding of peacebuilding is based on the 4Rs analytical framework (see Novelli et al. 2017), which identifies the dimensions of recognition, redistribution, representation, and reconciliation. This links Fraser’s (1995, 2005) work on social justice with the peacebuilding and reconciliation work of Galtung (1976), Lederach (1995, 1997), and others. Combining thinking on social justice and transitional justice, this normative framework for the study of education and peacebuilding recognizes the multiple dimensions of inequality and injustice. It also characterizes contemporary conflicts and the need to address them in and

through education. This framework is in line with well-established thinking on peacebuilding (e.g., Galtung 1976, 1990; Lederach 1995, 1997) and with the need to address both negative peace, or the cessation of violence, and positive peace, or the remediation of the underlying structural and symbolic violence—that is, the drivers—that often underpins the outbreak of conflict. It also recognizes the importance of addressing and redressing the “legacies of conflict” in tandem with the “drivers of conflict” (Novelli et al. 2017).

Research in this particular field has generally been too focused on taking a problem-solving approach to the issues of education, violence, and conflict—namely, by identifying how to get the sociopolitical system back up and running. It also has failed to pay close enough attention to education’s location in the quest for innovative education approaches and spaces as part of a broader agenda for governance and social transformation (Novelli et al. 2017). In response, critical scholars in the fields of international and comparative education have pushed to situate education within a broader set of cultural/semiotic, political, and economic processes—in short, to see it as an “education ensemble” in which all parts of the whole are closely intertwined (Robertson and Dale 2015). This line of thinking laid a foundation for the 4Rs framework. One of the main arguments following from this is that education can mitigate the relapse of conflict only if education reforms are embedded in the broader set of policies and programs included in the diverse peacebuilding processes being implemented in society (Novelli and Smith 2011, 12). The combined 4Rs and 4As framework discussed below provides a conceptual basis for analyzing education as an integral part of systemic processes that both foster and mitigate conflict and cause youth to experience political, economic, and sociocultural exclusion and inclusion. Building on these frameworks, I outline a regenerative understanding of education for reconciliation.

COMBINING TWO CONCEPTUAL FRAMEWORKS: THE 4RS AND 4AS

This combined conceptual framework starts with the idea of an education ensemble, as noted above (Robertson and Dale 2015). It combines complementary insights from the rights-based 4As model (Tomaševski 2003) and the recently developed social justice-inspired 4Rs framework. In short, while the 4Rs provide a conceptual lens to analyze the potential for peacebuilding and social justice, as well as concerns about education systems and actors, the 4As complement the 4Rs with a normative lens to uncover the ways education rights are, or are

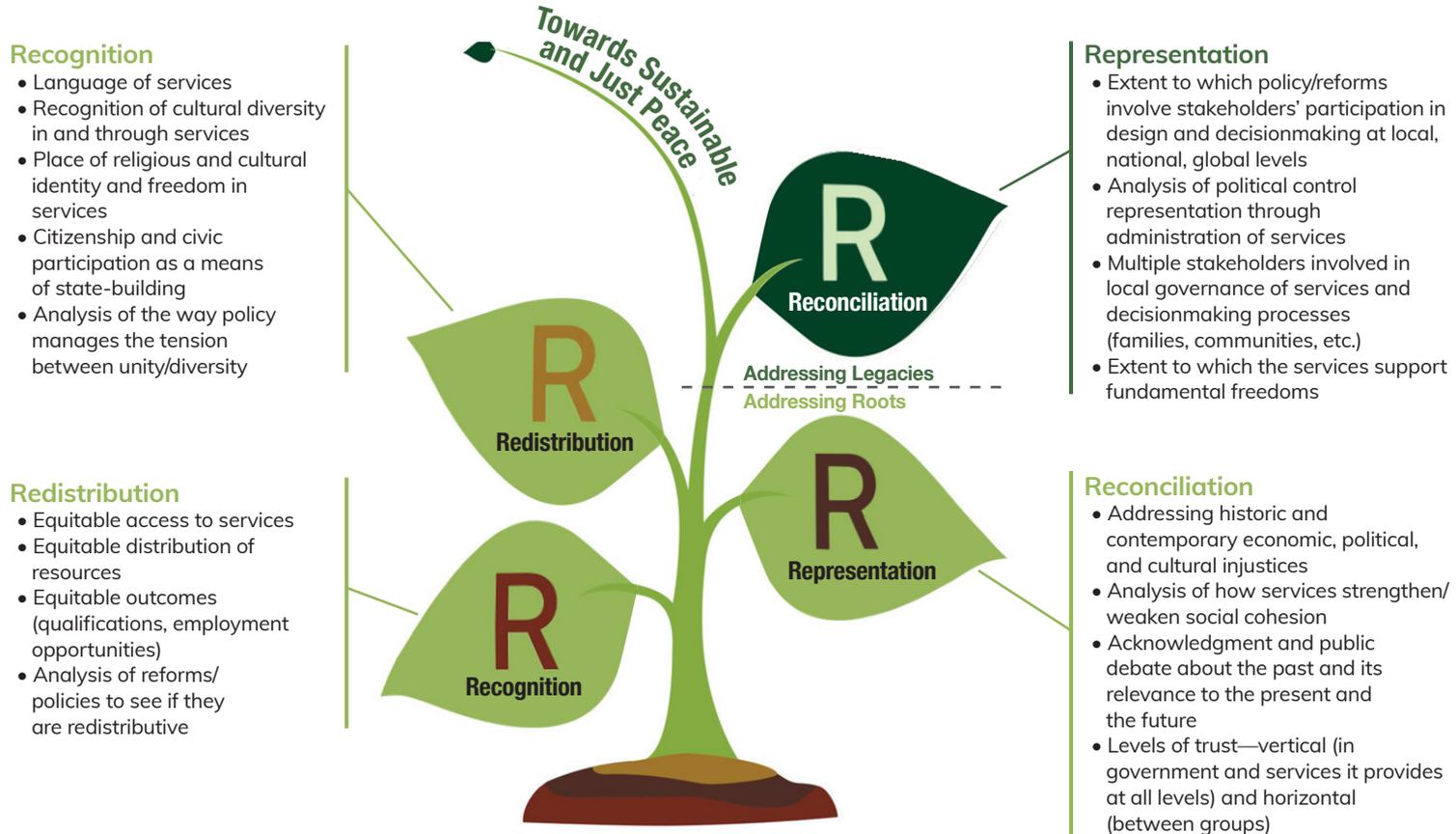
not, being met. What follows is an elaboration of the two frameworks and their unique contributions in analytical terms. I discuss the ways a combination of these two frameworks might help in the design and implementation of theoretically grounded studies that are well positioned to inform and stimulate meaningful debate and action in relevant fields of policy, practice, and activism.

THE 4RS FRAMEWORK

The 4Rs framework captures the multiple economic, cultural, political, and social dimensions of inequality in education and the ways they might relate to conflict and peace from a social justice perspective (Novelli et al. 2017). Following this framework, education has the potential to make a significant contribution to sustainable peacebuilding through its effect on security, and on political, economic, social, and cultural transformation within conflict-affected societies. I define transformation as the extent to which education policy, peacebuilding, and development programs promote redistribution, recognition, representation, and reconciliation. When education policy and programming support social justice processes (Glasius and Pleyers 2013), they can contribute effectively to what Fraser (1995, 2005) termed a “transformative remedy.”

Applied to the field of education by a range of scholars (e.g., Keddie 2012, 2014; Aikman 2011; Sleeter 1996), Fraser’s (1995, 2005) well-established 3R social justice model provides valuable reference points for deciding where policy and practice should focus their energies to serve education’s emancipatory potential. The 4Rs framework builds on Fraser’s three-dimensional conceptualization of interconnected remedies to social injustice that address economic redistribution, sociocultural recognition, and political representation. When applied to conflict- and violence-affected settings, the 4Rs framework adds a fourth R, the overarching dimension of reconciliation. And while recognizing that this concept has many possible interpretations, in the 4Rs framework we interpret it as a relational process (Hamber and Kelly 2004; Lederach 2014) that calls for (1) the need to address cultural, political, and economic injustices and grievances; (2) increased levels of vertical trust—that is, trust in the government and its services—and horizontal trust—that is, trust between groups; and (3) public debate on multiple interpretations of the past in order to reimagine alternative futures (Novelli et al. 2017). The key underpinnings of the 4Rs framework are presented in Figure 1, which is an updated version of the original figure published in this journal in 2017 (Novelli et al. 2017); it was redesigned by Adrian Serezo for the *Early Childhood Peace Consortium Report* (Serezo 2018).

Figure 1: The 4Rs Framework

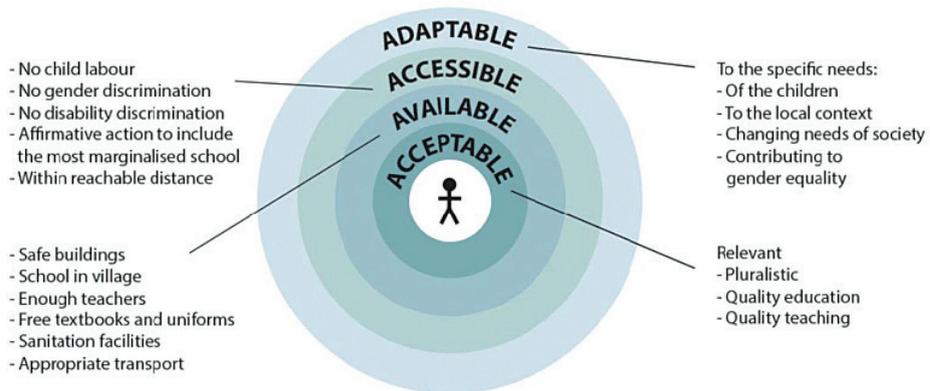


Having laid out the key premises of the 4Rs framework, I now turn to how Tomaševski (2001, 2003) developed the 4As model. I argue that combining the 4Rs with the 4As can provide a complementary analytical layer that, from a rights-based perspective, sheds light on the essential features of education systems that protect the right to education for all.

THE 4AS FRAMEWORK

Katarina Tomaševski (2005) developed the 4As model as part of her work as the UN Special Rapporteur on the Right to Education, a position she held from 1998 to 2004. The model was an attempt to hold governments accountable to their human rights obligation to make education available, accessible, acceptable, and adaptable. Availability means that education is free (or government funded) and that there is adequate school infrastructure, a safe environment, and trained teachers able to support its delivery. Accessibility refers to a system that is nondiscriminatory and safely accessible to all, and that takes proactive steps to include the most marginalized. Acceptability translates into education content that is relevant, nondiscriminatory, culturally appropriate, and of good quality. Finally, adaptability means that education can evolve with the changing needs of society, challenge inequalities such as gender discrimination, and be adapted to suit specific local contexts (Newman 2007, 24).

Figure 2: Tomaševski's 4As



Source: Tomaševski (2012)

Tomaševski's work on the right to education for every child has been called foundational for the field of education in emergencies. Tomaševski—who, unfortunately, died in 2006—fully recognized how difficult it was to get the right to education onto the international agenda. She shared the following lesson she learned through this process:

I have abandoned what I call “the chewing-gum approach,” whereby the remit for economic, social and cultural rights is constantly stretched and an image created whereby there is a human rights answer to every question. Stretching human rights concepts makes them weaker and thinner until they break. Common sense tells us that expanding an issue to cover everything reduces it to nothing. Experience tells us that human rights organisations which proved successful did exactly the opposite and defined their mandates narrowly. (Tomaševski 2005, 225)

Inspired by Tomaševski's self-criticism, I will offer a few additional concerns that should be brought to the fore when working with the 4As model, including Tomaševski's strategy to adopt a narrower focus on the right to education. Colleagues have rightly noted that minimal attention is paid to transnational civil society organizations and networks in the fight for the right to education, and the focus seems to be on primary education over secondary and tertiary levels (Klees and Thapliyal 2007, 508-09).

When adopting a rights-based approach to education, an additional critique needs to be acknowledged that relates to a broader concern for the universalist, neocolonial tendencies of human rights frameworks. For instance, Maldonado-Torres (2017) develops a decolonial critique on the evolution of human rights and how current definitions reinforce existing power imbalances between experts from the Global North speaking to marginalized peoples in the Global South about their rights. Spivak (2004) adds to the complexity of this critique by stating that “the difficulty is in the discontinuous divide between those who right wrongs and those who are wronged” (563). Of specific relevance to the 4As and the right to education is Spivak's argument that even the work of Global South-based human rights advocates is part of a larger human rights culture that follows “Northern-ideological pressure” and thus creates an “epistemic disconnect” with the reality and actual needs of the (rural) marginalized populations that they aim to serve and protect, mostly because they have been “educated in Western-style institutions” (527). She continues to stress the importance of scrutinizing the ends and quality of education and how “the sort of education we are thinking of is not to make the rural poor capable of drafting NGO grant proposals!” (527).

Maldonado-Torres (2017) reflects on Spivak’s call for a new kind of education geared specifically toward poor rural communities. He writes that “the goal is not to have experts in human rights addressing the denial of various sorts of rights among the rural poor, but creating the conditions for the rural poor themselves to engage in the process of affirming their humanity and defining it and their rights—if that is the way in which they think that defining their humanity is most appropriate” (39).

In line with this call to rethink education systems, de Sousa Santos (2007) and other scholars present important thinking on the coloniality of power, knowledge, and being, particularly in the Latin American region but with relevance worldwide. They call for a decolonization of the social sciences and humanities by opening up alternative knowledge, approaches, and paradigms that emerge from the Global South. These decolonial critiques on education and other forms of knowledge production are critically important when working with a human rights-based framework like the 4As, as they urgently call for a meaningful contextualization and translation of the dimensions that compose the 4As to reflect local understandings and meanings of the right to education.

Adopting a regenerative development perspective on the role of education in designing a more equal, inclusive, and peaceful community and society would mean seeing education spaces and systems as genuinely rooted in local systems of governance and value generation (Mang and Haggard 2016, 118). Connecting back to the Youth, Peace, and Security Progress Report’s call for a radical shift in conceptualizing the potential of large youthful demographic cohorts, rather than seeing the problems, would mean shifting the purpose of our education systems to become a means to control and manage young women and men. Mang and Haggard (2016) suggest that,

if we think of teenagers as highly energetic, idealistic, and adaptive people who are looking for meaningful places to belong, then we have the basis for designing a new educational system whose purpose is to access and nurture these culturally useful traits. (118-19)

So, what intersections and complementary insights do we gain from bringing the 4Rs into conversation with the 4As, and what new insights does this spark? Despite the challenges and critiques of working with a generic framework like Tomaševski’s 4As, it is still considered “the most common analytical framework for understanding the normative content of the right to education” (UNESCO 2019, 75). The 4Rs and 4As frameworks share the fact that they were developed

as normative analytical hermeneutics meant to scrutinize the complex and highly political role education plays in processes of social inclusion and exclusion—not least of young people.

The 4As model advocates for the right to education, rights within education, and rights obtained by following/finishing an education. In so doing, it works toward what Robertson and Dale (2015) refer to as the education ensemble—that is, seeing the spatiotemporal aspects of the whole system in terms of the moment of the practice of education, the moment of policy, the moment of politics, and the moment of outcomes. In Figure 1, the 4Rs are visualized as a plant, a living system, where the first three Rs are considered the root causes and drivers of social injustices. In terms of the law of three, grasping these interrelated roots is crucial to building an understanding of the activating and restraining contextual forces at work. The 4As help deepen this understanding in terms of the potential of education to support the availability, accessibility, acceptability, and adaptability of young peoples' educational perspectives and trajectories.

The fourth R, reconciliation, adds an additional level of complexity to our understanding of education's potential to support or hinder peacebuilding processes by shifting our minds and enabling us to imagine new futures. I argued elsewhere (Lopes Cardozo 2019) that the 4Rs might be visualized in a pyramid shape, with the three drivers of inequality and conflict at the base while the R of reconciliation becomes visible as an overarching process that has a quality of being “lifted up.” This would signify the potential of reconciliation to promote transformation and higher levels of thinking, consciousness, and interconnectedness relative to the process of sustainable peacebuilding and creating a socially just society. In keeping with this, I now explore what a regenerative development approach to reconciliation could contribute to conceptual debates and understandings of education in emergencies/peacebuilding education. My intention is to inform and encourage the design of critically informed, consciousness-driven research, policy, and practice.

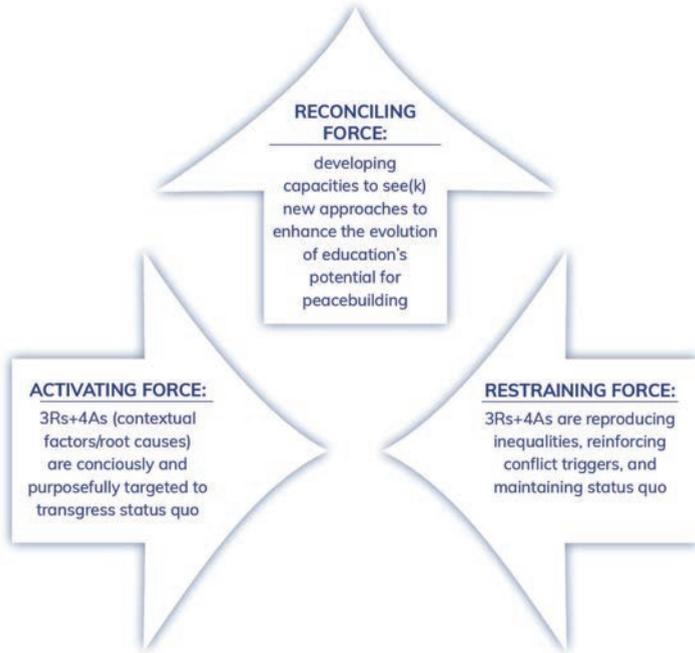
TOWARD A REGENERATIVE UNDERSTANDING OF EDUCATING FOR PEACEBUILDING

The tension between the activating contextual forces on the one hand and the restraining forces on the other pushes our thinking and awareness up to the next level (see Figure 3). Figure 3 was inspired by the law of three, which originated in Armenian philosopher Gurdjieff's teachings in the first half of the 20th century

(Seamon 2020), and from Bennett's *Elementary Systematics* (1993), which was introduced and adapted by Mang and Haggard (2016) and their colleagues in their work on regenerative development and design. Rather than adding yet another framework to the mix, I aim to show how we can advance our thinking on reconciliatory pathways for education by building on the combined insights of the 4Rs and 4As, and by observing and understanding activating and restraining forces. This combined framework is not meant to be a blueprint for solving problems but is, rather, an invitation to students, researchers, educators, education designers, and policy developers to reflect on and apply the framework in the communities they are working in, and to consider what activating, restraining, and reconciliatory forces are at work. This also could be useful to those working in the broader field of peacebuilding.

The activating and restraining forces often come to the fore most prominently when we look at education's role in conflict and peacebuilding situations. This framework invites us to embrace these forces as part of a larger picture and expand into new and alternative ways of thinking, acting, and being a third, reconciling force. It invites us to hold the tension between activating and restraining forces as a form of cognitive dissonance and, rather than moving into a state of compromise, to develop the capacity to view opposite forces as valuable and to push our thinking, being, and acting to new levels of understanding.

Figure 3: Law of Three: A Regenerative Understanding of Reconciliation Relative to the 3Rs and 4As



I now return to the start of this article, where I introduced debates and strategies developed in and beyond UN circles relative to the Sustainable Development Goals and the notion of sustaining peace. Engaging with the 4Rs and 4As frameworks in unison and aiming for reconciliation as discussed above (see Figure 3) urges researchers from academia, policymaking, and practice to move beyond the notion of sustainability, to rethink the notion of resilience in education in emergencies, and to foster reconciliation processes that promote socially just societies. Taking a regenerative development perspective calls for developing an understanding of the unique character and essence of a school, or a larger education system, as inspired by three levels of learning (as interpreted by Sterling 2003, in Reed 2007, 675).

I now invite you to briefly pause your reading and bring to mind a personally relevant real-life school setting for a thought exercise, one where exams are a key aspect of learning. Try to bring this example to life and keep it in mind as you read and reflect further.

