REFERENCES:

IMPACT OF CATCH-UP CLUBS IN CONFLICT-AFFECTED MYANMAR: A COMMUNITY-LED REMEDIAL LEARNING MODEL

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ABSTRACT

Myanmar is dealing with a protracted learning crisis in areas of the country where the COVID-19 pandemic was compounded by a coup in February 2021, which extended school closings. Save the Children created the Catch-up Clubs (CuCs), an intervention that supports children's remedial learning and addresses barriers to their successful return to school in the wake of the COVID-19 pandemic. The CuCs are an innovative model that offers community-led, play-based literacy instruction to children who are grouped by ability rather than age. The CuCs assess children's foundational literacy and social and emotional learning (SEL), while also addressing issues of child-protection and economic barriers to education. The model was piloted with more than 3,000 children in the upper primary to lower secondary grades who are living in 36 communities in the conflict-affected states of Rakhine and Kayin. We conducted a quasi-natural experimental impact evaluation to investigate the cause-and-effect relationship between the CuCs and children's literacy outcomes and SEL competencies. The study was contextually adapted to consider children affected by conflict, and by issues related to gender, socioeconomic status, and ethnicity. The results show that children who participated in the CuCs had significantly higher levels of literacy and SEL competency than children who did not participate. The participating children also demonstrated greater self-confidence, and they aspired to remain in school or to continue their schooling at a higher level.

INTRODUCTION

The global COVID-19 pandemic led to the forced closure of schools, which negatively affected children's education around the world. In Myanmar, the learning crisis was further compounded by a coup in February 2021. The lack of adequate support for many children who were forced to stay at home due to the pandemic and the coup prevented them from accessing the available alternative learning opportunities during the two years when nearly all schools were closed. The psychosocial state of Myanmar's children, especially those living in conflict areas, was worsened by the combined effects of COVID-19, increased exposure to violence, displacement, and disruption of their education. A growing body of literature has discussed the specific psychosocial concerns in Myanmar, particularly among the displaced Rohingya children, such as stress, nervousness, grief, and uncertainty, which have been caused by the limited access to food and loss of learning opportunities during the ongoing crisis (Tay et al. 2019).

In response to this compounded crisis, Save the Children developed and piloted what they called Catch-up Clubs (CuCs) to support children in the challenging Myanmar context. The CuCs are a remedial learning model that uses a play-based approach to enable children ages 8 to 13 to gain the foundational reading skills and social and emotional learning (SEL) skills they need to return to and remain in school. The CuCs are based on a conceptual framework of remedial learning designed to tackle learning loss (Bauman and Tuzhilin 2018; Wanzek et al. 2017; Westrope and Mahmud 2018), and on the benefits of play-based remedial approaches that enable primary school children to improve their language skills (Wadley and Stagnitti 2023; Benton et al. 2021; Nolan and Paatsch 2018). SEL activities are conducted at the start of each CuC session to create a positive learning atmosphere. Extensive studies have discussed the benefits of SEL activities, which help children living in challenging settings to develop emotional regulation, confidence, problem-solving skills, self-awareness, and empathy (Calhoun et al. 2020; Jukes et al. 2021; Malhotra et al. 2021).

The CuC model is designed to reach children, those in school and out of school, who are behind in their foundational literacy skills. The selection of Rakhine and Kayin states was based on a situational assessment, which found a high proportion of ethnic minority children in these areas who needed targeted learning support. CuCs were piloted in 36 communities, 18 each in Rakhine (including Rohingya children living in five refugee camps) and Kayin.

In this article, we address the following research questions:

1. To what extent are the CuCs effective in enabling boys and girls in grades 3-7 (below grade 2 literacy level) to gain foundational literacy?

2. To what extent are the CuCs effective in enabling boys and girls in grades 3-7 (below grade 2 literacy level) to improve their SEL competencies?

3. To what extent have the CuCs provided children with a positive learning experience and helped them develop sufficient self-confidence to resume their education and engage in grade-level curricula in order to achieve their educational aspirations?