While Reed (2007) applies regenerative development thinking on the three levels of learning to environmental sustainability—that is, to move from sustainability to resilience to reconciliation—I employ it here to explore the role of education in regenerative peacebuilding. The first operational learning level focuses on

sustainability and is concerned with improving the way things are done as part of the status quo and striving for efficiency—basically, with doing things better, rather than doing better things. This might be illustrated by training teachers to be better at orienting their students to do well on exams and by students seeking tutoring to help them pass exams. In this sense, this first operational level concerns improvements within a given system without transforming the underlying mechanisms at play. It is perhaps needless to mention that these examples aim to serve as an imaginative basis for bringing to life a way of reflecting and for shifting our understanding of the education systems in our own work and lives.

Can you bring to mind how this sustainability/operational level plays out in the real-life example you are working with? How might this be connected to the restraining, status quo, protective forces at play in the system that your school is nested within?

Level two entails a transformation of the system it is part of and can be connected to the activating forces at work. This second maintenance level of learning is concerned with the notion of resilience, and with a move from efficiency thinking to effectiveness thinking. For example, teachers might collectively resist an exam-driven governance model, as it puts too much pressure on their already overwhelming workload. At the same time, youth might protest this standardized system and find support from teachers who are concerned that the students are being pushed into expensive and exclusive private tutoring, which reproduces existing inequalities.

In your own real-life case, what activating forces are at play to enhance and maintain effectiveness in the school and/or system it is part of? How, and to what extent, are young people and educators actively engaged in these processes?

The third level moves on to reconciliation, or the actual evolution of an education system. This involves a more epistemological and perceptual change that is driven by integrative awareness of the whole system. As depicted in Figure 3, the reconciliation level moves our understanding toward the ultimate purpose of educating for peace. An example of this is how an institution like a teachers union or student union brings together various stakeholders to explore alternative approaches that value the outcomes of student learning. This would involve recognizing the need to move away from exam-oriented curricula and to reclaim teachers' autonomy in knowing how to serve their students' learning most effectively. This would enable young people to reclaim education as a place that nurtures their potential contributions to a more regenerative, peaceful future in their unique community contexts.

What new potential can you see(k) within a school or learning institute that you engage with as a student, educator, researcher, education designer, parent, advisor, or otherwise? What capacities, skills, or attitudes would you need to develop—within yourself, and within the communities you engage with in this school setting and the broader system?

Finally, I would like to reflect briefly on what the conceptual reflections presented in this article could mean for the design of future research. I would argue that these reflections might be equally relevant when it comes to the design of formal and nonformal education programming. A research and/or education project design that draws from a regenerative development and design methodology (e.g., Mang and Reed 2012) encompasses a thorough and layered design stage that starts from living systems or whole systems thinking, which is supported by the application of dynamic frameworks, such as the law of three introduced above (Krone, in Mang and Reed 2012, 30). This can inspire collaborative projects that take an action-oriented approach that is focused on transformation and engaging communities (Mang and Haggard 2016). This entails engaging and developing the endogenous capacities of multiple stakeholders in rethinking and redesigning the essence and purpose of education systems that are connected to a specific location, state, or substate system, as illustrated above. This means establishing a meaningful level of community engagement and a shared will to transform, which requires moving from short-term models (e.g., training of trainers) toward longer-term processes, thereby transforming existing funding systems that are geared toward selecting and supporting interventions that last just a few years. And, while recent research I conducted with colleagues from Myanmar (Lopes Cardozo and Maber 2019) illustrates how training teachers in conflict sensitivity and in integrating social and emotional skills into a broader systemic approach to peacebuilding for youth is a crucial step, it is not enough to sustain, let alone transform, an entire education system to promote peace. This was unfortunately illustrated by the immediate impact the February 2021 military coup in Myanmar had on teachers and students.

A regenerative, living systems approach toward designing academic, policy-, or practice-oriented research on education for equitable peacebuilding requires the formulation of radically smart questions. As noted above, designing such questions requires a collective community- and place-based process. It could be argued that researchers need to develop a research design and knowledge-sharing practice that follows Tomaševski's (2003) logic about the right to education in developing and disseminating research designs and findings that are available, accessible, acceptable, and adaptable. This would entail using participatory research

methods and engaging with youth researchers (Dunne et al. 2015), engaging with communities as partners in codesign (Mang and Haggard 2016), and ethical, conflict-sensitive, context-specific consideration of how research is conducted. Finally, as a researcher, educator, student, education designer, peacebuilder, or whatever role you play in this area of work, this framework is an invitation to see yourself as nested within these three forces. Achieving a more transformative, potentially regenerative approach to peacebuilding needs to start with working on ourselves and on developing our own capacity to (re)think, (re)act, and be(come) more capable of enabling the broader EiE ecosystem (Flemming et al. 2021), and the schools, communities, and systems we work with, to thrive.

CONCLUDING THOUGHTS: SEEING TRANSGRESSIVE POTENTIAL IN YOUTH AND EDUCATION SYSTEMS

My aim in this article was to provide a conceptual reflection that supports research, analysis, and practice. This is in response to the growing attention to and recognition of the importance of including young people “in the room, around the room, and outside the room of peace negotiations” (Altiok and Grizelj 2019, 37), and of seeing available, accessible, acceptable, and adaptable education systems as integral to an integrated, multilayered approach to peacebuilding. I was inspired by my humble involvement in the work of a highly diverse, progressive, and smartly radical group of advisors who were working under the leadership of Graeme Simpson on a global study on youth, peace, and security.² According to this study, young people who are involved in international, national, and community-driven peacebuilding work need to be seen not as passive victims or a potential threat to dominant systems but, rather, as resourceful, creative drivers of social change and political transition in contexts of multiple challenges—or “smart radicals.”

In this paper, I illustrate a conceptual exercise of theory-building from the perspective that theory is never static and that it needs to be adapted to specific research contexts and questions. In so doing, I brought two conceptual frameworks that have direct relevance to the EiE field into conversation with one another, the 4Rs (Novelli et al. 2017) and Tomaševski’s 4As (2005). Building on this conceptual exercise, I adopted a regenerative lens on reconciliation. The law of three framework enables a potentially deeper shift in our understanding of the transgressive and reconciliatory potential of education systems, actors, and processes.

² For more information on the UN Advisory Group for the Progress Study on Youth, Peace, and Security, visit <https://www.youth4peace.info/ProgressStudy/AdvisoryGroup>.

Inspired by insights from regenerative development thinking and transgressive education debates, I demonstrated how the law of three framework calls attention to the restraining forces at work in the 4As in connection with the 3Rs domains of social justice (misdistribution, misrecognition, and misrepresentation). Simultaneously, the framework invites us to conceptualize opposite and activating forces, which work to, for example, constructively disrupt existing curricular systems and hegemonic domination of knowledge, or rethink economic systems, forms of democracy, climate governance, and so forth. From this tension between restraining forces that maintain the status quo and activating forces that transgress the status quo, a reconciling force emerges that advances our understanding and, potentially, our actions. This allows a move from a sustaining peace approach to a regenerative development approach, which drives the sustainability agenda to adopt a more complex, whole-system perspective that goes beyond sustaining, adapting, and making education systems, actors, and processes more resilient to transform the value and purpose of education for peace. This regenerative approach calls for me, as author, and you, as reader, to develop our ability to (re)think, (re)act, and be(come) more capable of enabling those we engage with in our work and lives—especially the young people and the schools, communities, and systems we work with—to thrive. Education is one of the most potent systems through which we can support the younger generations and enable them to become the smart radicals the world community will need to face the multiple glocal challenges that lie ahead.

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BEYOND NUMBERS: THE USE AND USEFULNESS OF DATA FOR EDUCATION IN EMERGENCIES

ELIZABETH BUCKNER, DANIEL SHEPHARD, AND ANNE SMILEY

ABSTRACT

Recognizing the lack of knowledge about how to improve data systems for education in emergencies (EiE), we examine in this article how EiE professionals use data and what makes data “useful” to them. Drawing from 48 semistructured interviews from a purposive sample of professionals working in the EiE field across the humanitarian, development, and stabilization sectors, we explored the primary ways EiE professionals use data. Using inductive and emergent coding, we identified the key themes, which we then disaggregated by participants’ sector and role in EiE operations. Our findings indicate that there is a common need across sectors for data that inform operations. However, participants working at a national or local level spoke the most about operational uses of data and the least about strategic uses, such as policymaking and advocating. Meanwhile, there was a notable emphasis among actors at the global level on strengthening data systems and their strategic uses. In this article, we also highlight the myriad nontechnical factors that shaped participants’ perceptions of usefulness, including the politicization of data, users’ expertise in analysis, and personal and institutional relationships. We argue that conversations about improving data for use in EiE must not focus exclusively on tools or techniques but also on people, institutions, and contexts.

INTRODUCTION

It can be difficult for those working in education in emergencies (EiE) to find timely and accurate data. Studies find that EiE professionals lack data on where children in emergency settings are located, their educational needs, and the specific barriers they

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face in accessing education (Anselme, Ghosn, and van de Brug 2019; Mendenhall, Russell, and Buckner 2017; Montjourides and Liu 2019). The lack of data to inform EiE can prevent organizations from reaching those in need, undermine the efficient allocation of resources, and make it difficult for organizations to measure their impact accurately (Anselme et al. 2019). There have been calls to improve data collection, coherence, and sharing between actors in EiE as part of a broader shift toward more responsive and longer-term programming (UNOCHA 2017; UNGA 2016). Numerous stakeholders, including the Inter-agency Network for Education in Emergencies and USAID's Education in Conflict and Crisis Network, have identified the critical need to improve data tools and systems for the EiE field.

That said, there is less agreement on how to improve data for EiE (Cambridge Education 2017; Montjourides 2013), or for humanitarian responses more broadly (cf. Bhimani and Song 2016). This is because data collection and analysis can be time and resource intensive and, as such, some argue that focusing on data systems diverts resources from program implementation. Calls to improve data for EiE tend to assume that more is always better without necessarily clarifying what types of data are most needed and useful. Recognizing this gap in understanding, we examined how EiE professionals use data and what factors make data most useful for them.

Drawing from 48 interviews with EiE professionals working across the humanitarian, development, and stabilization sectors for a broad array of organizations, including United Nations agencies, donor agencies, and various implementing international nongovernmental organizations (INGOs), we explored how data are used in EiE. Our findings situate six uses of EiE data within two broad families of use, operational and strategic, which are prioritized differently by different actors in the field. An important and perhaps surprising finding is that there are relatively small differences in terms of data needs and uses across the humanitarian and development sectors; these needs and uses vary more according to respondents' proximity to project implementation. Those working in global or regional organizations or institutions that are farther removed from project implementation tended to discuss their role in terms of strengthening systems. They also tended to focus more on the data needed for strategic purposes, namely, advocacy and policymaking. However, data often were collected by entities closer to implementation, and they focused more on the operational uses.

Our findings also point to ways of strengthening data use in EiE that require more than technical solutions. While standardized indicators and responsive tools are certainly needed, our respondents also pointed out that data needs and uses are

highly context dependent and that numbers often are politicized. As such, we argue that building trust, institutionalizing data systems, and building technical capacity are necessary to improve the use and usefulness of data for EiE.

LITERATURE REVIEW

We conceptualize data as the qualitative and quantitative facts and information researchers use to synthesize and summarize more complicated and contextual realities. The many common examples of EiE data include how many children are of school age, how many are accessing various education programs, how those children are performing in school, the location and physical infrastructure of existing schools, where various EiE organizations are operating, and how much humanitarian funding is devoted to education.

Data collected for EiE differ from education development data in several important ways that may affect their use and usefulness, namely, the roles governments and international organizations play in collecting data, the geographic coverage of the data, the speed of the planning and policymaking cycle, and the type of data collected (Brown and Ngoga 2019; Buckner, Smiley, and Cremin 2019; MacEwen 2019; Montjourides and Liu 2019; Segniagbeto 2019).

Education development data are traditionally collected by a government through education management information systems (EMIS), which are implemented through either a school census or a more dynamic school-based data-collection process (UNESCO 2019). These data are then reported in a dashboard or statistical yearbook for the entire nation, with prespecified subnational disaggregation (such as states or regions). The data are commonly collected and reported on an annual basis and ideally used to inform policies and budgets for future years. Such EMIS data focus primarily on access but increasingly also on learning outcomes, in keeping with Sustainable Development Goal (SDG) 4—“Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”—and the so-called learning crisis (World Bank 2018).

While the availability and accuracy of data are concerns in the field of international education development (Gustafsson 2015; Omoeva et al. 2013; UNESCO 2017), emergency settings, which tend to be volatile and localized, pose distinctive challenges for data collection and use for various reasons (Brown and Ngoga 2019). First, governments may stop their data-collection efforts entirely in emergency contexts or have incomplete coverage in the areas affected by the conflict or

disaster (GPE and IIEP 2016; ODI 2016). This may be because of a reprioritization of resource allocation or a lack of access to the area. As a result, international organizations and local civil society organizations often begin to collect data. Second, because emergencies usually have differential effects across a country, data-collection efforts and data needs may differ by locality (Buckner et al. 2019; Montjourides 2013). This may result in different data-collection systems being used in different locations and new data-collection needs arising in areas affected by an emergency. Third, the volatility of the initial phase of an emergency requires more rapid data collection and data use, as annual data quickly become obsolete (Montjourides 2013; Montjourides and Liu 2019). As a result, humanitarian data are sometimes collected daily and weekly during the acute phase of an emergency. Finally, education service provision changes during an emergency in terms of what is delivered and who is delivering it (Buckner et al. 2019; Mert and Kesbiç 2019). This fact, and the volatility of the situation, generate a need to coordinate tracking of data on education activities, such as who is delivering what, where, when, and to whom (the 4Ws). As a result, more data may be collected on activities and on access to those activities than on learning and other education indicators (Mert and Kesbiç 2019). As a result, the humanitarian and development sectors tend to have different indicators, timelines, reference populations, and actors involved in the collection, aggregation, and dissemination of data (Buckner et al. 2019; MacEwen 2019; Segniabeto 2019).

PRIMARY USES OF DATA IN EiE

Despite the well-documented challenges of accessing reliable data in EiE contexts, data are important in EiE for many reasons. However, gaps remain in the understanding of how EiE data are used. Drawing from previous work on EiE data (Buckner et al. 2019) and from our own interviews, we focus on six of the broad range of uses identified in the literature, namely, planning, coordinating, monitoring, evaluating, policymaking, and advocating. In this section, we discuss these primary uses of EiE data.

PLANNING

Data often are used in EiE to inform program design and plan specific actions. Given the volatility of humanitarian settings, planning often is ad hoc and urgently needed. This differs markedly from the multiyear education-sector planning that is a norm in education development (Segniabeto 2019). In EiE, data on the scale of an emergency, on the geographic distribution of the young people affected, and

on the existing education infrastructure can all be important for program design. Anselme et al. (2019, 23) state that the “main challenge in designing programmes in emergencies is the lack of disaggregated, reliable, and up-to-date data.” Nonetheless, studies have shown that data from baseline surveys or risk assessments are important to program planning. For example, Davis and Payan (2019, 94) report that, after a baseline survey was conducted in Honduras, “school communities developed immediate, cost-effective policies and practices to reduce school-based violence.”

COORDINATING

Various forms of data are used to help EiE actors coordinate a humanitarian response. Those in a cluster system, for example, can use data to avoid conflict or duplication, identify opportunities for collaboration, and optimize the distribution of activities.¹ In order to improve coordination between EiE service providers and local education systems, UNESCO’s International Institute for Educational Planning has supported data collection and joint sector planning as, for example, in Ethiopia (MacEwen 2019).

MONITORING

Implementing partners and donors often generate data to monitor programs. Monitoring data are used in EiE to understand program implementation, examine progress toward goals, ensure accountability, and provide feedback (Cambridge Education 2017, 2). An example of this use is the monthly or quarterly education cluster dashboards that use data on the number of children reached, relative to the target numbers and the need (Global Education Cluster 2020).

EVALUATING

Data also are used to assess impact and performance, and to generate evidence for good practice (Liket, Rey-Garcia, and Maas 2014, 176). EiE evaluation data may include data on academic attainment, learning outcomes, and social and emotional learning. For example, data from early grade reading and numeracy assessments have been used to evaluate education interventions (Piper et al. 2020). Bogdanov, Basenko, and Zaleska (2019) reported on experimental and quasi-experimental research conducted to assess the effectiveness of mental health

1 The cluster system refers to groups of humanitarian organizations, both UN and non-UN, in each of the main sectors of humanitarian action, including education, that are tasked with coordinating activity within that sector. EiE activities often are coordinated through an education cluster and produce data that feed into the 4Ws.

programming among displaced children in Ukraine, and Alexander and Christia (2011) measured the effects school segregation in Bosnia and Herzegovina had on altruism among students.

POLICYMAKING

Data are also used to inform the design of organizational or governmental policies. Although policymaking is often highly politicized and may or may not be responsive to data, Montjourides (2013, 87) argues that “data are useful in improving policymaking or the efficiency of government spending.” This can involve using data to determine priority areas, funding allocations, and thresholds. Examples of this are using data to develop conflict-sensitive education-sector plans or to determine the thresholds for participation (such as age) in certain education programs.² Studies have found that a lack of disaggregated data and data on outcomes hinder EiE policymaking (Mert and Kesbiç 2019). In contrast, Tolani, Morales, and Wheaton (2019) explain how a USAID rapid education and risk analysis tool was used to inform the organizations’ priorities in South Sudan. Yemen also used data from the humanitarian sector to inform the development of its transitional education sector plan, which was finalized in 2019 (Yemen Ministry of Education 2019).

ADVOCACY

Finally, data are also used to persuade individuals, often policymakers, to prioritize a problem or solution, to allocate funding to a set of actions, or to change an official organizational or governmental policy. Various authors and organizations have argued that data can be used effectively to secure resources and prioritize EiE (Cambridge Education 2017, 2; Global Education Cluster 2017, 12). Indeed, humanitarian response plan data can unlock specific funds, such as those from the Global Partnership for Education (GPE 2017; ODI 2016, 24). Haavisto and Goentzel (2015, 301) explain that “humanitarian organizations have also recognized that if supported by data, funding appeals are more likely to reach a wider audience.” Dutton (2019, 27) reports similarly that data systems for tertiary education in Jordan were used to inform advocacy at international donor forums.

While the literature identifies the many ways data are used in EiE, a need remains for a deeper understanding of what types of data and analysis are needed to support the various uses effectively. Up to now, there has been little systematic

² Although related to planning, we distinguish policymaking as applying data to a broader set of decisions beyond a single intervention. The use of data for policymaking often involves seeking longer-term changes at a system level, while planning aims at shorter-term goals linked to a particular intervention.

examination of which uses are most common among EiE actors and what types of data are needed to support each of these uses most effectively.

FACTORS AFFECTING DATA USE IN EiE

In addition to documenting the many uses of data in EiE, the growing literature on how data are used in education and beyond shows that the process of moving from data collection to data usage is neither linear nor technocratic (Levin 2013; Maxwell, Rotz, and Garcia 2016), as many other social, cultural, and political factors come into play (Levin 2013). This point certainly applies to the humanitarian context and the distinct organizational cultures of humanitarian and development organizations. The significant body of literature on evaluations' utility to nonprofits has found that, despite increasing pressure for organizations to evaluate program effectiveness, many staff report feeling that they are “drowning” in data that do not improve programs (Snibbe 2006, 39; Liket et al. 2014).

Studies on program evaluations highlight the variety of factors that determine whether evaluations are utilized, including organizational readiness, the user friendliness of results, decisionmakers' prior education, and the degree of stakeholder collaboration (Cousins and Leithwood 1986; Hoefler 2000). Studies also have highlighted the fact that various members of a single organization may have differing concepts of data and their use (Maxwell et al. 2016). As such, the importance of building relationships between those who generate and use data is widely accepted as a crucial determinant of utilization (Bach-Mortensen, Lange, and Montgomery 2018; Donnelly and Searle 2017; Liket et al. 2014; Patton 2008; Ramírez, Kora, and Shephard 2015). Most of this literature addresses evaluations conducted by nonprofit organizations. As a result, it does not address the particularities of data collection and usage in EiE contexts, which pose their own challenges. Thus, there is a need to understand if there are any factors specific to the EiE context.