The CuC model combines Save the Children's years of learning on effective child-friendly approaches and remedial learning into a single program. The educational component is based on two evidence-based approaches. One is Save the Children's flagship Literacy Boost program, which focuses on developing children's core skills through play-based remedial learning (Save the Children 2018). Literacy Boost has been rigorously tested and implemented in 36 countries since 2009. The other is Pratham's Teaching at the Right Level (TaRL), which uses a simple learning assessment to organize children into groups based on their literacy level, rather than their age or grade, and provides targeted and inclusive learning activities. TaRL is an effective, low-cost approach to helping children catch up on their learning in a short period. Studies have proven that TaRL is an effective method for improving learning outcomes in a variety of settings (Banerjee et al. 2017), including during the COVID-19 pandemic (Kaffenberger 2021).

Our study addressed this evidence on the impact of remedial learning models, like the fun-based CuCs and TaRL, on the education of children living in displacement and in conflict-affected areas. In this article, we present the results of our research on the CuCs and assess the model as an innovative approach designed to enable children living in a conflict context to make gains in literacy and SEL within just a few months.

We begin the article with a literature review that presents the context and framework of the CuC remedial learning model. Following our discussion of the CuC methodology and nuanced exposition of the program, we draw from the key findings to provide deeper insights into the impact the CuCs have on children's learning outcomes, specifically their literacy and SEL competency.

CHILDREN'S EDUCATION AMONG DISPLACED POPULATIONS IN CONFLICT-AFFECTED MYANMAR

To date, only a limited academic literature has discussed the current state of education in Myanmar, particularly among ethnic minority children and those living in conflict-affected areas, such as Rakhine and Kayin states. Before the February 2021 coup, the international nongovernmental organizations, United Nations agencies, and donors involved in the humanitarian response had significant access. Despite restrictions and tight governmental control, these humanitarian actors and the cluster coordination system were able to gather situational information on the ground. However, the conflict that broke out in 2021 reduced humanitarian access and widened the information gap on the state of education in Myanmar. In this study, we aim to address these gaps in the literature and provide a contextualized understanding of the recent status of education in these regions.

Rakhine State

Rakhine state is located on the western coast of Myanmar, bordering Bangladesh. It is populated primarily by the Rakhine ethnic group, who are mostly Buddhist, and the Rohingya people, who are Muslim. While the Rakhine are among the 135 official ethnic groups of Myanmar and were granted citizenship with the 1982 Citizenship Act, the Rohingya people are not recognized as Myanmar citizens. Their stateless status increases discrimination against the Rohingya as well as their vulnerability, and denies them their basic human rights, including the right to education (Lui 2007). The humanitarian actors who are the primary education service providers in the camps recognize the Rohingya children first and foremost as children; the issue of their legal identity and citizenship is a separate issue that requires a political solution.

In 2012, a series of riots and violent clashes between the Rakhine and Rohingya ethnic groups displaced tens of thousands of people in Myanmar. At the end of 2017, as many as 128,000 people remained in internal displacement camps in central Rakhine, the majority from Rohingya communities. Rakhine has the country's lowest rates of primary and secondary school enrollment and education outcomes, largely due to a shortage of teachers and teaching materials, low-quality teaching, poor infrastructure, and poverty (INGO Rakhine Initiative 2018). Government provision of primary education services is extremely limited in internal displacement (IDP) communities, which leaves the Rohingya children heavily reliant for education services on UN actors and international

nongovernmental organizations. Consequently, the provision of education services varies considerably in quality and availability.

Rohingya cultural and social norms limit women's access to public spaces, and few of their women are literate. Moreover, a lack of female educators at all levels limits the educational opportunities of Rohingya girls, which creates a cycle of gender disparity. The language of instruction is also a major barrier to the refugees' education; while the official Myanmar curriculum is in Burmese, these children's native languages are Rohingya and Rakhine. Without proper transition support to learn Burmese, the Rohingya children fail to master the literacy skills needed to continue in upper primary school. Hence, although the CuC learning materials were in Burmese, in keeping with the national curriculum, the CuC facilitators were encouraged to use the Rohingya or Rakhine language as a medium of instruction so they could communicate efficiently with the children and keep them engaged in the CuCs.