Prior studies have documented the various issues EiE actors face when collecting data in crisis contexts (Anselme et al. 2019). For this study, we drew from the existing literature to examine how data are used by diverse stakeholders working in EiE, what contextual and organizational factors affect their perceptions of data utility, and what makes data useful for their purposes. With this article, we aim to contribute to ongoing initiatives to improve the use of data to provide quality education for all children and youth affected by emergencies.

DATA AND METHODS

Data for this study come from 48 semistructured interviews we conducted with professionals working primarily in EiE and education development in conflict-affected areas. We conducted the interviews in two waves. We focused first on interviewing respondents (N=35) whose work related to the conflicts in Iraq, Syria, and Yemen. For the second wave, we expanded our sample to include those working in EiE more broadly (N=13) using a combination of purposive and snowball sampling. The purposive sampling included a targeted recruitment of interview participants by organization type (humanitarian, development, and stabilization) and the geographic level at which they worked (global, regional, and national). We initially identified interviewees through their affiliation with targeted humanitarian and development organizations, UN clusters, or the Inter-agency Network for Education in Emergencies, and subsequently expanded their numbers through snowball sampling.

Interview participants worked at a variety of humanitarian INGOs (N=17), USAID (N=15), and United Nations agencies or clusters (N=14). Thirteen worked in education development, twenty in the humanitarian sector, and five in postconflict stabilization; the remainder worked in multiple categories or were not classified. Eighteen participants worked at the global level, four at a regional level, and twenty-two primarily at a national or local level. Respondents included education specialists, data specialists, EiE specialists, and program managers. Their experience in EiE ranged from less than a year to 19 years. A limitation of our sample is that the national and local respondents were primarily identified through their international partners and therefore consisted predominantly of the national and local branches of INGOs.

We conducted semistructured interviews that lasted 30 to 60 minutes and followed a standardized protocol. We captured data from the first wave of interviews by taking notes. We (the authors) and a research assistant recorded and transcribed the second wave of interviews. Using a sample of transcript excerpts, the coders tested interrater reliability and reached acceptable agreement using a coding framework that combined predetermined and emerging categories. We primarily took a grounded and inductive approach to our analysis, through which we identified emergent themes. In addition to coding primary uses, users, and data characteristics, we identified a number of important codes that emerged during the analysis, including politicization, relationships, and capacity.

MAJOR FINDINGS: DATA USES AND USEFULNESS IN EiE

In this section, we discuss three overarching findings. The main finding from our analysis of the primary uses of data was that EiE professionals have an overarching concern for data they can use to inform operations. We also found that proximity to programming matters; for example, those working at a national or local level spoke the most about operational uses of data, while those working at the global level emphasized more strategic uses, especially the need to strengthen data systems. Although prior research has pointed to major differences between humanitarian and development data systems, our findings indicated that professionals working in EiE tend to use data in similar ways, regardless of sector. The noteworthy difference that emerged instead was between actors operating at a global or cross-national level and those working at a national level.

The second major finding was that, when we examined what characteristics of data collection or presentation made data useful to users, no single characteristic was consistently preferred. Respondents noted instead that data collection and presentation should be tailored to the context, intended uses, and users' expertise.

Finally, in keeping with the literature on data and evaluation mobilization, our interviews pointed to myriad nontechnical factors that affected EiE professionals' perceptions of data usefulness, including politicization, analysis expertise, and personal and institutional relationships. These factors affected how stakeholders viewed data, specifically whether they perceived it as reliable, accessible, and interpretable. In the following sections, we first address how interviewees said they primarily use data and then discuss the factors shaping their interpretations of its usefulness. We then address the many other factors that affect their perceptions of the usefulness of data.

SIX DATA USES: DISTINGUISHING THE OPERATIONAL AND THE STRATEGIC

A FOCUS ON OPERATIONS

The interviews confirmed the six data uses in the literature, as noted above, while adding important nuances. They specifically revealed that respondents tend to group the major data uses identified in the literature into two overarching categories, one associated with operational and administrative concerns (i.e., planning, coordinating, monitoring, and evaluating) and the other encompassing

strategic and systemic concerns (i.e., policymaking and advocacy). Table 1 provides an overview of the six uses, with illustrative quotations from our interviews.

Table 1: Data Use Typology for EiE and Illustrative Quotations

Family	Use	Quotations from Interviews
Operational	Planning	<p>“[We] need to have conversations on what data we need—needs assessments, contextual analyses, rapid education and risk analyses—to understand where our humanitarian aid comes in.” (203, DEV, Global)</p> <p>“The main purpose is to inform the humanitarian plan . . . because humanitarian planning is done through what they call the HPC [humanitarian planning cycle]; we really target the humanitarian needs overview as the key planning document.” (506, HUM, Global)</p>
	Coordinating	<p>“[I am] trying to push [international organization name] to improve information management and coordination.” (203, DEV, Global)</p> <p>“I think [what] any coordinator needs in an emergency response, particularly a sudden onset, . . . is an information manager, because without managing information that you have and having some grasp of the data that you already have available and the information gaps, you really can’t do your job, you really can’t coordinate.” (505, HUM, Global)</p> <p>“Data can be useful for the government to coordinate different actions through the sector.” (508, DEV, Other)</p>
	Monitoring	<p>“We put together a monitoring framework that tracks key contextual indicators . . . and will be responsive and flexible and prepared for changes that may come up in [country].” (209, HUM, National)</p> <p>“We want to support countries and make sure that when they do . . . monitoring of their implementation they’re using the best available data.” (508, DEV, Other)</p> <p>“I would say that the most important use that I see for refugee education data is to monitor . . . the equity of [the] education system and . . . their access, and the quality of learning that they have access to.” (510, HUM, Global)</p>

Family	Use	Quotations from Interviews
	Evaluating	<p>“[Donor] is funding [NGO] to do work on data analysis and impact evaluation on learning outcomes, attainment.” (108, HUM, Global)</p> <p>“[International organization name] is trying to use data on [the] successful transition from primary to secondary school as a proxy for quality education.” (211, HUM, National)</p> <p>“Some partners who maybe get funding from [donor] really want to know the impact of their interventions on reading test scores or whatever . . . They will be collecting that information.” (505, HUM, Global)</p>
Systemic or Strategic	Policymaking	<p>“[Organization] is looking at the reporting needed for the [government] strategy.” (401, DEV, Global)</p> <p>“I guess really the highest level that we use data [for] would be that of policymaking.” (507, HUM, Global)</p>
	Advocating	<p>“[We] use the data for advocacy.” (110, HUM, National)</p> <p>“We do a lot of analysis to help us in that advocacy.” (502, HUM, Global)</p> <p>“We see new areas emerging in terms of advocacy, with new data coming out.” (507, HUM, Global)</p>

One clear finding was that nearly all respondents emphasized the need to support operations. Respondents representing organizations with different mandates and various levels of experience all spoke about operations as the central use for data in EiE, pointing to a shared assumption that data should be used to inform operations, even if there are challenges in terms of accuracy. Planning, coordinating, monitoring, and evaluating were the most common responses to open-ended questions about the general purpose of data for respondents’ work in EiE. Content analysis confirmed that these were the most frequently mentioned uses, especially planning and monitoring. One humanitarian actor declared that “we like our data to be used for planning and monitoring all these different things. At the core of it, it needs to serve an operational purpose” (503, HUM, Global).³

³ Parentheses after each quotation include three pieces of information about the interview respondent: (1) a de-identified number for each respondent, (2) the sector the respondent works in (HUM=humanitarian, DEV=development, STA=stabilization), and (3) whether they work at a national level or a cross-national (regional or global) level.

This was also true for development actors. One responded to which uses are most common: “Definitely the planning category” (508, DEV, Global).

While many respondents mentioned using data for evaluations within this broad family of uses, they often lamented that improvement was needed in this area. This was in contrast to monitoring, which indicates the important distinction between these two uses both conceptually and in practice. Respondents noted that the lack of data for evaluations was common to both governments, which “are not performing well but they don’t have the data to show it” (201, DEV, National), and humanitarian organizations, which “don’t really have any information on quality” (207, HUM, National). As one respondent put it, “I would say all of those [uses are important], except perhaps [evaluating]. Not that evaluating isn’t important, but I just don’t know that we [need to] do it so much” (508, DEV, Global). In short, while respondents think it is important to use data to evaluate operations, they also recognize that, in practice, this is rarely happening.

DIFFERENCES ACROSS SECTORS AND LEVELS

A second set of findings concerned differences in emphasis according to where EiE professionals worked, including their primary sector and proximity to operations. Humanitarian actors stated that they use data for coordinating substantially more often than development actors. Humanitarian actors readily discussed the importance of using data to coordinate, particularly through the education cluster (see Table 2), as well as the challenges of doing so. One respondent said, “[Sometimes the] 4Ws aren’t shared back due to political sensitivities—it is difficult to know who’s doing what where” (303, HUM, National). Discussions of using data for coordination were less common among development actors.

Table 2: Differences between Humanitarian and Development Actors

Development	Humanitarian
<p>Data for coordinating are less salient</p> <p>“Well, all the others we use very regularly, so . . . [on] the planning . . . and the design of program and the monitoring, we’ll have regular progress reports . . . similarly with the evaluating [and] . . . policymaking. Of course, we’ve got a new government at the moment so a lot of data we have is feeding into that, . . . and we are using quite a lot of data to support our advocacy to rally the international community . . . Coordination [is] less.” (504, DEV, Regional)</p>	<p>Data for coordinating are more salient</p> <p>“Because as soon as you start demonstrating to people that you can give them data, that you can analyze information in a way they can’t and give them a picture—a whole picture—of where the needs are, where the gaps are, where there might be duplication, then they see the utility of coordination and they want to participate.” (505, HUM, Global)</p>
<p>Data are most readily linked to SDG4</p> <p>“Otherwise, because of SDG4 reporting by country, if countries aren’t including migrants, refugees, [and] IDPs in their country-level data—all of those children . . . it won’t just be [data] for education indicators but for all indicators [that] will be missing.” (504, DEV, Global)</p>	<p>Data are most readily linked to Grand Bargain and the New Way of Working</p> <p>“And so, we are basically reporting against . . . our commitments to the Grand Bargain, for example, [and the] New Way of Working, and data around that . . . So, I mean, you might want to also look at the Grand Bargain [and] New Way of Working; these are frameworks that have a number of commitments that many, many partners signed up to.” (502, HUM, Global)</p>

Another important difference concerns how humanitarian and development actors framed the need to improve data systems. The common points of reference for humanitarian actors working in global organizations are the Grand Bargain (IASC 2016) and the New Way of Working (UNOCHA 2017). These global agreements call on humanitarian actors to be more transparent and inclusive, with data playing an important role. Meanwhile, development actors focused on the SDGs, specifically SDG4, which commits all nations to ensure access to quality education for all. A number of respondents explained that data systems for SDG4 were not well equipped to account for learners affected by conflict and displacement.

Another important finding had to do with differences based on proximity to operations. We found that actors who are working at a cross-national (i.e., global or regional) level emphasized different uses for data than those who worked at a national or local level. For brevity’s sake, we refer to these two groups as global

and national, respectively. Global actors discussed policy and advocacy more frequently than those at the national level (see Table 3). This distinction was best encapsulated by a respondent who has two roles, one at a national level and one at a global level. They stated that, in their national role, they focused on planning, monitoring, and coordinating. However, when working at the global level “for the fragile and conflict-affected states . . . it’s definitely [more about] policymaking and sometimes advocating” (508, DEV, Global).

Table 3: Differences between Global and National Actors in Terms of Strategic Data Use and Capacity-Building

Global/Regional	National/Local
Heightened strategic data use focus	Heightened operational data use focus
<p>“Policymaking—of course we’ve got a new [donor] government at the moment so a lot of data we have is feeding into that . . . [and] we are using quite a lot of data to support our advocacy to rally the international community.” (504, DEV, Regional)</p>	<p>“Data [are] used to design programs.” (303, HUM, National)</p>
<p>“I mean, [for the global level] we use data to drive home a point . . . like you said, to promote financing for activities or changes in policy and organizational or governmental levels.” (509, Other, Global)</p>	<p>“They are a starting point to understand where we would be operating.” (306, HUM, National)</p>
<p>“There is not much policy-level work that we do on that, but what we do is, when we have multiyear programs, those are done in protracted crisis . . . so we have, in some locations, links to policy strengthening and systems strengthening efforts.” (502, HUM, Global)</p>	<p>“[We] use [platforms] to translate the data into practical actions.” (204, DEV, National)</p>
	<p>“[Organization] is open to them monitoring their own projects.” (205, DEV, National)</p>
	<p>“[A] big part of the new activities that were launched is the feedback of information, learning loops, to improve the design of activities and programs.” (209, DEV, National)</p>
	<p>“[We] conduct ASER tests at the beginning and end of the school year.” (302, HUM, National)</p>
	<p>“[We] coordinate pretty closely with governments, really trying to build strong relationships with governments.” (110, HUM, National)</p>

Need to build data system capacity	Need to build data-collection capacity
<p>“Then we look at, for example, capacities around data and information systems . . . And finally, we also do capacity development for grantees, also helping them to develop these frameworks, but also at a global level developing global and regional public goods around measurement, around data analysis, around a strong, for example, EMIS system for EiE purposes . . . We are we are contributing to these kinds of global products.” (502, HUM, Global)</p> <p>“We are also interested in the wider global public good of having better data on these populations . . . and setting up systems at [the] country level.” (504, DEV, Regional)</p> <p>“We try also to play this role of supporting the countries in trying to decipher the complexities of the data . . . That’s another way to say, basically, [that] our mission [is] capacity development.” (501, DEV, Global)</p>	<p>“[There are] challenges around capacity-building—how to use the tool, what the tool is for, not trying to enhance results, enumerator training.” (302, HUM, National)</p> <p>“Not clear how data is gathered and validated—I’ve never been able to be confident on how they gather their data—and then hiring someone to verify it internally to them.” (210, DEV, National)</p> <p>“[The] capacity of people on the ground to do ongoing learning/data outcomes is challenged.” (307, STA, National)</p>

Actors working at the global level often talked about the role of data within a system and the use of data to inform the policies of a system or to advocate for changes to one. Such system-level discourse referenced the use of data directed at both global and national policy and advocacy. This duality occurred in part because global respondents often see governments as their primary stakeholders. As one respondent working at the regional level put it, “We are also interested in the wider global public good of having better data on these populations . . . and setting up systems at country level” (504, DEV, Regional). Although the focus on operations is shared at the global level, as noted above, we found it was combined with a more consistent focus on strategic data use for “systems strengthening.”

DATA USEFULNESS: THE IMPORTANCE OF CONTEXT, USES, AND USERS

In this section, we address what respondents said make data useful. Our key finding was that there are no particular characteristics that make data inherently useful. Respondents consistently indicated instead that data collection and presentation should be tailored to the context, intended uses, and the users' expertise.

THE IMPORTANCE OF CONTEXT

In terms of frequency, respondents overwhelmingly indicated that the frequency of data collection should be closely related to how volatile a situation is and how rapidly data could become out of date. For example, timely data such as biweekly or even daily reports were deemed most useful when an emergency is most acute and population movements most volatile. However, in protracted crises with relatively stable populations, less frequent data are sufficient. One respondent who worked in global development explained: "If variation in the numbers is extreme . . . then it's relevant to have numbers refreshed every week. But if a situation is more stable . . . then it's not relevant to make the same computations every week" (501, DEV, Global).

Moreover, despite a general preference for more frequent and specific data for operational uses, respondents also agreed that actors often cannot collect any more data than they already are. For example, a participant who worked in the humanitarian sector explained that "even what we're doing already is incredibly hard for us to do. So adding layers of measurement or layers of data collection on[to] what we're doing is really asking a lot" (505, HUM, Global). This participant pointed to logistical and resource challenges in collecting more data. Other participants noted the same constraints in terms of data analysis and use. One participant explained: "Sometimes more frequent is problematic because then you have too much information and people don't have the capacity, meaning the skills or the time, to actually analyze it" (509, HUM and DEV, Global).

TAILORING DATA TO INTENDED USES AND USERS

In addition to the most useful frequency of data collection and presentation being dependent on the context, respondents indicated that it should reflect the intended use. They said that less frequent data were needed for more strategic uses, such as policymaking and advocacy, whereas more frequent data might be needed for more operational uses:

Well, it depends for what purpose. So, for advocacy purposes . . . you need to have something that's within the last year . . . but . . . it's not that you need things at quarterly intervals or anything. You know, I think annually . . . is quite useful for certain issues . . . but obviously . . . with an emergency response . . . When I was supporting our office . . . we were getting one [update] every fortnight and certainly we were getting daily reports on the movement of people. And so it just depends on the nature of the crisis and how much movement is involved of people . . . and therefore how much planning you need to do in order to make sure that your programs are responsive. (504, DEV, Regional)

The responses were similar when respondents were asked what level of data granularity was most useful. While they again said it depends on the context and the use, there was a general preference for highly detailed data. The most important reflection for the purposes of our use framework is that operational uses required more granularity than strategic uses.

Many respondents preferred getting raw data they could link to other data sources and analyze to address specific questions and uses. However, this preference carried the frequent caveat that an organization receiving raw data needed to have the capacity to analyze it; the lack of this capacity was noted as a frequent shortcoming. In short, when we examined how data are used and what makes them useful to those working in EiE, what emerged was a complicated landscape that defied simplification and in which context, purpose, and capacity were all important factors.

CONTEXTUAL FACTORS: THE ROLE OF POLITICS, RELATIONSHIPS, AND INSTITUTIONAL CAPACITY

In keeping with the literature on the use of data, our interviewees pointed to myriad nontechnical factors that affect EiE professionals' perceptions of data and their potential usefulness to them. In this section, we discuss three themes that emerged from the data that affect stakeholders' interpretations of the validity and reliability of data, as well as those that affect their perceptions of accessibility and interpretability. Table 4 presents key findings with quotations.

Table 4: Social and Political Factors Affecting Data Availability and Usefulness

Considerations	Quotations from Interviews
Political Concerns	<p>“It’s not in the interest of the government to put that information public because it won’t paint a great picture.”</p> <p>“The politics play a huge role, make it easier or harder . . . in some cases to get the information that you need.”</p> <p>“That is tricky because UNICEF has the best of interests in getting more funding, but the story that they tell is usually the most dire.”</p> <p>“Refugee education data might be a very, very sensitive topic in many contexts, either because there might be a lot of investments done and the data is not showing results yet. And so . . . there is a fear that donors might be discouraged or maybe the data looks, quote unquote, <i>good</i>.”</p>
The Role of Relationships	<p>“In South Sudan, where the government is very involved, . . . it’s being supported by the development partners, often the same development partners that are coordinating the cluster. So those kind of links are already established, and trust makes it able to access data that they might not otherwise have if the government was doing it by itself.”</p>
Institutionalization of Capacity	<p>“It’s not [as if] everybody else . . . is also fluent in using statistical software as . . . big datasets, so we try also to play this role of supporting the countries in trying to decipher the complexities of the data.”</p> <p>“We have people in the team who have the capacity to actually analyze that as well. So, you know, ideally the raw data should be analyzed, but if there is the possibility to mine the raw data and even for extra bits that we could bring from it, then that’s also useful.”</p>

POLITICIZATION OF DATA

Respondents in both rounds of interviews regularly noted that the availability and quality of data for use in EiE settings do not involve only technical considerations of data systems and platforms. They said that data use and usability are also influenced by political considerations, personal and institutional relationships that facilitate data sharing, and organizational structures that determine individuals’ scope of work and mandates. In this section, we point out that data usage and usability cannot be separated from the context in which EiE professionals are

operating and, as a result, that the social and political aspects of data collection and usage must be considered.