Kayin State

Kayin state is in southeastern Myanmar, bordering Thailand. The Karen people represent the majority population in Kayin state and are the third largest ethnic group in Myanmar. The Karen have fought for sovereignty since Myanmar won independence in 1948. After the military coup in February 2021, the Karen National Union (KNU), along with other armed groups across the country, joined the Myanmar Spring Revolution against the de facto government.

More than 60 years of armed conflict and displacement in Kayin state led to a fragmentation of education services (Shiohata 2018). To fight the domination of the ethnic majority Burmese culture and preserve their own identity and languages, the KNU developed a separate ethnic-nationalist education system. Known as the Karen Education and Culture Department (KECD), this school system functions parallel to the central state education system. There also are several "mixed" schools, which are supported partly by the KECD and partly by the government. The type of school a child attends is determined by the availability, affordability, perceived quality, and language of instruction. Before the 2021 coup, several Karen communities opted for the government-led system, as it offered free public education and better prospects for higher education and employment opportunities in Myanmar.

In response to the military regime's "burmanization" of the national culture, the KECD uses the Karen language—which differs slightly from Burmese—as the main language of instruction (Shiohata 2018). A substantial number of children in Kayin are taught the Karen curriculum, primarily in areas controlled by the KNU. Most graduates of this education system are unable to speak Burmese fluently. Of the 26 schools selected to pilot a CuC in Kayin state, 19 are mixed schools that use both languages. Most children enrolled in the CuCs in Kayin are of Karen ethnic and language background.

Kayin state is currently a hot zone of Myanmar's civil conflict. CuCs were planned in hard-to-reach areas where tensions were great and there were frequent clashes in every township. This conflict, along with the mountainous terrain, rains, and unreliable telecommunications, added to the challenges of implementation in this area.

REDEFINING REMEDIAL EDUCATION OR LEARNING: A LITERATURE REVIEW

Save the Children's concern about the inequality of children's access to education in Kayin and Rakhine states led them to initiate a remedial learning intervention that promoted inclusive education, which is a process of addressing and responding to the diverse needs of all learners through increasing participation in learning, cultures, and communities, and by reducing exclusion within and from education (UNESCO 2005). Studies have shown that inclusive education leads to children having better learning outcomes, more positive attitudes toward learning, and improved resilience, which enables them to achieve their full potential as adults (Mouchritsa et al. 2022; Ainscow 2016). Moreover, reorienting the curriculum to match the pace of students' learning results in positive learning outcomes and makes it easier for them to achieve more than a year's worth of learning than if they continued studying under the same learning system (Pershad, Comba, and Bergmann 2020).

Remedial Education and SEL

The remedial learning method has proven successful in bridging education gaps in various contexts. Evidence shows that children enrolled in remedial learning programs show greater improvement in their foundational literacy and numeracy skills than those in the matched group (Wanzek et al. 2017; Diazgranados Ferráns et al. 2022; Kinay and Hamidi 2022). A study in Turkey conducted with children ages 10 to 14 found a positive change in their attitudes toward education after

participating in a remedial program. These children, who were either lagging behind in their studies or had dropped out of school, found peer interaction and individualized attention from teachers to be a source of motivation (Börkan et al. 2015). Similar results were found in Syria and Jordan among children ages 7 to 13 who had low academic performance in Arabic, English, and math. The remediation program improved students' academic skills and helped them develop positive attitudes toward learning (World Vision 2020).

The global education landscape has changed in recent years. Teachers and researchers are giving greater attention to improving children's SEL skills, which include empathy and social awareness, problem-solving, responsible decisionmaking, stress management, and social engagement. Provided the appropriate environment exists in the schools, children can acquire these skills through their interactions with peers and teachers (Berg et al. 2021; D'Sa and Krupar 2021). A meta-analysis of school-based SEL programs found them to be effective at all education levels in improving children's academic performance and reducing behavioral problems. These effects were found to be present even six months after the program ended (Durlak et al. 2011). Other studies assessing the impact SEL interventions have on students found a reduction in school dropout rates (Wang et al. 2016), improved self-awareness in children and adolescents (Berg et al. 2021), and a reduction in their emotional distress (Chen and Yu 2022). Including an SEL component in remedial programs could help children learn to regulate their emotions (Kim et al. 2023). Despite the range of benefits remedial programs and SEL have for children's learning, evidence of these benefits in developing countries is limited, particularly among conflict-affected and displaced populations, whose need for these programs is tremendous (Creed and Morpeth 2014; Newaz 2023).

Promoting children's SEL and other types of learning through schooling can be especially challenging in humanitarian settings that are characterized by a fragile education system in an active conflict context (Winthrop and Kirk 2008). There also is limited evidence on how SEL programs can support children in humanitarian settings, as most evidence on these programs is from a Western context that includes a comprehensive, lesson-based curriculum implemented in formal school settings (Durlak et al. 2011; Jones et al. 2021). It could be challenging for children in humanitarian settings to attend such programs regularly, due to the expectation that they will engage in (un)paid work to contribute to the family income; issues of safety and security when attending the program; and acceptance of the program by parents and community leaders (Kearney et al. 2019; Wu et al. 2023).

Contextual Barriers to Learning

Environmental disruptions create an imbalance in the learning opportunities available for children, specifically those considered vulnerable due to gender, socioeconomic status, disability status, place of residence, and displacement status (Tarricone, Mestan, and Teo 2021). The COVID-19-related school closures disrupted the education of more than 1.6 billion learners globewide, hitting the most disadvantaged children the hardest (UNESCO 2022). This compounded the challenges faced by more than half (53%) of all ten-year-old children in developing countries, who before the pandemic were already experiencing learning poverty—that is, they were unable to read and understand a simple text at a level appropriate to their age (UNICEF 2021b). The impact of the COVID-19-related school closures was even higher for populations living in conflict-affected areas characterized by widespread violence and human rights abuses, and for those belonging to ethnic minorities and low-income groups. Even before COVID-19, children in conflict-affected areas faced severe barriers that limited their access to education. Most fragile, conflict-affected states have strong budgetary commitments to improve access to education, yet many of their children remain out of school (Dryden-Peterson 2009). Unless it results in sustained enrollment, regular attendance, and learning progress at the appropriate ages, merely increasing physical access to primary school may not be meaningful. However, structured, meaningful, creative activities conducted in informal learning spaces in a fragile context could improve children's social, emotional, and behavioral wellbeing, and also increase school enrollment and retention (Lewin 2007).

New Pathways in Education: Play-Based Learning

Creating an effective remedial program involves finding a balance between introducing new innovations and overcoming obstacles. Moreover, additional resources are needed to plan the programs, train teachers, and create relevant learning materials (Ajaero 2015). These challenges are exacerbated in areas affected by conflict, disaster, epidemic, or economic crisis (Dulieu et al. 2022). Researchers in such environments struggle to monitor the quality of the intervention and maintain the positive impact. The difficulties they face include identifying students for the programs and a lack of local education systems that can sustain the positive effects over the long term (Börkan et al. 2015; Corcoran et al. 2018). Research conducted among refugee children in Ethiopia, Sierra Leone, and Afghanistan found that the barriers to education included exploitation and violence occurring in the schools, which the researchers needed to consider when designing remedial programs (Winthrop and Kirk 2008). Along with such systemic barriers, the

participants' complete acceptance of and engagement with the intervention was not always guaranteed, which raises concerns about the cost-effectiveness of implementing such remedial programs (Medin and Jutengren 2020). However, educators have implemented innovative approaches designed to mitigate the effects of disrupted education, even under such difficult circumstances.

One effective tool that can help to improve children's social and emotional wellbeing after a crisis is play-based learning (O'Keeffe and McNally 2021; Casey and McKendrick 2023). Including play in the learning process promotes children's greater enjoyment, deeper engagement, academic success, critical thinking, and self-reflection (Anderson and Thomas 2021; Khalil et al. 2022; Murtagh, Sawalma, and Martin 2022). Evidence from systematic reviews of education research that explores the best practices of creative experiential learning, including play-based activities, shows that the creative approach to learning has a positive impact on children's learning attainment, self-awareness, confidence, resilience, motivation, problem-solving, and interpersonal skills (Jindal-Snape et al. 2013; Bell et al. 2014). The creative approaches in question worked well with children in conflict-affected settings in Sri Lanka and Palestine (Schwartz 2022; Creed and Morpeth 2014; UNICEF 2021a). The approaches also yielded positive social-emotional and character development among children from low-income families, reduced their absenteeism, and improved their literacy and numeracy skills, as well as their academic motivation (Bavarian et al. 2013).