The political sensitivity of conflict settings coupled with the humanitarian imperative of neutrality during a conflict create unique political barriers to data collection, sharing, and use. Respondents highlighted the fact that data availability reflects concerns over the power of numbers as tools of judgment, as one participant explained concisely: “Data gets picked up for political consumption” (301, HUM, National). There was concern that numbers are being manipulated, particularly in conflict settings or in contexts where governments and organizations are under pressure to be accountable to donors, which affected the perceived validity and reliability of data. Some respondents explained that they simply do not trust the data coming out of governments or, in some cases, UN agencies. One respondent, who worked at a global organization, explained: “The validity of the data that we have public access to is likely manipulated and highly politicized. There are not just thousands of refugees missing, but millions” (112, HUM, Global). Another respondent, who worked at a donor agency, explained that, before the Brussels Conference, a donor conference jointly organized by the United Nations and the EU focused on raising funds for the Syrian response: “The [education] ministry would change data to make them look worse before funding or better, depending on the situation” (201, Other, National).

Data sharing is complicated by the competing demands on organizations working in EiE. Data users need to maintain positive working relationships with the organizations and government actors that collect and disseminate the data while also recognizing that their dependence on them can limit external verification and validation. One participant explained:

UNICEF is politically hampered in providing data because UNICEF is both humanitarian and development; they have a bilateral relationship with government. For example, if a child enrolls in an education program and only shows up once, they count toward the larger UNICEF number of beneficiaries. It is not in the interest of the government to make [attendance] information public because it won't paint a great picture. (213, HUM, Global)

Another respondent had similar concerns, stating that there are many “motivations for manipulation,” both financial and political. The respondent, who works at a global advocacy agency, explained that UNOCHA needs to maintain its “brand”

and that this was associated with upholding “the status quo with governments” (112, HUM, Global).

Other respondents explained that there is great concern that data could draw attention to an issue or group that some would prefer not be noticed. One participant, who worked in a donor agency that was part of the EiE response to the Syrian refugee crisis, explained: “When data isn’t there, it’s not an accident” (504, DEV, Regional). They went on to say that some data are deliberately not collected because organizations or governments do not want it to be used in certain ways; they believed, for example, that their efforts should not be evaluated.

Respondents said that political dynamics limited their ability to share data because they could be used to identify program locations or organizations. They also suggested that the dynamics of politics and conflicts made it even more important to protect data. One respondent, who worked at a donor agency supporting the Syrian response, explained that the “4Ws aren’t shared back due to political sensitivities, so it is difficult to know who’s doing what where. Data is incomplete, which leads to duplicate efforts” (303, HUM, National). In short, our participants pointed out that data sometimes are not used to serve a neutral reporting of objective facts and instead are linked to the political and financial interests of governments, UN agencies, NGOs, and beneficiaries.

THE IMPORTANCE OF RELATIONSHIPS

Recognizing the many ways data are used politically, our participants highlighted how important relationships are to information sharing. We found that generating, sharing, and using data all were facilitated by personal and institutional relationships that generated trust. Some respondents explained that their relationships with other organizations have facilitated data sharing and collaboration.

Our findings shed light on how the field of EiE already relies on professional and organizational relationships to share data. One respondent, who works at a UN agency, explained that governments and UN agencies are dependent on one another for data collection and sharing: “In my experience, it’s very much about building relationships and trust relationships in order to, you know, get datasets from EMIS” in the countries where they work. Another respondent, who worked at a development and donor agency, explained further: “Certainly, my impression from talking with colleagues is that [data sharing] is very relational” (508, DEV, Global and National).

One respondent, who worked in the humanitarian sector, explained in detail how these personal relationships facilitated data sharing:

You know, the prime minister, he's calling the [education] minister when he hears about the attacks that happened in [a part of the country]. He wants to know how many schools are there. But the ministry up until now has to scramble to get that information ready because they have to call UNICEF or they'd have to call someone else or someone else or someone else . . . they can't get it that easily. That's just wrong, and too complicated. (510, HUM, Global)

Respondents also pointed out how data facilitate relationship-building among those working in humanitarian response and more generally in the field. For example, one respondent who worked in humanitarian response explained that, “to get people to participate in clusters, you have to show them [that] participation will result in something of value, so giving information is one way to get partners to show up, attend meetings, and share information” (505, HUM, Global).

INSTITUTIONALIZING CAPACITY

We found that the ability to generate, share, and use data is determined by both institutional and individual capacity. Respondents mentioned the general need to strengthen capacity but their perspectives on what types of capacity were needed varied. We found that capacity-building did not always imply general training; for many respondents, capacity implied ensuring that organizations had access to specialized technical capacity. We found that there is a particular need to have someone within each entity who knows how to find, generate, and use data. For example, one respondent explained that their organization always publishes cleaned and aggregated data along with the raw data, but finds that, “if it is a big household-level survey, I have some doubts that this is used because often the cluster doesn't have the technical capacity to pull out statistics” (506, HUM, Global). One important example of this in EiE is the information manager, who is supposed to be one of the two staff members of every education cluster. One respondent explained:

What any coordinator needs in an emergency response, particularly a sudden onset, is an information manager because without managing the information that you have and having some grasp of the data that you already have available and the information gaps, you really can't do your job, you really can't coordinate, you really can't advocate. (505, HUM, Global)

Unfortunately, only 31 percent of clusters had an information manager in 2018, a slight decline from 35 percent in 2017 (ECW 2019, 125).

Many respondents highlighted the need to build capacity for data creation, sharing, and use; the type of capacity needed differed according to the actor's sector. For example, development actors cited the need to develop their staff's capacity to navigate and use humanitarian data. A recurrent theme was that many actors in education development do not understand the complexities of the humanitarian sector or how to navigate its data systems. We also found differences across levels: global actors tended to frame the need for capacity-building in terms of the ability to use and analyze data. For example, respondents referred to "supporting the countries in trying to decipher the complexities of the data" (501, DEV, Global). Meanwhile, national actors tended to focus on building capacity to collect data. They highlighted the need for tools and for individuals with the capacity to collect reliable data (see Table 2). A recurring idea was that tools were needed that "validated" and were "responsive" to the conflict setting.

DISCUSSION AND CONCLUSION

We know that one of the major challenges facing the EiE field is a lack of reliable data to inform program design and implementation. Nevertheless, perceptions of the usefulness of data vary. In this article, we examined how professionals in EiE use data in their work and what makes data useful to them. Our findings highlight six primary ways EiE actors use data, which we organized into two categories: operational (i.e., planning, coordinating, monitoring, and evaluating) and strategic (i.e., policymaking and advocating). Moreover, we found that these uses were mentioned by actors working in the humanitarian and development sectors alike. A key finding throughout our interviews was that professionals working in EiE wanted data to inform their decisions about education programming and policy. As one of our respondents explained, their ultimate goal was to put data "in the hands of those making decisions." The overriding hope was that high-quality data systems and analysis could help to build a stronger EiE evidence base.

Indeed, participants expressed concern throughout our interviews that a lack of data likely limits the effectiveness of programs and the efficient use of resources, which ultimately results in fewer students and teachers being reached by education programs, or in less effective programming. Conversely, they felt that robust and targeted data collection and analysis would help inform and improve program operations, policies, and advocacy efforts.

However, we also found that respondents' proximity to implementation changed the way they thought about data. Individuals working in a specific country or crisis focused on the use of data for operational purposes and mentioned policymaking or advocating only in passing. Meanwhile, respondents working at the global level often spoke at length about the importance of using data to inform policy and advocacy in order to strengthen systems and develop global public goods. This finding is important, as it highlights the fact that current conversations tend to treat "data" in the abstract when, in fact, the current level of fragmentation means that many forms of data are not useful to others in the field. As efforts to standardize indicators move forward, it will be important to ensure that the same standardized indicators can be useful to actors operating at multiple levels. For example, future efforts should focus on aligning indicators and reporting mechanisms to meet the needs of both the operational uses of implementers at the local level and the strategic uses of the broader community at the global level. Similarly, global actors who provide funds for data collection should consider—and support—data systems that can be targeted specifically for the use of those closer to implementation, along with their own more strategic needs. This provides a productive starting point for the much-discussed need for standardization or for methods of linking datasets, as it highlights the need to be able to link, aggregate, and compare data that will be useful for policymaking and implementation in specific contexts and cross-nationally.

Finally, we explored what factors may make data useful, or usable, to EiE professionals. Our findings suggest that the field needs not only more data but better data. Our interviewees explained that, by better data to inform operations, they mean data that are up-to-date, geographically specific, and disaggregated by age and other demographic factors. They also mentioned other factors, such as context, politics, relationships, and organizational capacity. Our findings indicate that improving data and evidence for EiE depends not only on technical aspects of data but on institutional and relational factors that enhance data collection, data sharing, and data use. An important implication of this research is that having better data for the EiE field—which is a widely shared goal—means strengthening data systems throughout the data cycle, from collection to analysis to use. What might this look like? Our findings suggest that supporting data systems likely entails holding regular forums to strengthen personal relationships; creating safer ways to share politically sensitive data, such as more sophisticated masking procedures; and institutionalizing capacity for analysis, such as ensuring that every education cluster has an information manager to support the use of data. In short, improving data for EiE must not only focus on tools or techniques but must also attend to the people, institutions, and contexts that determine data creation and use.

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COMMUNITY-LED PROVISION OF NONFORMAL EDUCATION FOR DISPLACED LEARNERS IN NORTHERN NIGERIA

MARYAM JILLANI

ABSTRACT

In this field note, I explore the community coalition model Creative Associates International and its partners employed to provide nonformal education to out-of-school displaced children and youth in northern Nigeria under the USAID-funded Education Crisis Response project. While there is no evidence directly linking community involvement to improved education outcomes in crisis- and conflict-affected contexts, the existing literature and final project results point to its importance in the education in emergencies field. In this field note, I briefly shed light on the education landscape in northern Nigeria, offer global evidence on the impact of community participation in education in low-income and crisis- and conflict-affected contexts, and describe the promise a community-led model employed by the Education Crisis Response project holds for improving education access for out-of-school internally displaced children and youth. I also describe the community mobilization and capacity-building approach adopted for the project and its success in providing access to education for more than 80,000 learners in a volatile region.

INTRODUCTION

Nigeria is a powerful West African country with abundant natural resources. It is Africa's biggest oil exporter and has the largest natural gas reserves on the continent. Its wealth, however, has not trickled down to the education system. At 10.5 million, Nigeria has the world's largest population of out-of-school children,

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the majority of whom are in northern Nigeria (“Nigeria Has ‘Largest Number of Children’” 2017).

While the north-south divide has always existed in Nigeria, the disparity has widened because of the Boko Haram insurgency that systematically targeted formal schools. Boko Haram emerged in northern Nigeria in 2003 as a small group of Islamist militants who challenged the government. After the movement was militarily suppressed in Nigeria in 2009 (Mohammed 2014), it adopted the tactics and strategies of global jihadist groups—targeted assassinations, suicide bombings, hostage-taking—which resulted in a 40 percent spike in conflict events in 2014 and a 150 percent increase in fatalities in the country (ACLED 2014). The violence spurred a massive migrant crisis that displaced 1.8 million people in northeastern Nigeria (ACAPS 2018).

Internally displaced persons (IDPs), as defined in the UN Guiding Principles on Internal Displacement, are individuals or groups of people who have been forced or obliged to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, human rights violations, or natural or human-made disasters, and who have not crossed an internationally recognized state border (UN OCHA 2001). An overwhelming majority of the children affected by conflict who lack access to formal education are IDPs (Women’s Commission for Refugee Women and Children 2004).

While additional research is still needed to determine the best way to rapidly expand access to education for large numbers of refugee and IDP children in an education in emergencies (EiE) context (Burde et al. 2015), evidence in crisis- and conflict-affected and low-income contexts points to the importance of community-based interventions. For instance, studies support the use of community-based schools to increase enrollment and learning gains among populations affected by conflict (Burde and Linden 2013), along with community monitoring to help increase teacher and pupil attendance (Barr et al. 2012) and contribute to learning gains (Jimenez and Sawada 1999).¹

Community involvement in the delivery of education services has been a key feature of Creative Associates International’s (hereafter, Creative) work in northern Nigeria since 2004. It began with the Community Participation for Action in the Social Sectors (COMPASS) project, wherein Creative, in partnership with

1 Community-based schools are broadly understood as schools serving children who live nearby.

Pathfinder International, provided the local government with technical assistance in primary education and school health. During this period, Creative developed its community mobilization approach—that is, the formation and mobilization of community coalitions—to roll out programming in hard-to-reach areas of northern Nigeria. Over a period of ten years, Creative refined its approach and, in 2014, adapted it to address northern Nigeria’s education crisis under the USAID-funded Nigeria Education Crisis Response (ECR) project. Results from the project point to the model’s ability to rapidly provide IDP children and youth with access to education in an EiE context.

NIGERIA’S EDUCATION CRISIS AND THE NORTH-SOUTH DIVIDE

While the Boko Haram insurgency threw Nigeria’s education crisis into the spotlight, the Nigerian education system, particularly in the north, has been struggling for many years. Responsibility for the education system is currently shared by the federal and state education ministries and local governments, with support from communities and private organizations. The Federal Ministry of Education is responsible for ensuring the coherence of national policy and procedures, and the states are responsible for operating within those parameters. Communities historically have played a key role in Nigeria’s education system; many of the primary schools are already subsidized by contributions from the community through parent-teacher associations, schools, councils, and community-based organizations. In rural areas, where personnel costs are high, their contributions are especially critical. However, despite this support, the quality of education is low, the physical facilities are in poor condition, and teachers are not adequately prepared for their roles (Moja 2000).

The situation is especially dire in northern Nigeria, a region comprising 60 percent of the country’s out-of-school population (“Nigeria Has ‘Largest Number of Children’” 2017). The gender gap in northern Nigeria is also more pronounced; in 2008, as few as 39 percent of females ages 15-19 had attended school, compared to 65 percent of males (Antoninis 2014). While the Boko Haram insurgency has intensified the disparities between the north and south of the country, the divide existed even in precolonial Nigeria. Northern Nigeria is predominantly Muslim, due to centuries of contact with North Africa through the trans-Saharan trade. The southern part of the country is predominantly Christian, with a longer history of contact with Europe. This divide was reinforced by colonial policies of “divide and rule,” which reinforced perceptions of north-south separateness. This included the production of a limited cadre of Western-educated elite in the

south who were able to climb the social and economic ladder, which was not true of those in northern Nigeria who received a Quranic education. This is likely one of the factors that contributed to the distrust between proponents of traditional and Western education in the north (Mohammed 2014).

Distrust of Western-style education, however, has subsided in northern Nigeria since the 19th and early 20th centuries, despite rhetoric from Boko Haram. A 2005 survey by the Federal Ministry of Education showed that only 4 percent of community leaders identified mistrust of Western education as a barrier to integration in secular schools. However, the state governments have lacked the capacity and resources to fully integrate religious education providers into the public education system or to adequately support public schools. While private education providers in southern Nigeria have stepped in to fill the gap, families in the north continue to rely on community-based religious education (Antoninis 2014).

In 2013, following Boko Haram's takeover of part of Borno State, the Nigerian government declared a state of emergency in the states of Adamawa, Borno, and Yobe (ACAPS 2018). Violence in northeastern Nigeria escalated dramatically, with a sharp increase in fatalities, widespread kidnapping, and attacks on villages. Adamawa, Borno, and Yobe states continued to bear the brunt of the insurgency (Campbell and Harwood 2018). UNHCR (2018) estimated that, as of 2018, the insurgency had displaced 2.4 million people in northeastern Nigeria, Cameroon, Chad, and Niger. Children and youth have been especially at risk because of recruitment efforts by Boko Haram, repeated attacks on schools, and parents' corresponding reluctance to send their children to school, due to heightened fear for their children's safety.

COMMUNITY PARTICIPATION IN DELIVERING EDUCATION SERVICES TO IDP CHILDREN AND YOUTH

There is scant evidence on how community support can be mobilized to meet the education needs of IDPs, and the needs and coping strategies of IDPs living outside camps (Ferris and Winthrop 2010). While one typically imagines that IDPs live in camps, most of the displaced (including those in Nigeria) live in host communities (Guterres 2010). These IDPs have a variety of living arrangements, such as staying with relatives and friends, or renting or building homes in shantytowns. It is difficult to identify these populations, and therefore often hard to support them. Conflict and displacement also affect education access differently

for IDPs within the same country. Such factors can increase access to education by driving children from villages where there were no schools to camps where education is provided (Ferris and Winthrop 2010). In Nigeria, however, many children have been forced to leave their schools and move to areas where the host schools are overcrowded. IDP children also may face discrimination due to their ethnicity, or simply because of their IDP status. Despite such factors, the benefits of IDP children and youth going to school are well established. Schools can be a source of psychosocial support, provide a degree of stability and normalcy, and facilitate these children's integration into their host community (Mooney and French 2005).

While the jury is still out on the most rigorous and rapid means of providing education to large numbers of IDP and refugee children in crisis- and conflict-affected contexts (Burde et al. 2015), there is widespread consensus on the need to diversify the provision and delivery of education to meet the unique learning needs of different populations (ADEA 2010). There is growing emphasis in the EiE community on the role accelerated education programs (AEPs)—flexible, age-appropriate programs that promote access to education in an accelerated timeframe—can play in promoting education access to children and youth whose education has been interrupted due to crisis and conflict (USAID 2016). Based on a review of good practices and learning from AEPs worldwide, the Accelerated Education Working Group, which comprises education partners working in accelerated education, compiled a list of principles that help education stakeholders design, implement, and evaluate AEPs (Myers, Pinnock, and Lewis 2017). These principles range from recommendations about the flexibility of AEPs (e.g., class time and location) to their alignment with the national education system. They state that, “for AEP success and sustainability, community engagement is critical from the start” (Myers et al. 2017, 59). While the principles broadly approach community engagement within the framework of community-education committees (e.g., parent-teacher associations and school management boards) or community outreach workers, various studies point to a broader spectrum of interventions that involve community engagement.

A comprehensive literature review of what helps to promote children's access to education, quality learning, and wellbeing in crisis-affected contexts revealed that, in countries affected by protracted conflict, community-based education increases access to education, especially for girls at the primary level (Burde et al. 2015). For instance, a randomized controlled trial of village-based schools in Afghanistan found that placing a school in a village dramatically improves the academic participation and performance of all children, but particularly girls

(Burde and Linden 2013). Village- or community-based schools are designed to serve only children living in close proximity to the school. Until the Taliban takeover of Afghanistan in 2021, these schools were typically supported by international aid agencies in order to improve access to education. While they followed the official government curriculum, many of them were run by a local staff employed by international development organizations. These community schools were smaller and were taught by locally educated individuals; they often received little government monitoring.

In addition to placing schools and learning centers within communities, broad community participation can play an important role in the delivery of education services. While community participation in developing countries primarily refers to community financing, such as contributions of money, material, labor, expertise, and land (Bray 2000), there is increased recognition of the wider role communities can play (Colletta and Perkins 1995). For instance, communities can advocate for enrollment, recruit and support teachers, and monitor teacher and school performance. Evidence from low-income contexts points to how enhanced community monitoring can increase teacher and student attendance and result in statistically significant increases in test scores (Barr et al. 2012). Increased community participation and training also can boost demand for education and reduce dropout (Beasley and Huillery 2012). Of course, if community involvement is to be effective, there must be certain important preconditions, such as a basic level of resources and adequately trained and supported teachers (De Grauwe 2005).

The level and depth of community participation in school management is also important. Rose (2003) differentiates two extremes of participation: genuine participation and pseudo-participation. Where there is genuine participation, communities take part in decisionmaking in a voluntary and spontaneous way; where there is pseudo-participation, communities accept decisions that have been made for them by external parties. As Taniguchi and Hirakawa (2016) point out, Jimenez and Sawada's study (1999) shows how community participation under the Education with Community Participation Program in El Salvador increased educational productivity. These communities had actual decisionmaking power, and they could allocate school budgets and hire and dismiss personnel. The success and failure of community participation also depends on the stakeholders' capacity to be effectively involved in governance issues (Chikoko 2007) and their relationship with the central government, particularly in conflict-affected environments. As Jones (2005) points out, the participation of local power elites in school management is not equivalent to genuine community participation; it

can be better described as pseudo-participation. Many of these trends and findings are characteristic of the ECR project, where the community, through community-based nongovernmental subgrantees or community coalitions, played a critical role in providing access to education for IDP children and youth.