The literature cited above provides a starting point and framework for our investigation of the impact of the CuC intervention on children's literacy outcomes and SEL competencies. There is little systematic empirical research to date that evaluates how remedial interventions work to transform children's learning experiences and to promote equality in learning opportunities for displaced populations in conflict-affected countries, such as Myanmar. Our study hypotheses are formulated around the conceptual framework in the existing literature on remedial learning and SEL development. They reflect our thinking on the positive impact of remedial learning interventions and on the challenges of implementing interventions for people in conflict-affected areas. We hypothesize that the innovative CuC intervention—which integrates remedial literacy learning activities that use a play-based approach with SEL support, child-protection services, and cash voucher assistance (CVA)—will result in positive literacy outcomes and SEL competencies, boost children's confidence in learning, cultivate positive learning attitudes, and motivate them to learn, even in challenging contexts.

CATCH-UP CLUBS: A COMMUNITY-LED EDUCATION MODEL

Save the Children developed a targeted, data-driven, cost-effective intervention that can be implemented quickly and scaled-up rapidly to support children who need to catch up on their education. This intervention was intended to reduce the likelihood that children would drop out of school due to the COVID-19 pandemic and, in Myanmar, to the ongoing crisis. The approach integrates elements of the Learning Boost and TaRL programs, which have demonstrated successful rapid learning gains, and builds on Save the Children's expertise in community-based learning, child-protection, and child poverty programming through cash assistance (Save the Children 2018).

Remedial education programs are commonly designed to be delivered by schoolteachers during or after regular school hours. After COVID-19, teachers were put under significant pressure to deliver the curriculum and to help their students catch up. Save the Children's global education team intended to harness the community's capabilities and use them to develop a CuC initiative to complement the efforts education systems around the world were making to address learning loss. The CuCs were developed to be play based, to be supportive of children's wellbeing, and to carve out a time and space in which children could enjoy learning without any academic pressure to perform.

The CuCs were conceived in early 2021 to address the anticipated learning loss created by the prolonged school closures stemming from the global COVID-19 pandemic (Save the Children 2021). They were designed to support vulnerable children's efforts to catch up on foundational literacy and SEL, and to help them regain the confidence and motivation they would need to go back to their schools when they reopened.

During Save the Children's internal innovation incubator challenge, the CuCs were selected as an innovative concept to support children's wellbeing and learning during the pandemic. Funding was then allocated to support CuC pilots in several countries and contexts, including Myanmar, Bangladesh, Columbia, Uganda, Malawi, Egypt, and Afghanistan (Abdalla 2023; Cortes and Pava 2023; Save the Children 2021).

The global team developed technical guidance on the CuCs implementation. This included the curriculum, learning activities, reading materials, and training manuals for the facilitators and coaches. In Myanmar, all the materials were specifically contextualized for children in Rakhine and Kayin states and translated into Burmese. The learning activities were adapted to meet the needs and contexts of the local communities and children, and they were facilitated by community volunteers in the children's native languages. Save the Children's education team in Myanmar translated the activity guide and made appropriate modifications to the activities to ensure that they were aligned with local norms and with what the local children were accustomed to. The school community, which included village authorities and leaders, school heads and teachers, and parents/caregivers who were engaged in the parent-teacher association, selected the volunteers who would run the program. Before the CuCs were implemented, Save the Children mobilized members of the parent-teacher association, school personnel, and community leaders to determine the locations and the afterschool hours in which the clubs would operate and to support the selection of volunteers. This local mobilization was maintained throughout the CuC cycle to support the children's attendance and their retention in the club. The project team shared CuC students' literacy results with community members, whose support increased as they witnessed the children's rapid progress from one CuC round to the other.

The CuCs targeted students ages 8 to 13 who were in grades 3 to 6 and had not developed foundational reading skills.[1] However, it was piloted with children up to grade 7 and to 15 years old. Using a simple learning assessment to determine the children's foundational literacy skills, the volunteer facilitators organized them into learning groups based on their literacy levels, not on their age or current grade. Each child's reading ability was assessed at the start of the CuC cycle. They were reassessed at intervals of two to three weeks and reassigned to a higher-level reading group, as was appropriate.