THE EDUCATION CRISIS RESPONSE IN NORTHERN NIGERIA

Creative, in partnership with Pathfinder, began its education programming in northern Nigeria in 2004 with the COMPASS project. COMPASS was a multisectoral project through which Creative provided technical support to local governments in the areas of education and health. The project engaged specifically with multiple committee wards that were subunits of the local government area. Upon implementation, the project team realized that it could engage more efficiently with the various wards through relevant community stakeholders. This led to the idea of community coalitions, which are formal groups comprising representatives from key community groups (e.g., women, youth, traders, unions, religious and traditional leaders, etc.) that worked directly with the wards to achieve program objectives across target locations. From this point onward, Creative made the formation and mobilization of community coalitions a pillar of its programming in northern Nigeria.

This approach built on a strong history of community support for education in Nigeria, and on global evidence that underscores the importance of community participation in education to boost enrollment and learning outcomes. The approach was adapted under the USAID-funded ECR project that started in October 2014 in response to the Boko Haram insurgency that overwhelmed northeastern Nigeria, particularly its fragile education system. As of 2016, 611 teachers had been killed, 1,200 schools damaged or destroyed, and 600,000 children left without access to education (UNICEF 2017).

The ECR was funded by USAID to expand access to quality, protective, and relevant nonformal education and alternative education opportunities for internally displaced out-of-school children and youth ages 6-17 in the states of Adamawa, Bauchi, Borno, Gombe, and Yobe. The project goal was to expand access to quality, protective nonformal education and alternative education opportunities for children who were not able to attend formal schools.

To achieve this goal, Creative and its partners—the International Rescue Committee, the Federation of Muslim Women’s Associations in Nigeria, the Civil Society Action Coalition on Education for All, and 56 local nongovernmental organizations (NGOs)—established 1,456 nonformal learning centers. Community engagement was the primary vehicle through which the project was able to achieve the desired results within a volatile security context.

During the first year of the project, Creative conducted a community education and conflict assessment, the first of a series of assessments to inform the project inputs, shape content, and keep the program management abreast of the changing education needs of a population in flux. Findings from the first assessment in 2015 revealed that many IDP children and youth were not attending schools for a variety of reasons, including the stigma of being an IDP, lack of economic resources following their displacement, moving continuously, overcrowded classrooms in host communities, an overwhelming demand for relevant, skill-based education, and the need to feel safe in the classroom. The assessment also revealed how their living arrangements influenced IDP children’s decision to go to school. For instance, boys and girls living in community households are more likely to attend a formal or nonformal school than those in camp-based settings, where the schools may be farther away (Creative Associates International 2015). These findings directly informed the program design.

The project established five types of learning centers to accommodate the diverse needs of out-of-school children and youth: (1) nonformal learning centers for boys and girls ages 6-12; (2) learning centers for adolescent girls ages 13-17; (3) learning centers for adolescent boys ages 13-17; (4) centers for learners ages 6-17 who have physical disabilities; and (5) learning centers for girls ages 6-12. Each center offered a nine-month accelerated basic literacy and numeracy program that included alternative education topics, such as psychosocial support and gender-based violence prevention. The centers that targeted adolescents also provided relevant employability skills (e.g., tailoring, leatherwork, mobile phone repairs) (Creative Associates International 2017).

The project’s activities were grouped into four intermediate results.

Intermediate Result 1: Increased availability of quality, safe, nonformal alternative education opportunities. This included the establishment of nonformal learning centers in communities with a higher concentration of out-of-school IDP children. The nonformal learning centers provided a nine-month AEP and adhered to safety benchmarks developed by the project to ensure a safe and protective environment.

The ECR's project partner, Florida State University, enhanced the existing nonformal basic education curriculum and adapted the national benchmarks for basic literacy so it could be included in the program. The International Rescue Committee developed a specific social and emotional learning (SEL) curriculum to be incorporated into the nonformal learning centers' literacy and numeracy lessons.

Intermediate Result 2: Improved quality of instruction in nonformal education and alternative education programs. This involved setting the criteria for learning facilitators who would serve the nonformal learning centers and their partners in the relevant agencies, departments, and ministries, as well as recruiting and training them in the target communities. The ECR adopted a cascade professional development approach, whereby it recruited master trainers from agencies, departments, ministries, and tertiary institutions in the target states and trained them in the nonformal learning center curriculum. The program focused specifically on developing skills in literacy, numeracy, and SEL, and on how to use the teaching and learning materials. The master trainers trained the mentor teachers, who provided professional development support to learning facilitators through bimonthly visits to the nonformal learning centers. The learning facilitators received a five-day training, during which they were shown how to create a welcoming, learner-centered environment. They were equipped with teaching aids, including a scope and sequence comprising the content and skills to be covered, as well as scripted lessons in literacy, numeracy, and SEL that guided them in their instruction delivery. The project also engaged local craftspeople to train youth and adolescent girls in marketable skills, which were identified during a skill prioritization exercise conducted in partnership with the National Directorate for Employment and Small and Medium Enterprise Development Agency of Nigeria.

Intermediate Result 3: Increased community engagement and support for schooling in targeted nonformal education communities. Here the project strengthened community ownership of the nonformal learning centers through advocacy and engagement. This involved the formation and mobilization of the 67 community coalitions that are the focus of this field note. These community coalitions were formed by 56 local NGOs, which in turn were selected as project subgrantees through a competitive bidding process. With the funds they received, the NGO subgrantees operationalized both the nonformal learning centers and the community coalitions. The community coalitions in turn conducted sensitization campaigns in their communities, which promoted support for the nonformal learning centers and awareness of the benefits of a holistic curriculum. With

the project's support, the community coalitions conducted feedback meetings to identify and address program implementation issues throughout the life of the project.

Intermediate Result 4: Increased state and local government and civil society support for nonformal education and alternative education options. The ECR established a nonformal education technical working group to support government leadership of program activities, including teacher training, development of instructional materials, and setting benchmarks and standards for project implementation. The working group, which comprised representatives from key agencies, departments, and ministries, coordinated technical input for the development of relevant policies, guidelines, and regulations to support nonformal education and alternative learning options. The ECR also built the capacity of its NGO subgrantees to leverage funding for education. The subgrantees attended a five-day training, during which they learned how to secure additional funding from other donors. The community coalitions received similar training on resource mobilization, which enabled them to mobilize additional resources for the nonformal learning centers and to launch advocacy campaigns.

A TWO-TIERED COMMUNITY-MOBILIZATION MODEL

While neither formal nor informal community groups had been used previously to mobilize communities to provide education for displaced populations in northern Nigeria, Creative was certain the approach could work, given that the majority of Nigeria's displaced population had been taken in by host communities. The nonformal learning centers would also be open to the host community's children and youth. Moreover, Creative's previous projects—the Northern Nigeria Education Initiative and COMPASS—had demonstrated that the demand for access to a quality education was a unifying force among diverse community stakeholders, and that a well-mobilized community can drive its own development using low-cost local initiatives.

To achieve the ECR goal of providing education opportunities for out-of-school children and youth, Creative rolled out a two-tiered community-mobilization model. Through a competitive bidding process, Creative identified 56 local NGOs with deep roots in the communities to directly establish and manage the nonformal learning centers. Through a public announcement, the ECR invited local NGOs to apply to become project subgrantees. It then reviewed the

applications using selection criteria such as strategic fit, technical approach, past performance, organization capacity, and approach to gender equity.

After selecting the NGOs, the ECR conducted an online institutional capacity assessment, as well as a financial and management capability questionnaire and a grants performance measurement tool, to determine the NGOs' capacity. These tools measured the organizations' key competencies in areas like strategic planning, internal governance, project management, and human resource development. The results of the assessment informed the project's five-day training program. The ECR and Creative home office staff members trained representatives from the NGOs on various aspects of organizational strengthening: human resources, financial management, grant-writing, and monitoring and evaluation. The training format included traditional seminars comprising presentations and group activities; deep analyses of each NGO's action plan; "one-minute moments" that focused on the organizations' communications and marketing capacity; hands-on evaluations of each NGO's materials; and one-on-one mentoring sessions.

The second tier of the ECR's community mobilization model was to form and train community coalitions. To enter new areas, ECR staff members conducted advocacy visits to the education and social development departments of targeted local government areas and local chiefs to inform them of the project goals and the formation of community coalitions. In regions where Creative had not previously worked and the security situation was unpredictable, Creative engaged national partners, such as the Federation of Muslim Women's Associations in Nigeria and the Civil Society Action Coalition on Education for All, along with its NGO subgrantees, to organize various community-based organizations representing youth, women, trade unions, tribal associations, faith-based organizations, traditional leaders, and displaced persons. During these initiation meetings, the ECR staff and partners discussed the importance of values and social norms that promote community action on education, then asked these different groups to select representatives to form their area's community coalitions. Through this process, the project established 67 community coalitions that formed the backbone of the project. Each NGO subgrantee was responsible for its network of community coalitions and took the lead on training them, with support from the ECR.

The level of motivation and the quality of work done by the NGOs and the community coalitions varied. The project team found there was a period during which the community coalitions took time to get fully mobilized and to commit to the project mission. To motivate the newer community coalitions, the project

staff members, in collaboration with the local partners, organized study tours of model community coalitions. The study tour brought together participants from relevant state agencies, local government education authorities, and communities, and gave them a first-hand look at the role of community coalitions, as well as an avenue for discussing how to provide nonformal education and alternative learning programs in their own settings. The lessons from the study tour were distilled into a community education handbook that became a key guidance document for NGOs on how to form and manage a community coalition. Topics included defining community coalitions and their functions, how to operationalize them and mobilize their members, how to leverage assistance from external sources, and the coalitions' role in providing conflict-sensitive education in their communities.

The study tours were followed by training. ECR staff members trained a cadre of master trainers from government institutions and partner NGOs, who then gave a three-day training to community coalitions on the community-action cycle, SEL, and early warning preparedness and response, which ensured the safety of the centers and the learning environment. Safety concerns were integrated into action plans led by the community coalitions, which included contingency plans in the event of a volatile change in community life—in essence, emergency response plans. A total of 685 community coalition members were trained.

The key framework that threaded together the community coalition training in the ECR and Creative's previous northern Nigeria projects was the community-action cycle, a conceptual framework based on participatory problem-solving approaches. The community-action cycle encourages community members to work together to identify, define, and prioritize problems in their community and subsequently identify solutions to improve or remedy the situation. The process also includes reviewing the progress made in order to adjust strategies and/or identify new problems. Informed by the community-action cycle framework, the community coalitions developed action plans and mobilized resources within the communities to assist the ECR staff and the partner NGOs with establishing and managing the nonformal learning centers. The project directors found that some community coalitions had less well-developed action plans than others because they lacked adequate support and monitoring by the NGO partners. They also found logistical challenges in instances where the community coalition members lived far apart. In such instances, the project staff would step in and provide additional targeted support to the NGO and community coalition, or to change which nonformal learning centers were assigned to them.

While the responsibility to establish and manage the nonformal learning centers lay with the subgrantee NGOs, it was the community coalitions that, with input from their respective groups, provided feedback on the location of the centers, the learning facilitators, and the needs of the target population. Taking lessons from their community-action cycle training, they mobilized resources to fund the centers and launched education advocacy campaigns to boost enrollment. They also helped flip the narrative about IDPs, thereby promoting a broader vision of community that included the IDP population.

Creative had embedded the collaborating, learning, and adapting approach within this process to ensure that the project was building relationships with a broad and relevant network of stakeholders, empowering communities to participate in the decisionmaking process, and enabling the project to respond quickly to their feedback by improving the quality, delivery, and inclusiveness of its program model.² This approach took the form of feedback-loop meetings that were organized in 31 of the project's local government areas to identify the key implementation issues affecting project success in the areas of access, learning performance, and safety. The model required assigning roles and responsibilities to stakeholders to address the issues. Held at least every two months, these meetings were chaired by the executive secretaries of the local government education authorities, facilitated by the NGOs, and attended by community coalition members (Creative Associates International 2018).

As mentioned earlier, the quality and effectiveness of participation depends on a community's relationship with the government. Creative found this to be the case in its target states as well, where NGO and community coalition relationships with the local government education authorities affected their work. The feedback meetings described above helped build and strengthen the relationship between the two, particularly in locations where the relationship was weak or nonexistent.

To oversee the program implementation, the ECR established multiple levels of quality assurance: (1) the community level, where they recruited monitoring facilitators from the community who visited the centers every day and provided weekly reports to the project; (2) the community coalitions themselves; and (3) the ECR project staff and state partners, who conducted formal monitoring.

² USAID describes the collaborating, learning, and adapting approach as a set of practices that help improve development effectiveness.

A SCALABLE, TRANSFERABLE MODEL

The community-led model yielded impressive results. Over the life of the project, community coalitions facilitated the establishment of 935 distinct nonformal learning centers in safe spaces, the recruitment of 1,107 learning facilitators, and the enrollment of 80,341 learners. Their multipronged sensitization process helped them exceed the enrollment target by 23 percent, and the targeted completion rate of 65 percent ended up at 139 percent. They also were able to raise more than US\$60,000 in local funding to meet the needs of their centers. Meanwhile, the NGO subgrantees were able to secure nearly US\$1.5 million from additional donors after the ECR organizational strengthening training was completed. The coalitions established an additional 33 centers across the five states, which provided access to education for out-of-school IDP and host community children. Coalitions in the local government area of Toro and in Rafin Makaranta and Ramde Baru initiated conversations with the state ministries to integrate existing nonformal learning centers into the formal education system in places where there were no primary schools.

These results demonstrate the effectiveness of community-led programs in Nigeria, as well as their transferability and scalability. Creative used a similar community-led program model for the COMPASS program in 2004 and the Northern Nigeria Education Initiative in 2009, and was able to adapt it to mobilize communities to address the needs of displaced learners. While this approach is especially beneficial in areas that are hard to reach and volatile, it is also context sensitive, cost-effective, and sustainable. As Helen John, the former ECR community mobilization and NGO coordinator, noted, “Our working with the subgrantees was not because some of these communities couldn’t be reached but because of the knowledge of these communities and as a sustainability mechanism.” John’s point underscores how partnership with NGO subgrantees allowed Creative to tap into their intimate knowledge of the content and paved the way for their continued engagement following the end of the project.

Insights from studies of community participation in education indicate that the reasons the model worked in northern Nigeria was that the community organizations, both the NGO grantees and the community coalitions, had real decisionmaking power: they were able to choose the location of the nonformal learning centers, decide on the timing and schedule of the classes, and select the learning facilitators based on their communities’ needs. These factors helped set the stage for genuine participation. They also received targeted capacity-building support from the project. The NGOs specifically received training on

organizational strengthening, and the community coalitions on the community-action cycle, along with recurring technical and management assistance from the project staff. Finally, regular feedback-loop meetings with the NGOs, the community coalitions, and the local government education authorities helped build and strengthen the relationships among the three groups, which set the stage for a meaningful partnership beyond the life of the project.

Since the ECR was not a research project and its goals were focused on the provision of education, Creative did not systematically measure the impact its training had on the behavior and attitudes of its NGO and community coalition participants. One possible question for future research that will be of interest to the EiE community is whether the target communities have characteristics that make them amenable to providing education for displaced learners. If they do not, what aspects of the ECR capacity-building and mobilization model had the most impact? The model could benefit from such behavioral insights, which would help practitioners refine it to become more effective and transferable across sectors and countries.

There is significant scope for a discussion on how community mobilization affects social cohesion. Chan, To, and Chan (2006) present a compelling definition of social cohesion that offers an important lens through which to assess the impact of our community work in conflict and crisis contexts. UNICEF's Peacebuilding, Education, and Advocacy in Conflict-Affected Contexts program has helped put social cohesion front and center in the discussion about peacebuilding in education. Chan et al. (2006) present a series of questions that could be used to measure horizontal cohesion (within civil society) and vertical cohesion (between state and citizen). Anecdotal evidence from the ECR project suggests that the program activities facilitated a closer and more collaborative relationship between the target communities and the state authorities, as mentioned above. For example, the Lauka community in the Toro local government area of Bauchi State built two physical classrooms at the nonformal learning centers, which prompted the State Universal Basic Education Board to send formal school teachers to the Lauka community to begin a formal school—the first in the community. While the ECR prioritized government ownership of the nonformal learning centers from the outset, it would be worthwhile to assess whether similar programs to increase collaboration between government and communities affect vertical cohesion.

Many organizations rely on national and local partners to provide contextualized service delivery in hard-to-reach and insecure areas. However, to ensure the success of these programs and facilitate the sustainability of program initiatives, these organizations should provide partners with adequate and targeted support during the program initiative, which will help them grow and professionalize their operations and create channels that foster greater communication and collaboration between communities and government. This model is especially relevant in areas affected by conflict, where governments have a limited presence and IDP populations need long-term support.

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EMBEDDING SOCIAL AND EMOTIONAL LEARNING IN LITERACY AND TEACHER TRAINING IN AFGHANISTAN

SUSAN AYARI, AGATHA J. VAN GINKEL, JANET SHRIBERG,
BENJAMIN GAULEY, AND SARAH MANIATES

ABSTRACT

This field note contributes to understanding of the challenges in and opportunities for supporting social and emotional learning (SEL) in the education in emergencies context, with a particular focus on embedding social and emotional skills into literacy learning in the early grades of primary school. In Afghanistan, the current reality is that many children and their teachers have been exposed repeatedly to adversity and highly stressful situations, such as attacks on their schools. Research shows that exposure to crises affects learning and the wellbeing of students and teachers alike. In this article, we describe how SEL was embedded in the early grade literacy curriculum and teacher training in Afghanistan, and in education support systems and practices. We further elaborate on the challenges faced and lessons learned throughout this process. The experience of integrating SEL into an early grade literacy curriculum has been positive, and initial feedback on the approach suggests that it promises to continue to be so. However, further research is needed in both Afghanistan and other contexts to more fully understand the impact of embedding different SEL practices in early grade reading materials and classrooms, and in preservice and in-service teacher training. Note: This field note was written prior to the change of government in Afghanistan in August 2021.

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EDUCATION IN A PROTRACTED CRISIS ENVIRONMENT AND THE AFGHAN CHILDREN READ PROJECT

Education in Afghanistan has suffered greatly from the conflicts that have taken place there over the last few decades. However, since 2001, Afghanistan has made significant progress in education delivery, including improved infrastructure. More than 14,600 schools have been built, and student access to school has increased from less than 1 million in 2001 to 8.2 million in 2012 (UNESCO 2015). And yet, the reality in Afghanistan is that many children and their teachers continue to be exposed repeatedly to adversity and highly stressful situations. For example, attacks on schools that result in the destruction of property or the injury or death of teachers increased by 45 percent between 2018 and 2019 (UNICEF 2019), which highlights the need to address social and emotional wellbeing in schools.

In this context, with funding from the United States Agency for International Development (USAID), the Afghan Children Read project began its collaboration with the Afghanistan Ministry of Education (MoE) in 2016. The project focused on building the MoE's capacity to provide good quality early grade reading (EGR) education. The interventions thus far have included reviewing and updating policies related to EGR; developing new EGR materials; training teachers and coaches to provide quality EGR education; and creating awareness in the target communities about the importance of EGR. The EGR materials and training were piloted between 2017 and 2020 in Afghanistan's Herat, Nangarhar, Laghman, and Kabul provinces and included more than 1.2 million students, 18,640 teachers, and 2,085 schools. The expectation is that, by the end of the project, the MoE will implement the curriculum and related activities at the national level.