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1   Foundational reading skills are broadly defined as being able to read and understand a short paragraph, generally around the grade 2 level, or equivalent to the highest level of the CuCs' Annual Status of Education Report assessment. See assessment section for more details.

Figure 1: The CuC Cycle
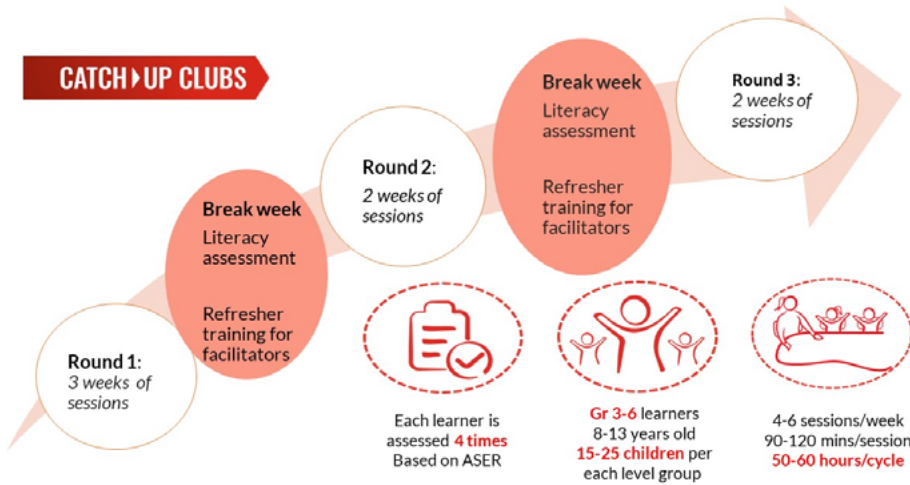
While attending the CuCs, children do not sit quietly at their desks as they do in a classroom setting. They instead have the opportunity to learn through structured play. The children are grouped and regrouped into subgroups or pairs, and they are given time to read with their buddies. Some activities allow the children to be physically active, such as jumping on paper cards that have words written on them, which the volunteers have laid out on the floor.

During a CuC cycle, children participate in sessions for at least 7 weeks and have 50 to 60 hours of instruction time. The CuCs were designed during the worldwide COVID-19-related school closures and then piloted in Myanmar and other countries as the schools reopened. A CuC cycle is meant to be an intensive intervention of short duration that boosts children's foundational skills. A CuC cycle can take place during an academic term in afterschool hours, or over school holidays.

The children who struggle academically are often facing a range of barriers and challenges to their active participation in school, including household poverty, health problems, logistical barriers, and child-protection issues, such as violence in the home. The CuCs use a supportive process to address these barriers, in partnership with the children and their families. The CuCs also address barriers to education access by providing support to overcome child poverty and child-protection issues, and they offer a supportive space in which children can learn at their own level through play-based activities. Community social workers collaborated with the CuC facilitators to identify the children who needed additional support and provided them and their families with the appropriate psychosocial support by connecting them to the relevant services.

CVA was provided to facilitate children's access to and engagement in education by addressing families' economic vulnerability and ensuring that caregivers could afford the direct and indirect costs associated with schooling. These provisions aimed to ensure that children would receive the holistic support they needed to engage confidently with their learning.

METHODOLOGY

This study applied a quasi-natural experimental design to understand the cause and effect of the CuC intervention on children's literacy outcomes and SEL competencies. The study targeted conflict-affected children and ensured inclusivity in terms of gender, socioeconomic status, ethnicity, displacement status, and access to education or schooling. Rakhine and Kayin states were noted as areas in Myanmar that had a large proportion of displaced populations, due to the recent political conflict.[2] We conducted a situational analysis to identify the children most affected by inequality—specifically, those facing challenges in accessing quality, safe, and equitable education. With nearly all the schools in these two states closed, many children above age eight were struggling to read at the grade-two level.

The project team selected 3,056 eligible children in grades 3 to 7 to enroll in the CuCs. They were from (1) conflict-affected villages in Kayin; (2) conflict-affected villages and internally displaced communities in central Rakhine; and (3) host communities near conflict-affected communities in Kayin and Rakhine states.

A subset of children enrolled in the CuCs were invited to take part in the evaluation as the intervention group. Children living in the same townships who were not enrolled or exposed to CuC activities were engaged as the control group. The control group children were also targeted as potential participants for the expansion and scale-up of the CuCs.

Research Design, Data Collection, and Sample

We employed a cluster random sampling method to establish an appropriate sample size for our analysis.[3] As the subject participants were spread out across villages, we used cluster sampling to improve the sampling feasibility and to possibly increase external validity by reaching children with characteristics similar
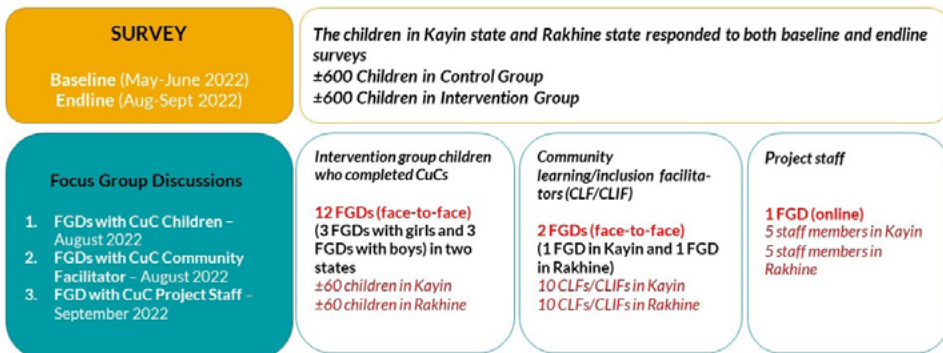
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2   Findings from the Save the Children Education in Emergencies project, part of the European Commission Humanitarian Aid project.

3   The sample calculation can be seen in Appendix 1.

to those of the target population. We selected children from a predetermined list of clusters of villages instead of schools, as not all children had returned to school. We randomly assigned each child to a cluster, then reached out to around 600 control group children across 34 clusters, and 600 intervention group children across 33 clusters.[4] Before the CuCs were implemented, we invited children and their parents or caregivers to complete a baseline survey. To gain more nuanced insights after the CuC activities were completed, we conducted a follow-up survey with the same children and focus group discussions (FGD) with selected children, the CuC facilitators, and the CuC project team, the results of which complemented our quantitative results.

We conducted a baseline survey to establish benchmarks for the project outcome indicators and to understand the obstacles children faced in achieving foundational literacy, in particular education equity and inclusion. The intervention group children completed a CuC literacy assessment after each round; this occurred four times during the CuC cycle.[5] The control group children were assessed twice, once at baseline and once at endline. Nearly all the children surveyed at baseline took part in the endline survey; the attrition rate was a mere 1.9 percent. This was a significant achievement, considering the challenges of collecting data in an active conflict setting.

Table 1: Sample and Timeline of Data Collection

SURVEY Baseline (May-June 2022) Endline (Aug-Sept 2022)	The children in Kayin state and Rakhine state responded to both baseline and endline surveys ±600 Children in Control Group ±600 Children in Intervention Group		
Focus Group Discussions 1. FGDs with CuC Children – August 2022 2. FGDs with CuC Community Facilitator – August 2022 3. FGD with CuC Project Staff – September 2022	Intervention group children who completed CuCs **12 FGDs (face-to-face)** (3 FGDs with girls and 3 FGDs with boys) in two states ±60 children in Kayin ±60 children in Rakhine	Community learning/inclusion facilitators (CLF/CLIF) **2 FGDs (face-to-face)** (1 FGD in Kayin and 1 FGD in Rakhine) 10 CLFs/CLIFs in Kayin 10 CLFs/CLIFs in Rakhine	Project staff **1 FGD (online)** 5 staff members in Kayin 5 staff members in Rakhine

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4   It was not possible to conduct school clustering, due to the lack of data from schools, many of which were closed during our situational analysis.