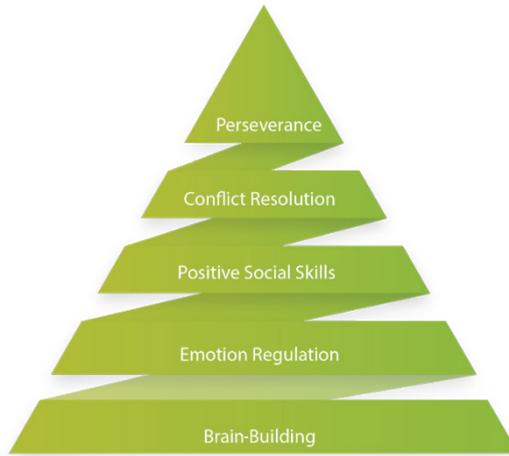
Although the project's mandate and primary focus is on EGR, the fragile context in Afghanistan in which this education improvement is taking place cannot be ignored. Relevant research has demonstrated that exposure to conflict and crisis can create toxic stress and negatively affect learning and the wellbeing of students and teachers in various ways, including depression, anxiety, aggression, or poor memory and information retrieval (Schleicher 2018; Schonert-Reichl 2017; Shriberg 2009). At the same time, research shows that the "harmful effects of toxic stress can be mitigated or even reversed when children are exposed to safe and predictable learning environments and have positive, nurturing relationships with key adults, such as caregivers and teachers, who actively participate in explicit Social Emotional Learning (SEL) activities" (USAID and Education in Crisis & Conflict Network 2018, 1). However, despite the anticipated benefits of SEL, little

documentation is available on how closely the project staff members have worked with education leaders to implement SEL programming that is sustainable and relevant in a context rife with conflict.

The SEL framework used in Afghanistan is based on competencies identified by the International Rescue Committee (IRC 2016), based on their experience with SEL implementation and research in countries affected by crisis and conflict. The framework recognizes five SEL competencies that build on one another and often are presented in a pyramid that indicates developmental and cumulative skills (Figure 1). The competencies are as follows:

1. *Brain-building* helps people to focus attention, remember instructions and concepts, successfully juggle multiple tasks, and plan for the short and long term.
2. *Emotion regulation* enables people to understand emotions and manage their feelings in a positive manner.
3. *Positive social skills* enable people to relate to others in a positive way by understanding their feelings and behavior, and to respond in a way that promotes positive social interaction and reduces conflict.
4. *Conflict resolution* helps people address any problems and conflicts that arise in a positive manner.
5. *Perseverance* enables people to push through challenges and continue to work toward a realistic goal.

In Afghanistan, these competencies were operationalized for young children and refined in various crisis and conflict contexts (IRC 2018). In this field note, we describe the experience of integrating SEL with EGR in Afghanistan, including the opportunities this approach created, challenges encountered, methods used to overcome these challenges, lessons learned, and considerations for future relevant government-led, sustainable programming.

Figure 1: The SEL Competency Pyramid

Source: IRC (2016)

EMBEDDING SEL INTO EGR SUBJECT CONTENT

In 2016, when Afghan Children Read and the MoE began working on a new EGR curriculum, a discussion developed around how SEL could become part of early grade primary education, either as a separate subject or embedded in the EGR curriculum. This was a timely discussion, as the MoE was already involved in curriculum reform, including looking at the number of subjects taught in the early grades. Given their preference to reduce the number of subjects, the MoE recommended embedding SEL into the EGR curriculum. This approach is supported by current evidence, which shows that classroom teachers can help students develop social and emotional competencies by directly teaching these skills using engaging curriculum materials and implementing specific instructional and classroom-management practices (Durlak et al. 2011). To ensure that this embedded SEL approach would be implemented in the classroom, teachers were given preservice and in-service training in SEL and follow-up coaching, thus creating the opportunity to support a multipronged SEL approach in a protracted crisis environment that went beyond the usual early grade literacy subjects.

SEL IN EARLY GRADE LITERACY MATERIALS

One of the project's first activities was to develop a new set of literacy materials for grades 1 to 3 (students ages 6-11). An MoE team, led by an international literacy expert and supported by international SEL experts, worked to contextualize

current research on reading and writing (National Reading Panel 2000) and SEL (IRC 2016) for the Afghan languages and script (Rahbari and Sénéchal 2010; USAID 2020a), culture, and education context (USAID 2020b). In grades 1 and 2 lessons, the SEL competencies were implicitly integrated into activities, reading texts, comprehension activities, and writing activities. Each lesson had an SEL competency as a crosscutting theme, and the reading text and comprehension activities supported the development of the competency (USAID 2020c). For example, most of the decoding activities contained in the literacy lessons already supported the brain-building competency, and it was easily included in the materials (for a more detailed explanation, see Ayari, van Ginkel, and Muhib 2019). The grade 3 curriculum allowed for more explicit SEL skills-building through the literacy lessons. Led by an international expert, the MoE developed a detailed scope and sequence for SEL competencies (USAID 2020c). The scope included the five SEL competencies, and the sequence was based on the hierarchical order in which these competencies function (see Figure 1). Each competency was assigned for a few weeks, and SEL focus areas related to the competency were developed for each week, starting with brain-building and ending with perseverance. For example, emotion regulation was practiced in weeks 8, 9, and 10, and each week had a particular SEL focus area (see Table 1).

Table 1: Example of Scope and Sequence for SEL as Part of the EGR Scope and Sequence

Unit 3: Weeks 8, 9, and 10			
Week	8	9	10
	I-do	we-do	you-do
Theme	Family		
Subthemes	Respecting each other at home Helping each other at home	Family economics Mother	Patience Father (poem)
Genre	Narrative		
Subgenre	Fiction		
SEL competency	Emotion regulation		
SEL focus area	Identify and name a variety of feelings	Describe how different situations make you feel	Identify and demonstrate emotion-management strategies

This allowed students to work on developing SEL competencies in an explicit, sequenced, and systematic manner. During the week, students read stories that incorporated these objectives then completed comprehension activities focused on discussing feelings and identifying emotions. On the fifth school day, listening and speaking activities were focused fully on these objectives, and students completed a creative writing exercise in which they expressed their feelings and strategies for managing them.

The new curriculum materials were piloted for two years, during which the project collected information from teachers, students, parents, and other key stakeholders (see Challenges Encountered and Lessons Learned, below).

IN-SERVICE TEACHER TRAINING

Embedding SEL in the new EGR materials created a need to provide an in-service teacher training (INSET) on SEL for teachers at the pilot schools; the training included how to use the new EGR materials. Development of the INSET program was simultaneous with the materials development. Teachers in the pilot schools received a 12-day training, including a 90-minute session on the theoretical background of SEL concepts. During the remaining training days, the teachers learned how to use the new literacy materials, which included teaching SEL activities and topics. After one year, the teachers took a five-day refresher training, which included a module on SEL. The teacher's guide that accompanies the EGR materials gave teachers guidance on SEL, and on how to develop a positive classroom environment. We refer to this as a healing classroom, a safe place for students to focus on their cognitive development and their social and emotional development (IRC 2018). However, it bears restating that the project mandate and its primary focus are EGR, which effectively limited the training time spent on SEL.

COACHING AND SEL

A coaching system to support the teachers who were implementing the new EGR curriculum in the classroom was set up and piloted by the project. Trained senior teachers served as coaches in their schools. Coaching occurred at the individual and group level. Individual coaching took place at least once a month, during which the coach observed a class and filled in a rubric on how well the teacher applied various skills. The classroom observation included a five-point SEL rubric that evaluated the degree to which the teacher

1. addressed SEL competencies, including brain-building, emotion regulation, positive social skills, conflict-resolution skills, and perseverance, in accordance with the literacy instructional materials;
2. focused on listening and speaking skills and obtaining feedback from students; and
3. provided additional support to needy students and helped them improve their social and emotional behavior through consulting and modeling.

After the class observation, the coach and teacher discussed the coach's observations and identified action points for the teacher.

Group-based coaching was organized through monthly teacher learning circles, during which teachers and their coaches meet to discuss issues related to teaching EGR. The teachers and the coaches set the agenda for the meetings, which included relevant SEL-related issues. Research on the coaching showed that it provided excellent on-the-job support for the teachers in both literacy and SEL (USAID 2019).

PRESERVICE SEL CURRICULUM

From the start of the implementation in 2016, the project staff worked with the MoE's teacher education department to develop modules for an early grade diploma course for teachers. The project originally was tasked with providing a series of four modules focused on EGR: Foundations of Language Development in Early Grade Education, Methods of Teaching Literacy in Early Grades, Methods of Addressing Early Grade Literacy Problems, and Methods of Strengthening Literacy for Students with Special Needs. When the MoE's teacher education department saw how Afghan Children Read had embedded SEL into the EGR materials and the INSET, they requested a fifth module: Social Emotional Learning Skills for Early Grade Students. These five modules were designed to be taught at the MoE's 34 public teacher training colleges (TTCs), which were responsible for both in-service and preservice teacher training. The TTCs offer a two-year teacher diploma for grade 12 graduates and a five-year diploma for grade 9 graduates (Goddard, Bakhshi, and Frideres 2018). Given that this module was a new approach for the MoE, it was designed as an introductory survey module to ensure that foundational SEL content was presented in an interactive and evidence-informed manner. The module was divided into 16 weeks, two sessions per week, and covered the content presented in Table 2.

Table 2: Social Emotional Learning Skills for Early Grade Students Course Sessions

Week	Content
1	Orientation to Social and Emotional Learning
2	Social and Emotional Wellbeing for Students and Mindfulness
3	SEL Research
4	Brain-Building
5	Emotion Regulation
6	Positive Social Skills
7	Conflict Resolution
8	Perseverance
9	Modeling and Integrating SEL across the Curriculum
10	Sensitivity to Learners' Needs in SEL
11	Teacher Wellbeing and SEL Programs
12	SEL from the Afghanistan Perspective
13	SEL and the Whole School Approach
14	Assessing and Measuring SEL within a Classroom
15 and 16	Final Project

Each first weekly session of the module was a lecture, while the second session was interactive and included practical activities that responded to the lecture content. During the development of the module, great care was taken to work with the MoE to ensure that the content was contextualized. For example, some language for mindfulness activities was considered inappropriate and was changed accordingly.

Reviews of the previous week's session were embedded in the module design and offered at the beginning of each week; reflections on new content were shared at the end of each week. These activities gave the module instructors feedback on how their students (preservice teachers) were processing and interpreting the module. Students were assessed through midterm and final exams, portfolio journal entries, participation in and quality of class activities, and a final essay. A pretest and posttest, adapted from an IRC model test (IRC 2016), were developed to give students some background on what they would be learning (pretest) and enable them to measure what they learned (posttest) over the 16-week module.

The module's practice-based pedagogy gave students opportunities to role play, develop SEL activities around a particular competency, and implement activities with their peers, then to process these experiences as both "teacher" and "student" and reflect on what they learned from completing the activities and from observing them. Knowledge of how the brain works is behind this approach; the neural

wiring is strengthened each time an individual practices a new behavior or skill, thus “practice makes permanent” (Willis 2018). The module was student centered and scripted so that the instructor could model the behaviors she or he expected students to practice. This was done so that, when they became teachers, they would have had relevant experience from their training and from the SEL module.

CHALLENGES ENCOUNTERED AND LESSONS LEARNED

While it is still too early to see the full impact of this embedded approach to SEL in the literacy curriculum and in the teacher training and support system, the development process and initial feedback on the pilot implementation has produced some lessons on the various aspects of integration that we outlined, including materials development, in-service teacher training, coaching, and preservice teacher training.

MATERIALS DEVELOPMENT

Embedding SEL in the literacy curriculum in the early grades posed the challenge of finding a balance between SEL and the mandatory literacy content. In Afghanistan, Dari or Pashto literacy (reading and writing) is scheduled for six weekly time slots of 45 minutes each. This is the minimum time needed to teach and practice initial literacy skills, which makes it challenging to include SEL. However, we recognized that SEL was key to the students’ wellbeing and that including it would enable them to learn more effectively. To address this challenge of time, SEL was implicitly included in as many activities as possible, such as reading texts, comprehension questions, and word-recognition strategies (see Embedding SEL into EGR Subject Content, above).

Piloting the new materials provided insights from a broad range of stakeholders. The pilot data showed that stakeholders had positive reactions to SEL being embedded in the early grade literacy materials. The stakeholders also indicated that the illustrations and stories reinforced the students’ positive behavior. One focus group participant remarked, “Compared to the previous curriculum, this curriculum has created an unprecedented variety of children’s tastes that strengthened the child’s sense of wellbeing and integrity by a hundred percent” (USAID 2018). Another focus group member commented that “the minds of the children have become stronger—they are alert, more active than before” (USAID 2018). In addition, all the teachers expressed that various aspects of the lessons had helped students develop their social and emotional learning skills (USAID 2018).

Based on the early evidence from the pilot, embedding SEL in literacy materials may support students socially and emotionally by

- strengthening their sense of wellbeing;
- sharing positive behavior with friends and family members;
- increasing their ability to stay alert and active; and
- helping them develop the skills to help fellow classmates.

These initial findings suggest that this embedded approach is possible without interfering with the time students need to learn crucial basic literacy skills. As other research has already shown (Durlak et al. 2011), it seems that SEL can be embedded naturally and easily into evidence-based EGR pedagogy.

IN-SERVICE TEACHER TRAINING

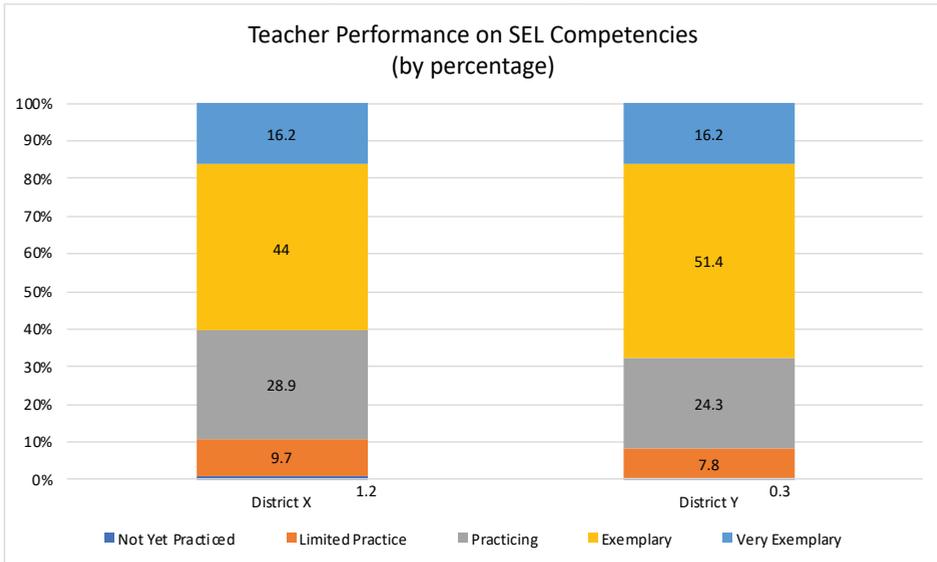
Feedback from teachers on integrating SEL into the INSET was generally positive; however, two areas may require follow-up. First, teachers indicated that they found the training on SEL approaches too short to fully understand and apply them. Teachers made similar comments about the training for using the new literacy materials, which suggests that the issue lies more with the length and nature of the in-service trainings than with the SEL training content. Providing teacher training on the job means it must be short and efficient; the full content is often covered during preservice training. When teachers were observed by their supervisors in their classrooms during the pilot, it was apparent that the short training, combined with the well-developed materials and coaching, helped both teachers and their students improve their SEL skills.

Second, some teachers had concerns about activities that required students to be physically active in the classroom when practicing SEL competencies, such as jumping up and down to get their heart rate going. While implementing the model, we found that physical activities were not always appreciated, especially when they took place in a mixed-gender environment, such as a teacher training or a classroom. Some teachers suggested that these activities be replaced with “inspirational” activities that allow children to remain seated and to engage in mental rather than physical activities.

COACHING

As previously stated, the teachers indicated that the INSET was too short for them to grasp all the issues related to SEL. In response, the coaches provided the teachers with continuous professional development. During classroom visits, the coaches used the rubric to indicate how well teachers were implementing different aspects of the new curriculum, including SEL, using the five categories (see Figure 2). These data were helpful in providing targeted support. For example, Figure 2 illustrates how well teachers in each district were applying the SEL competencies in the classroom.

Figure 2: SEL Coaching Data



The data presented in Figure 2 show that a few teachers still do not promote SEL: about 10 percent have limited practice in teaching SEL, while about 25 percent are teaching it but could still improve, which illustrates the need for follow-up with both teachers and coaches about implementing SEL competencies.

Over time, the coaching seemed to help allay teachers' concerns around the insufficiency of the in-service training. Moreover, feedback on similar innovations in other countries (Pflepsen 2019) indicates that it takes several years for teachers and coaches to become fully familiar and comfortable with new literacy methodologies, so comfort with SEL techniques may also take some time.

PRESERVICE TRAINING

Developing the preservice module presented some challenges. The first was fitting the content and activities within the time allotted. The MoE stated that preservice teachers taking the module could not work outside the module hours; therefore, readings and assignments had to fit within each one-hour class. The second was not knowing the TTC instructors' capacity in SEL, or their more specific knowledge of child development, child psychology, and pedagogy. Therefore, they required a highly scripted teacher guide. Due to these factors, instead of the MoE personnel writing the module with the guidance of an international expert, international SEL experts wrote it and then piloted and validated it while making several revisions.

The module has since been piloted with a group of TTC instructors and MoE personnel. Postpilot evaluations indicated that most participants in both groups strongly agreed (92% and 82%, respectively) or agreed (8% or 18%, respectively) that the learning outcomes of the module were important for their roles, and that the training enhanced their professional expertise. All the participants agreed that the module content was relevant and appropriate (Afghan Children Read 2018).

The participants did suggest, however, that further contextualization was needed for some of the activities, especially those that support mindfulness. For example, a breathing activity asked participants to “breathe out the bad thoughts and breathe in the good.” As a result of the pilot, during the revisions of the module the breathing activities were rewritten to say, “Focus on the light,” and they asked participants to think, “The light is in me, I am the light. I shine light on everyone and everything around me.” The feedback had noted that, in the Afghan context, the reference to “badness within” was seen as inappropriate, whereas the affirming reference to the “light within” was appropriate.

This feedback demonstrates another lesson learned: while it was possible to develop the integrated SEL approach using experts from outside Afghanistan, it was important that these experts understood the need to adapt SEL competencies and activities to the context. This enabled a productive synergy to develop among the outside experts, the MoE curriculum developers, and the community and religious leaders who helped identify alternative activities. This open-minded, collaborative approach was critical in adapting SEL competencies and activities to the cultural and religious context of Afghanistan. Many of the SEL skills integrated into the literacy curriculum—friendship, conflict resolution, patience, and perseverance—align with Afghan values, morals, and behaviors. However, more research is needed to confirm this early evidence, identify additional

SEL skills and values that are specific to the context, and develop contextually appropriate activities for practicing SEL competencies.

CONCLUSION

Early evidence based on the implementers' observations and participant feedback and analysis indicate that students using the EGR materials made noticeable changes in their behavior and knowledge of SEL content. The teachers and parents confirmed this and reported that the children's social and emotional wellbeing had improved. Embedding SEL implicitly in the EGR content allowed sufficient time to build early grade reading skills while ensuring that the students also were exposed to SEL competencies. Despite teachers' concerns about having too little time for the SEL training during their INSET, the posttraining feedback indicated that the well-developed EGR materials compensated for the short training and that the uptake by teachers was promising. It also showed the importance of relying on international experts, who were able to work with their national counterparts to ensure that the SEL values and activities aligned with Afghanistan's cultural and religious values.

Attending to student and teacher wellbeing in crisis and conflict contexts is essential, but hope for the sustainability of SEL instruction depends on the MoE and its vision for the curricular design. The Afghanistan MoE understood the need to embed SEL in the existing primary education curriculum and materials, and because it was engaged in primary and secondary education curriculum reform at the time this activity was taking place, the literacy curriculum and materials provided the first opportunity to embed SEL. Afghan Children Read took this opportunity to expand SEL into the student materials, and into teacher training and professional support materials and approaches. At the onset of COVID-related school closures, the project responded to community interest (as expressed through the Shuras, or councils) to include SEL resources in home-based learning.

The development of the preservice SEL module may help address the shortcomings of in-service training, as it will provide new teachers with a solid foundational knowledge of SEL and how to integrate it into their teaching practice—and to recognize its benefits for their own wellbeing. Further studies may demonstrate whether the new diploma course will support teachers' application of SEL, as they will have had 32 hours of SEL class time to learn and practice, in contrast to the existing teachers who have had only 90 minutes of in-service SEL training. The MoE is also looking to provide more substantive INSET training to current teachers so

they can be certified in the early literacy and SEL modules designed for delivery at the TTCs, which would provide the foundation for a certificate program.

In this field note, we aimed to enrich understanding of the challenges in and opportunities for supporting SEL in the education in emergencies context. We explained that SEL was embedded in the EGR curriculum for grades 1, 2, and 3, and described the opportunities that arose to incorporate SEL into both teacher training and coaching. The initial feedback on this approach suggests that social and emotional skills and subject learning, in this case literacy, can be integrated effectively, even in a fragile education context that is functioning during an ongoing crisis. More research is needed to fully understand the process of working with education ministries to embed SEL across subjects as a way to improve teaching and learning for teachers and students in crisis and conflict environments.

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FISHING IN THE DESERT: EMPOWERING SUSTAINABLE DEVELOPMENT THROUGH HIGHER EDUCATION IN KAKUMA REFUGEE CAMP

DIEU MERCI LUUNDO

INTERVIEWED BY PAUL O'KEEFFE

Vijana Twaweza Youth Club (VTC), which was created to serve youth living in Kakuma refugee camp in northwestern Kenya, is empowering these young refugees to make real and lasting change in their community. Winners of *Permaculture* magazine's 2020 Youth in Permaculture Prize and the 2021 World Food Programme NextGen East African Innovator Programme competition, the club members are guided by the permaculture philosophy of working with nature. VTC creates sustainable and empowering solutions to provide better nutrition to Kakuma residents and to help combat some of the effects climate change is having in the camp. Club founder Dieu Merci Luundo, who studied human rights, global health, and basic medical training with the University of Geneva in Kakuma, has put what he learned in class into practice to serve and educate residents of the camp. The youth club, whose first projects were a small fish pond to raise fish and a garden to grow vegetables, now includes 39 members who have built a bigger fish pond, planted more vegetable gardens, started a soap-making enterprise, and are delivering permaculture training to others in the camp.

Refugees living in camps like Kakuma rarely get the opportunity to exert much control over their lives and the environment around them. They are generally prohibited from leaving the camp and have limited access to the camp's institutional resources. This is especially difficult for the many young people in Kakuma. Higher education is one of the few avenues available to them to invest in their hopes, empower themselves, and forge a better future. With its ability to protect and provide durable solutions and foster resilience, VTC has harnessed the power of higher education to enable the young camp residents to engage with

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the wider world, to learn and exchange ideas, and to build a project that both provides and inspires.

This interview with VTC founder Dieu Merci Luundo shares the inspiring story behind the club in the hope that it will provide a model for change for refugees around the world. The interviewer, Dr. Paul O’Keeffe, is a longtime supporter of and adviser to the club.

O’KEEFFE: I first met you when you stormed the stage at the University of Geneva’s Kakuma graduation ceremony in 2018 and put on an impromptu play about police violence and protecting human rights. The hall was filled with students and faculty from the courses the University of Geneva ran in Kakuma.¹ Although the play was in French, which many people in the room did not understand, your message—that refugee rights are human rights and that we must all fight for them together—came through loud and clear. I think everyone in that room was inspired. Can you tell me how your experience in higher education inspired the creation of VTC?

LUUNDO: Higher education inspired me a lot in creating VTC. Higher education can bring students together to discuss problems and challenges. For example, our tutors at the University of Geneva taught us primarily by asking us different questions or presenting cases to us that we had to work as a team to answer. We had to listen to each other and respect each other’s opinions, which gave me the spirit of working together with people from different backgrounds. We use the same principles in VTC. For example, I raise an issue, then we discuss it, and together we find a good solution. This is one of the main inspirations I got from the University of Geneva.

In the global health course, a video about finding solutions for tropical diseases really inspired me. The lecturer was talking about how the World Health Organization was planning to eliminate rabies by 2030. She said the point is to think big and have a strategy, but start small. Show your evidence, then scale up. She said that we can be the generation to make a difference, that we need to work together across sectors to make a bigger impact. This message was the inspiration for VTC.

In addition to studying human rights, basic medical training, and global health with the University of Geneva, I have taken courses in aquaculture, entrepreneurship, and cricket keeping. My younger brother is in the club and has studied human rights and ethics as well. Others in the club have studied

¹ The University of Geneva facilitated higher education courses in Kakuma refugee camp from 2017 to 2021 through a humanitarian program called InZone.

things like community health, computer science, plumbing, media production, and management. Together we have a strong collection of education backgrounds.

O'KEEFFE: For me, VTC is confirmation that higher education is more than just getting a qualification. It's about being part of a community that enables ideas to become a reality. Can you tell me how you came up with the idea for VTC?

LUUNDO: After getting that motivation from the global health course, I watched another video from the World Health Organization about linking global health priorities with biodiversity. This made me think that I cannot work alone, that I should work with other youth to help our community. If we could provide fish or vegetables to our households, it would be a first step. We do not have a lot of support, we do not have a lot of money, but the little skills from each member can help. We can start from this to make things big. Before I started the global health course, the fish were mine, the little farm was mine, but the course made me realize that I need to work with other people and showed me how.

One concept in global health is that many parties—physicians, entomologists, anthropologists, climatologists—can come together to work on one problem, such as the coronavirus or malaria. This inspired me to bring young people together to work on our problems together. The name *Vijana Twaweza* means “youth, we can”—we can come together and, even if we are not experts, we can use our knowledge. So, I got the general idea from higher education. In the courses we talked about how to respect each other, how to keep ourselves healthy, what nutrition is, how to take care of ourselves physically.

O'KEEFFE: Starting any project in Kakuma is not easy. The environmental conditions are difficult, the resources are limited, there is a lot of red tape, and people often are demotivated. Can you share how you went about setting up the fish pond?

LUUNDO: I suffered a lot as I started it myself; it was very difficult. One day I went to the stream and found some baby fish, so I collected them and put them in a container. After a few days, five of them died. After many questions, I found out that the container was not suitable for them. So, I transferred them to a basin, and decided to dig a small fish pond. To do this I bought some plastic covers to line the pond—it was hard to prevent my chickens from falling into the pond and drowning. Also, changing the water of the pond was very challenging; I had some health conditions in my shoulders from doing this.

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Later, a man from the Burundian community told me that the lapia fish, the ones I had collected, would not grow much more and that I should get some catfish instead. A Congolese guy told me that the fish could not lay eggs, as there was no sand at the bottom of the pond. He told me I should put some sand in the pond so that the fish can lay eggs. So, I followed this advice and learned from others around me.

By the next morning, almost all the fish had died. Just one male and female were alive, then the male died. I decided to get more fish, but then there was lots of rain and the fish were washed out of the pond, and the chickens ate them. It was a hard time. I took all the fish that had survived and put them in the pond, then they started to eat each other. There were lots of lessons I learned the hard way.

O'KEEFFE: Despite the difficulties, you persevered and set up the club and brought other people into the project. Who are the members of VTC and how is it organized?

LUUNDO: When we started we were 14 young people from all different backgrounds—Congolese, South Sudanese, Somalis—who came together as a refugee community initiative. We were motivated to work together to solve some of the problems in Kakuma, in particular the inadequate diet and the fight against climate change. We worked together to improve nutrition by increasing the diversity of animals and crops and to increase food availability. After six months, we welcomed 25 new members, then this year we received three more applications. Many young people want to join, as they can see the impact the project has in the community and how we work together with the spirit of cooperation.

When bringing so many people together, there can be many challenges with organization, logistics, communication, cultural barriers. We follow the permaculture principle of positivity, which means that the problem is the solution, or we try to see the problem in a positive way. For example, tribalism in Kakuma can get in the way of working together, so we decided that we needed to make sure that all the communities in the club have proper representation in everything we do. We are now 39 people in VTC. To enable transparency, we put in place an executive committee structure, which is composed of the chairman and vice chairman, the secretary and vice secretary, the treasurer and vice treasurer, and four advisors. We try to reach consensus on any new projects.

I'd like to mention that we have forged strong connections with partners in the camp and overseas. The Jesuit Refugee Service has given us a lot of support, with motivational training and other assistance. For many projects we work

with local community organizations, such as Vision Art Music for Youth, the Youth Education Development Association, and Food and Health Education. We also have weekly mentoring meetings with you and others from the University of Geneva, the Lampeter Permaculture Group in the United Kingdom, and the Permaculture Institute in Uganda. We also communicate regularly with our former tutors from the University of Geneva. VTC is very much organized around a collaborative global effort.

O'KEEFFE: I've been following VTC's evolution from the start and have seen you take it from an idea to something truly amazing. Can you tell me what a typical week looks like for the club and describe the key developments over the last year?

LUUNDO: Currently we are working on the two main projects—the market garden and the fish farm. We have a greenhouse where we grow different vegetables. We appointed a South Sudanese guy to be the “chief” of the market garden. He was with me in a course on fish farming and agriculture, and he is the one who plans everything for the garden. We also created a new pond that has about three thousand fish in it. This keeps us very busy.

In VTC, we all volunteer our time. The reality is that we all have a lot of things to do outside of the project, school and so on, so we mostly come after school or on weekends. When we have a little time, we just do what we can, such as irrigating the compost heap, taking care of the crops, and feeding the fish. We don't work in the market garden on Sundays, but Monday to Saturday we do what needs to be done.

For the fish farm we work every day. A friend from Burundi leads the fish farm; he selects and directs the people to work on the pond. The old pond takes a lot of work, so we recently built a new fish pond and put it in our family compound to keep it safe and to have less work monitoring it. We lined it with plastic and we irrigate it to keep the water clean, as the community depends on getting water from it. Also, having the pond in a public place was not so safe, as people could trample in it, spreading disease and bacteria to the fish from their shoes. There are a lot of risks and a lot of work involved in keeping the pond safe and secure, so having a better management system helps keep the fish safe and makes it easier to organize.

There is no really typical week at VTC, as there is always something new to do. For example, one week we might be taking a course on permaculture or preparing a presentation of our work for a competition, or we might be planning a satisfaction survey for our customers. We do this a lot, as we want to ask them what kind

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of products they want, what crops they think we should grow, how much they would be willing to buy, and so on. We plan and discuss all of these activities during our meetings every Saturday and plan the next week out.

O'KEEFE: VTC has gone from strength to strength in the last year. Can you tell me, what are the next steps for the club?

LUUNDO: VTC was among the three groups which won the permaculture prize organized by *Permaculture* magazine in 2020. We also won last year's World Food Programme NextGen East African Innovator Programme competition. This really motivates us for the future and helps us come up with new ideas. We are currently planning a permaculture ethics and principles training for women, orphans, and widows in the camp. We want to enable them to observe, interact with, and design sustainable solutions for their problems or needs by turning available materials or waste into something useful for them. For example, we plan to train them to turn the leaves of the neem tree, which grows in Kakuma, into natural pesticides; to transform the sacks we get from the ration center into raised beds for crop production; and to compost legumes and some green grasses into a source of nitrogen for growing crops.

In terms of growth for VTC, our next step is to open the first permaculture center in Kakuma refugee camp in order to reduce hunger and poverty by encouraging and supporting people to create their own durable solutions to their problems, and to provide more fresh fish and vegetables to the residents of Kakuma. We are also planning to improve our outreach strategy so that we may collaborate with some local organizations working in the camp.

O'KEEFE: How can others learn from VTC's experience?

LUUNDO: I think our determination makes others learn from us. For example, many young people are going to the lake to collect catfish, while others ask us for small fish so they can start similar projects.

If we have a good reputation, if we have integrity, I think many people will learn from us. By working together, it will make them come to us to learn. The people in the community are seeing what we are doing. If we succeed, we can tell them how to succeed. We can organize sessions to teach them about agriculture, and we can share the knowledge we get from our studies with the ones who cannot access the courses.

O'KEEFFE: Finally, the ethos of collaborative learning for sustainable development is hardwired into VTC's DNA. What else is necessary for young people in Kakuma to empower themselves?

LUUNDO: I think it is about improving post-high school studies. In Kakuma we don't have many places to learn. There are about eight high schools with people who want to learn, but few opportunities for higher education. This means a lot of competition to get into the courses that are available. For example, for a course I took at Arrupe Learning Centre, there were about 600 applicants for 8 places. I like this learning center because it asks questions on the application forms that require a lot of thinking. Taking post-high school courses is the first step to empower the community, which is what we are trying to do at VTC.

When I was in high school before I came here, I never thought I would learn about medicine, global health, human rights, agriculture. I thought I would just study economics and go work for the government. But here I have studied medicine, global health, and human rights, and these courses really helped me. I think if this project succeeds, the people will accept it, as they will see that it works and that they can follow our example. So, I think the support most needed here is for education after high school. If we get this, we will gain enough knowledge to help ourselves.

HELPFUL RESOURCES

To find out more about Vijana Twaweza Club please see:

1. <https://www.facebook.com/VijanaTwawezaClub/>
2. <https://www.youtube.com/watch?v=MbZ-AVuKZF0>
3. <https://abundantearthfoundation.org/announcing-the-2020-youth-in-permaculture-prize-winners/>
4. <https://www.youtube.com/watch?v=pGkt3Yv6mUE>

BOOK REVIEW

MAKING REFUGE: SOMALI BANTU REFUGEES AND LEWISTON, MAINE

BY CATHERINE BESTEMAN

DUKE UNIVERSITY PRESS, 2016. XVI + 352 PAGES

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Practitioners in the field of education in emergencies often focus on the present moment, the immediate need, and durable solutions for the future. Rarely in this field do we find ourselves looking backward to inform the way forward (Monaghan 2019). Catherine Besteman's book, *Making Refuge: Somali Bantu Refugees and Lewiston, Maine*, is an excellent example of how the past educational experiences of marginalized refugee groups can shape both individual and cultural identity, and have an impact on their present and future educational opportunities and experiences.

Through a decade of work and an expansive seven-year ethnographic study, Besteman weaves an intricate story of colonial devastation, historical discrimination, and contemporary violence. In the foreground of this severe backdrop, she showcases the hope, resiliency, and resolve of the Somali Bantu refugee community in Lewiston, Maine, as they seek not merely to integrate, but to achieve equality. Her book is first and foremost an ethnographic account of the Somali Bantus' journey, from conflict in Somalia through a decade in Kenyan refugee camps and eventual resettlement in the United States. Besteman creatively uses the recurring theme of education throughout the three main sections to exemplify points related to the discrimination, identity development, integration, and cultural change experienced by this Somali Bantu community.

In the first section, Besteman presents a narrative of the structural violence that led to the evolution of the *jareer* (marginalized Bantu) and *jileec* (dominant) ethnic groups in Somalia. She recounts how the historical enslavement and subsequent minority status of the *jareer* led to their poverty, physical assault, and humiliation (78). Besteman describes the centuries of extreme marginalization that specifically included a lack of access to education, which resulted in illiteracy, limited opportunities for social mobility, and lingering negative relations between the *jareer* and *jileec*. Indeed, this educational discrimination followed the Somali Bantus to refugee camps in Kenya in the early 1990s, where *jareer* Somali Bantus who are now resettled elsewhere remember being taunted by their fellow *jileec* students: "Even monkeys can pass the exam and go to high school!" (88).

Besteman describes how education functioned as a vehicle for past and present discrimination, noting specifically that education was instrumental in the identity development of Somali Bantu youth. She explains that jareer teenagers learned the term “Bantu” from their Kenyan teachers in the refugee camps, which offered them “a connection to Bantus elsewhere in Africa and to their teachers that made the label appealing” (87). This contrasted sharply with the racism they experienced there. Besteman explains how educational success in the refugee camps “emboldened young Somali Bantus, for whom the Bantu label offered a positive self-identity” (88). Despite the racism and discrimination the Bantu label inflicted, education provided an opportunity for positive self-identity development for jareer teenagers who proudly took up the term.

In the following section, Besteman uses education as a backdrop for showcasing the challenges of resettlement, integration, and assimilation the Somali Bantus faced in Lewiston, Maine. She begins by noting that the promise of education motivated individuals to sign up for resettlement in the first place; however, the reality upon arrival was a disappointment. Almost all of the Somali Bantu refugees who arrived in the United States as teenagers failed to graduate high school, due to the poor quality of their previous education, language issues, and cultural differences. Most Somali Bantu adults were forced to choose between earning an income or pursuing an education. Besteman explains that schools became battlegrounds for intercultural conflicts (e.g., Somali Bantu parents’ requests for prayer rooms in schools, for their daughters to be allowed to wear headscarves, and for the cafeteria not to serve pork), and that Somali Bantu parents felt their concerns were often disregarded or deflected by school officials. This section also includes examples of how the unwarranted overuse of suspensions, teachers’ racist remarks and behavior, and the denial of specialized services for struggling Somali students created an accumulation of obstacles within the education system that made achieving assimilation, let alone equality, nearly impossible for these Somali Bantu students.

In the final section of the book, Besteman underscores the integral role education played in the development and reshaping of these Somali Bantus’ cultural identities and practices. One example is how advocacy groups used the schools as a means to increase protective factors for Somali Bantu girls, preventing early marriage in particular. As a result, parents were forced to shift their traditional ways of thinking about their daughters’ safety and future wellbeing; instead of marriage being a factor that would provide future security, their school now functioned in this capacity, and marriage was seen to be more harmful than helpful at such a young age. Besteman also describes how the school was a catalyst for parent-child

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interactions (e.g., parents asking children how their school day went, discussions about report cards, pushing back on school discipline and suspension, etc.), and how these interactions slowly changed how the Somali Bantu parents and children regarded, respected, and communicated with one another—changes that will shape the cultural identities and educational experiences of future generations of resettled Somali Bantus.

Besteman's work is an impressive in-depth look into the past and present lives of a displaced people and their experience "making refuge." For those in the field of anthropology, this book is an outstanding example of ethnographic work and an important reality check for those working in the field of refugee resettlement. This book also demonstrates the crucial role education can play in a refugee group's past, present, and future discrimination, identity development, integration, and cultural change. Like *Making Refuge*, future historically rooted works about the refugee experience will help to inform and improve the design and delivery of education services for displaced communities in both emergency and resettlement contexts.

KELSEY A. DALRYMPLE

University of Wisconsin-Madison

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and do not represent the University of Wisconsin-Madison.*

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BOOK REVIEW

THOSE WE THROW AWAY ARE DIAMONDS: A REFUGEE'S SEARCH FOR HOME

BY MONDIANT DOGON, WITH JENNA KRAJESKI

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Those We Throw Away Are Diamonds: A Refugee's Search for Home by Mondiant Dogon (with Jenna Krajeski) is a simultaneously heartbreaking and inspiring firsthand account of Dogon's life as a survivor, "forever refugee," top student, child soldier, community leader, and change-maker. The narrative takes readers from Dogon's early childhood in the eastern part of the Democratic Republic of the Congo, through his more than two decades in refugee camps in Rwanda, and on to New York City, where he earned a master's degree in international education. Having been taught that "refugees are told to be quiet, and to be grateful for what we have" (252), and having long feared sharing his story, even with his classmates in each context, Dogon labels silence "a disease" (252). In breaking his silence, Dogon challenges many popular misconceptions about forced migration and refugee life and teaches readers through the power of his story. Many of the book's key themes are of special relevance to those who work, study, or are otherwise passionate about education in emergencies (EiE).

Dogon's book offers a corrective to frequent misunderstandings of refugee experiences. First, the media gaze is too often on a one-way period of flight, where safety is presumed if the journey is survived. Dogon and other refugees' ongoing search for safety is an important theme throughout the book. By the time he was 12 years old, Dogon had confronted unimaginable dangers, made a perilous journey from Congo into Rwanda, survived massacres in a refugee camp in which he lost multiple family members and friends, journeyed from Rwanda back into Congo, and once again from Congo back into Rwanda. Daily life was often dangerous, both within and outside refugee camps. Dogon writes, "I had seen more death than I'd ever thought possible" (221).

Second, through his experiences with a lengthy period of asylum and his efforts to make a life in refugee camps, Dogon challenges the common understanding of refugee status as a temporary condition. Dogon uses the term "forever refugee" to explain the prolonged displacement he and other refugees face. Refugees today are displaced for 20 years on average (European Commission 2021), and while UNHCR (2019) promotes alternatives to camps, many refugees' lives are entirely

framed by refugee camps. Writing about his brother, Dogon says, “It would be a miracle for him to buy a home or raise a family outside Gihembe [refugee camp]. He couldn’t leave the refugee camp for Kigali . . . Food and clothing, even medicine, would always seem like expensive luxuries” (204).¹

Third, Dogon’s writing complicates what is often an oversimplified, and largely negative, narrative about refugees’ lives. His story certainly illustrates the magnitude of the daily grind that he and those in his refugee community face in order to survive. Dogon also describes happy moments of familial love, intense friendship, generosity when there was little to give, joyous memories, and future aspiration. His writing encourages readers not to think of refugees from a deficit perspective or to position them as passive recipients of humanitarian aid, but to see them through a lens focused on their capacity, on their agency, and on their ability to lead creative, complex lives.

Each of these lessons should be instructive for scholars and practitioners who work with refugee populations, as well as a wider readership interested in gaining a better understanding of forced migration. Dogon’s book also offers insight into specific EiE programming. For example, his reflections on living through violence lend support to the current EiE focus on early childhood education and social emotional learning:

I was so young. But living through a war makes you older. When you are three or four or five years old and you spend a year living in war, you become as wise as if you were twenty years old. You learn when to close your eyes and how to keep them open even while you sleep. You stop asking for food no matter how hungry you are. You see people dying wherever you go, and you say, “Wow, I’m next.” (65)

Education is the overarching and perhaps most central theme of the book, as it ties all the parts of Dogon’s life together. Echoing themes common in the EiE literature, Dogon portrays schooling as the key to the future and to hope:

Through everything, school was the center of my life. I think this must be true for a lot of refugee children. It doesn’t matter what the classroom looks like or who the teachers are, or even what is taught. It doesn’t matter if we are threatened by violence. We will risk everything to study. If parents can send their children to school, all hope is not lost. (152)

¹ Kigali is the capital of Rwanda.

The details of Dogon’s educational journey should be of great interest to readers. They highlight his incredible perseverance and how he overcame obstacle after obstacle—poor-quality primary schools; accessing school as a child soldier; ethnic, national, and refugee-based discrimination; the absence of secondary school and higher education options; a lack of required education and citizenship documentation; and more—which should guide those of us working in EiE. Reflecting on his time as a student in the camp, he writes, “I didn’t see any way out of Gihembe other than school, and so I became obsessed with being the top of my class. Besides collecting firewood and the occasional soccer game, I did nothing but study. In the refugee camp, school was more than a place to learn; it was an escape hatch” (258). Dogon’s narrative reminds us not only of the roots of the EiE field—which is built on the power of schools to promote wellbeing in conflict-affected contexts and as places to “cope and hope” (Winthrop and Kirk 2008)—but of the work that remains to be done.

A powerful first-person narrative that challenges misperceptions about refugees and their lives, Dogon’s *Those We Throw Away Are Diamonds* draws attention to key priorities in education in conflict-affected contexts. It is an important read for EiE students, scholars, and practitioners.

ELISABETH KING²
New York University

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 and do not represent New York University.*

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² Elisabeth King is Professor of International Education and Politics at New York University. In writing this review and reflecting on her own positionality, she shares that she has conducted research in Rwanda, visited Gihembe refugee camp, and taught Dogon at New York University.

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CONTRIBUTORS

ABDULKADER ALAEDDIN is a monitoring, evaluation, research, and learning (MERL) expert with 14 years of experience designing, implementing, and leading MERL activities in conflict-affected areas across the Middle East. Since 2013, he has led MERL activities in Syria for various programs, including stabilization and humanitarian programs funded by the US Department of State, USAID's Office of Transition initiatives, the UK Foreign Commonwealth and Development Office, and the European Union. He currently is the Director of MERL in a Chemonics education project that promotes access to safe, inclusive, and quality learning opportunities to children in conflict-affected areas in Syria. He holds a BS in pharmaceutical science from the University of Aleppo.

MAJD AL-SOLEITI (majdsoliti@gmail.com) is a medical doctor and a researcher based in Amman, Jordan. His research interests include child psychiatry, early childhood development, public mental health, and refugee studies. He has contributed to several research projects at the Yale Child Study Center and Yale MacMillan Center, and he currently practices medicine in Jordan as a general practitioner.

ASEEL FAWAZ ALZAGHOUL (aseel.alzaghoul@mail.mcgill.ca) is currently a PhD candidate in McGill University's mental health program. Her research interests involve early childhood development, mental health among refugee populations, and psychosocial interventions in low- and middle-income countries. She obtained her medical degree from the University of Jordan.

GRACE ANYAEGBU (grace.anyaegbu@fcdo.gov.uk) is a Statistics Advisor in the UK Foreign Commonwealth and Development Office. She works with their programs in Yemen to provide statistical and evaluation support, advice, and quality assurance at all points of the program lifecycle to ensure that aid-spending programs are underpinned by robust evidence and monitored effectively. She has more than 12 years' experience working in the UK government on social issues, such as income inequality, child poverty, and infant mortality.

CONTRIBUTORS

MARIA PAULINA ARANGO-FERNÁNDEZ (mariapaarango@gmail.com) is an education researcher in Colombia and was the Director of Teacher Professional Development for Medellín's department of education. Her expertise includes the development of curriculum content for reconciliation and citizenship in conflict contexts. She holds a PhD in international and multicultural education and was recognized as a Peace Scholar by the United States Institute of Peace for her research on the role technical and vocational education play in the reintegration of youth ex-combatants in Colombia.

SUSAN AYARI (susana@creativeduc.com) is the Program Area Director for Creative Associate International's education programming in the Middle East and North Africa and Asia regions. Her work in her earlier role as Project Director of USAID's Afghan Children Read project was critically informed by her 30-year experience as an early grade classroom teacher, particularly in the areas of teacher professional development and social and emotional learning. Her work with USAID in Yemen and UNICEF in Jordan during the height of the Syrian refugee crisis sparked her interest in education in emergencies working groups, such as INEE and ECCN.

MARIA ANGÉLICA BENAVIDES CAMACHO (mariaa.benavidesc@gmail.com) is a policy analyst with experience in social development, specifically education and early childhood development. She has contributed to decomposing, analyzing, and evaluating policy issues to devise evidence-based solutions in Colombia and other humanitarian contexts.

FELICITY BROWN (felicity.brown@warchild.nl) is a Senior Researcher at War Child Holland. She previously co-led a research program to assess the implementation of digital game-based learning programs in Lebanon, Sudan, and Jordan. Her research and technical interests involve developing and evaluating psychosocial and education interventions for children and families affected by armed conflict, poverty, and other adversities. She holds a PhD and a master's degree in clinical psychology.

CONTRIBUTORS

ELIZABETH BUCKNER (elizabeth.buckner@utoronto.ca) is an Assistant Professor at the Ontario Institute for Studies in Education at the University of Toronto. She also is the principal investigator on three research grants from the Social Sciences and Humanities Research Council of Canada and a co-investigator on a Major Research Grant from the UK Economic and Social Research Council, which focus on universities in crisis-affected contexts. Her research examines how global trends, including internationalization, privatization, and sustainable development, affect higher education, and has been published in *Sociology of Education*, *Comparative Education Review*, *Comparative Education*, and *Higher Education*, among other journals.

CAROLINE CARNEY (carolinecarney8@yahoo.com) previously worked as a Statistics Advisor in the girls' education department at the UK Foreign Commonwealth and Development Office, where she led the evaluation of the Girls' Education Challenge. She focused particularly on learning loss during COVID-19 and on adapting teaching during school closures. She has more than 10 years' experience as a quantitative researcher and has worked in academia, the development sector, and government.

THOMAS DE HOOP (tdehoop@air.org) directs a research portfolio focused on the impact, scalability, and cost-effectiveness of self-help groups, savings groups, and education innovations in South Asia and sub-Saharan Africa. He is the Coprincipal Investigator for the Evidence Consortium on Women's Groups, a research project that focuses on synthesizing, strengthening, and disseminating research on the impact and cost-effectiveness of government-supported women's groups in India, Nigeria, and Uganda. He is also the principal investigator on a cluster-randomized controlled trial of a technology-aided instruction program in Zambia, and a quasi-experimental study on the impact of a government-supported women's group program in Nigeria.

BENJAMIN GAULEY (bgauley@savechildren.org) manages private and US government-funded awards in the Middle East, Eurasia, and Latin America in the international programs division of Save the Children. While working previously at Creative Associates International, he backstopped USAID education projects in Afghanistan, Jordan, Morocco, and Yemen. He has professional and research experience in Haiti and the Federated States of Micronesia. He holds a master's degree in development management from the London School of Economics and Political Science.

CONTRIBUTORS

EYAD HALLAK (hallak.eyad@gmail.com) served as a Project Officer for War Child Holland's Can't Wait to Learn program. He has worked with War Child and other nongovernmental organizations involved in child rights and education for six years. Born in Syria and currently residing in the Netherlands, his work focuses on the contributions culture and language make in the implementation of education interventions. He has a master's degree in business administration from the European University in Damascus.

SASCHA HEIN (sascha.hein@fu-berlin.de) is a Professor in the Department of Education and Psychology at the Freie Universität Berlin. His research focuses on the education and mental health of youth involved in the juvenile justice system, as well as early childhood development and education in humanitarian contexts. He received his PhD in educational sciences from Goethe University Frankfurt am Main, Germany.

HOLLY-JANE HOWELL (hollyjane@sophos-consulting.com) is the founder of Sophos Consulting, a technical education consultancy. She is the former Head of Education for the UK Office for Syria at the Foreign Commonwealth and Development Office. She has more than 15 years' experience in international development, has held multiple roles in government, and has supported innovative research in crisis- and conflict-affected settings.

NISREEN IBRAHIM worked for War Child Holland for five years. As Program Manager for the Can't Wait to Learn program in Lebanon, she supported the design, launch, and implementation of the program in vulnerable communities across the country. She has a PhD in education and has worked over the last 16 years as a teacher, curriculum coordinator, trainer, educational consultant, and researcher.

MARYAM JILLANI (maryam.jillani@gmail.com) is an international education consultant currently based in Manila, Philippines. She previously served as an Education Specialist for UNESCO Cambodia, where she oversaw the agency's COVID-19 education response and nonformal education initiatives. She also supported the Creative Associates International education in conflict team in Washington, DC. Her areas of focus include alternative education, early grade reading, education in emergencies, and education in technology. She has lived and worked in Cambodia, Mexico, Pakistan, and Somalia.

CONTRIBUTORS

MARK J. D. JORDANS (mark.jordans@warchild.nl) is Director of Research and Development for the Netherlands-based War Child and Professor of Child and Adolescent Global Mental Health at the University of Amsterdam. He is also a Professor at the Center for Global Mental Health, King's College London. His research interests are the development, implementation, and evaluation of psychosocial and mental health care systems in low- and middle-income countries, especially for children living in fragile states.

MIEKE T. A. LOPES CARDOZO (t.a.lopescardozo@uva.nl; <https://educationanddevelopment.wordpress.com/members/mieke-lobes-cardozo/>) is a Senior Lecturer in education and inclusive development at the Amsterdam Institute of Social Science Research and an Associate Fellow at the Centre for International Education at the University of Sussex. Her academic research, teaching, and supervision are focused on the potential of education in peacebuilding, social and gender justice, and regenerative development in Sri Lanka, Aceh/Indonesia, Bolivia, and Myanmar, and on higher education in the Netherlands. She codirected the Research Consortium on Education and Peacebuilding from 2014 to 2016, and was appointed as an advisor to the UN Security Council-mandated Progress Study on Resolution 2250 on Youth, Peace, and Security from 2016 to 2018. Currently training with the Regenesi Institute, she is committed to bringing a regenerative development approach to her academic research and teaching.

DIEU MERCI LUUNDO (luundodieumerci80@gmail.com) is an asylum-seeker living in Kakuma refugee camp. He is the Chairperson and Project Coordinator of Vijana Twaweza Club, where he oversees fish farming, crop production, cricket farming, and soap-making.

SARAH MANIATES (sarahmaniates@gmail.com) is a Mission Support Program Analyst at Zemitek, where she supports work on locally led development with the USAID Local, Faith, and Transformative Partnerships Hub. Previously at Creative Associates International, she supported education programs funded by USAID and the UK Department for International Development in Afghanistan, Nigeria, and Ethiopia. She also has professional and research experience in Ethiopia, India, and South Africa. She holds a master's degree in public policy from Duke University's Sanford School of Public Policy.

CONTRIBUTORS

AUGUSTINO TING MAYAI (amayai@suddinstitute.org) is the Acting Managing Director of the Sudd Institute. He studies education and health in emergencies, with a particular focus on schooling and learning and health systems. He has served as a policy researcher for various local, international, and UN agencies, including the World Bank, UNDP, UNICEF, UNFPA, FAO, UN Women, Save the Children, South Sudan's Ministry of General Education, and the office of the President of South Sudan.

KATHRYN MOORE (moore.kathryn85@gmail.com) is an early childhood education and development specialist. Her work involves early childhood development and education in emergencies, and achieving gender equality in and through education. She also has contributed to early childhood education governance research, and served with multilateral and nongovernmental organizations in various research and practitioner-facing roles.

KOEN I. NEIJENHUIJS (contact@kneijenhuijs.com) is a Data Scientist in the research and development department of HumanTotalCare, the largest occupational health service in the Netherlands. His work is focused on designing personalized, adaptive questionnaires, predictive models, and data-driven personalized health care in the work environment. He regularly collaborates on complex data analyses and machine learning algorithms with research institutes, including assisting War Child Holland in the analysis of the Can't Wait to Learn program between 2016 and 2019. He earned a doctorate in the application of data science and psychometrics in clinical psychological eHealth applications.

ANGELA NG (angelang1201@gmail.com) is an engineer, researcher, educator, social entrepreneur, public health advocate, and community builder. She is engaged in the promotion of health, water, sanitation, and hygiene, and with educational programs in the humanitarian realm, especially with women and children in multiple global contexts.

PAUL O'KEEFFE (Paul.Okeeffe@ucd.ie) is an international development and education lecturer, researcher, and program leader. His academic interests focus on developing inclusive and accessible education and enabling refugee-led approaches for development. He worked for the University of Geneva from 2017 to 2021, where he created higher education spaces for refugees, including refugee-centered pedagogies in the Azraq refugee camp in Jordan and Kakuma refugee camp in Kenya. He currently manages the University College Dublin Global Experience and advises on the development of refugee-led projects around the world.

CONTRIBUTORS

LILIANA ANGÉLICA PONGUTA (angelica.ponguta@yale.edu) is a Research Scientist at the Yale Child Study Center. Her work aims to advance early childhood development and education programs and services globally. Her projects span policy analysis and program evaluation in normative and emergency contexts. She has worked in more than 20 countries in partnership with national governments, universities, advocates, and multilateral and civil society organizations.

KATE RADFORD (radfordkate@gmail.com) is currently an advisor on ed tech interventions worldwide. She previously was the Global Program Director for War Child Holland's Can't Wait to Learn program. With 20 years' experience in humanitarian and development programs, she holds degrees in business, European politics, Germanic studies, and development aid.

KARISHMA SETHI (ksethi3@alumni.jh.edu) is an Implementation Science Fellow with the Centers for Disease Control and Prevention. Her areas of interest are developing, managing, and monitoring high-impact public health programs, with the aim of strengthening health systems infrastructure at the local, state, federal, and international levels.

DANIEL SHEPHARD (daniel.shephard@columbia.edu) is a PhD candidate in comparative and international education with a specialization in sociology at Teachers College, Columbia University. His dissertation investigates how school structures and social networks influence students' social and academic trajectories within contexts of large-scale forced displacement. He also has conducted research involving displaced learners and teachers in the Middle East and sub-Saharan Africa. His work is supported by the National Academy of Education Spencer Dissertation Fellowship.

JANET SHRIBERG (janets@creativeduc.com) currently serves as the Senior Technical Advisor for child protection and wellbeing in Creative Associates International's education for development division. She has worked in academia for more than 20 years as a worldwide consultant to diverse development and humanitarian organizations whose programming addresses education, psychosocial wellbeing, evaluation, and research. Her specific areas of interest include child and family wellbeing, caregiver support, quality education in situations of crisis, and postconflict development.

CONTRIBUTORS

ANNE SMILEY (anne.smiley@rescue.org) serves as Deputy Project Director of Research with the International Rescue Committee for the LEGO Foundation-funded PlayMatters program. She is based in Kampala, Uganda, where she leads education research activities focused on learning through play in refugee and host communities in Ethiopia, Tanzania, and Uganda. She previously worked as Associate Director for Research and Evaluation at FHI 360 and has been principal investigator on multiple large mixed-methods research studies that are building evidence in education in emergencies and education equity.

HESTER STUBBÉ-ALBERTS (he@hesterstubbe.nl) is an education scientist whose work is focused on innovations in education, including applied gaming and virtual reality. As a Senior Educational Specialist at the Netherlands Organisation for Applied Scientific Research, she worked with War Child Holland from 2011 to 2018 on the educational design and the development of the Can't Wait to Learn program games.

KARINE TAHA (karine.taha@hotmail.com) is currently a project leader for an education consultancy firm. She was formerly the Research Coordinator for Can't Wait to Learn in Lebanon and worked for War Child Holland for four years. At War Child she supported the implementation of two randomized control trials related to education and psychosocial support that targeted highly vulnerable communities. She has 12 years' experience in strategy, management, and research and evaluation. She has also led key monitoring and impact-assessment projects for nongovernmental organizations. She holds a master's degree in social development practice from University College London.

JASMINE S. TURNER (jasmine.turner@warchild.nl) is a Researcher in War Child Holland's research and development department and the lead researcher for the Can't Wait to Learn program. She also manages a Global Partnership for Education Knowledge and Innovation Exchange research portfolio in Uganda, Chad, and Sudan on how to adapt and scale up ed tech programs in conflict-affected settings. She is currently completing her PhD and is focused on the development and evaluation of an approach to strengthen caregiver engagement and the home-school relationship, with the objective of increasing scholastic access, attendance, retention, and transition.

CONTRIBUTORS

AGATHA J. VAN GINKEL (agathavanginkel@outlook.com) is a senior multilingual education expert who specializes in languages, scripts, and reading in low- and middle-income countries. With her PhD in applied linguistics, she looks for ways to provide quality education in diverse, and often complex, education contexts. Her research interests are transfer reading, reading in different languages, reading assessment, and the effects of language policies in education systems. She has written articles and book chapters on these topics and is a peer reviewer for several journals.

DIVINA VARGHESE (divina.varghese@gmail.com) is a Technical Manager in monitoring and evaluation at Creative Associates International in Washington, DC. She previously worked as a Program Administrator at the Johns Hopkins Alliance for a Healthier World and as an Educator and Departmental Coordinator at a private school in the Kingdom of Bahrain.

ALAA ZAZA (azaza@manahel.org) is an education and child protection specialist with 16 years of experience in inclusive education and school social work. He has targeted experience in education in emergencies, teacher professional development, special education, and child protection in humanitarian action. A passionate advocate for the rights of children with disability in Syria, he works with Chemonics International as the Team Lead for the Syria Education Program. Funded by the UK Foreign Commonwealth and Development Office, the program provides access to safe, inclusive, and quality learning opportunities to children in Syria. He holds a master's degree in special education.

STEPHANIE SIMMONS ZUILKOWSKI (szuilkowski@fsu.edu) is the Associate Director of the Learning Systems Institute and Associate Professor of international and multicultural education in the Department of Educational Leadership and Policy Studies at Florida State University. She also is the Project Director for the USAID Transforming Teacher Education activity in Zambia. Her research focuses on improving basic education in low- and middle-income countries, including school quality, early literacy outcomes, and preservice teacher education.

JOURNAL ON EDUCATION IN EMERGENCIES

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