5   Adapted from the Annual Status of Education Report literacy assessment.

The surveys were developed in English, translated into the Burmese language, and then administered by enumerators who were fluent in the local languages spoken by the children: Karen-Poe, Karen-Sgaw, Rakhine, and Rohingya. FGDs with the children and CuC facilitators were conducted face to face, while the FGD with the project team was conducted online in the local languages. The FGDs were recorded and transcribed, and a consultant who was a local native speaker of the Burmese language was engaged to translate them into English. The monitoring, evaluation, accountability, and learning team then double-checked the translations for quality assurance.

Analytic Approach

The samples were comprised of children between ages 8 and 15 who were in grades 3 to 7 from the baseline (p=0) to the endline (p=1) periods. Using quantitative surveys, we collected information for context, including indicators of the children's demographic characteristics and those of their households, socioeconomic conditions, schooling, wellbeing (including their SEL competency), perceived barriers to learning and attending school, and their educational aspirations. We were able to collect a panel dataset in two time periods. By matching children's unique IDs, we were also able to triangulate the survey data with other information collected from our monitoring activities, such as the children's literacy assessment results and attendance.

We employed descriptive statistical analysis and multivariate regression analysis using difference-in-difference methods, which estimated the average treatment effect of the CuC intervention at the end of the implementation. In order to conduct a more robust examination, we combined insights from our comparisons of the intervention group and the control group before and after the intervention.

Qualitative data from the survey and the FGDs were coded for common themes and triangulated with the quantitative survey data, along with the project monitoring data. We used a conceptual content analysis approach in our qualitative analysis of the FGD participant responses, and then coded them according to the presence of certain words or themes. We used the qualitative findings to answer the study

questions on acceptability, appropriateness, and satisfaction, which complemented the quantitative results from the evaluation of the CuCs' effectiveness in helping children improve their literacy and SEL competencies.

Variables

Our main outcome variables are (1) children's literacy, as scored by level: Level 1-Letter, Level 2-Word, Level 3-Sentence, Level 4-Story, Level 5-Comprehension; and (2) children's SEL competency, which is a binary variable, where 1 indicates high SEL competency and 0 indicates otherwise.[6]

We measured children's vulnerability status using several variables, including (1) member of an ethnic minority, (2) disability status, (3) family displacement status since the pandemic or military coup, (4) socioeconomic status, and (5) head of household's literacy status. These variables were used as proxy indicators for the groups most affected by inequality and discrimination in education access. Detailed information on how all the variables were defined can be seen in Appendix 2.

FINDINGS

Descriptive Statistical Analysis

At baseline, a control group of 683 non-CuC children and an intervention group of 655 CuC children were surveyed. Four CuC children and 22 non-CuC children were unable to take part in the endline survey, mainly because their families had migrated away from their villages as the conflict escalated.

As seen in Table 2, we had a relatively balanced proportion of children between the control and intervention groups in terms of gender, disability status, displacement status, and age, with a median age of 11-12 years old, which made it comparable for our evaluation analysis.

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6   This was measured by seven questions posed to the children, which had simple answers of yes (scored as 1) and no (scored as 0) and don't know (scored as a missing value). The questions were mapped onto four SEL competencies: (1) relationship management, (2) self-management, (3) social awareness, and (4) responsible decisionmaking. An SEL index score was calculated from the average score on the four SEL competencies. Using principal factor component analysis, we identified and computed composite scores for the factors underlying the SEL index measure. The SEL index score was used to create a binary construct (variable); children having an SEL index score above the median SEL index were classified as having high SEL, and children having an SEL index score at the median value or below the median SEL index were classified as having low SEL.

Table 2: Descriptive Statistics of the Sample

	Baseline		Endline	
	Control Group n=683	**Intervention Group n=655**	**Control Group n=661**	**Intervention Group n=651**
Foundational Literacy (average mean score)	2.5 (1.12)	2.3 (1.09)	3.1 (1.13)	3.8 (1.00)
Level 1: Letter	24.1	30.3	10.0	3.9
Level 2: Word	26.4	23.1	19.7	9.6
Level 3: Sentence	23.1	29.1	31.8	31.8
Level 4: Story	26.4	17.6	28.4	57.7
Level 5: Comprehension	0.0	0.0	10.1	21.4
SEL Competency				
Relatively high	56.2	41.2	39.4	49.7
Relatively low	43.8	58.8	60.7	50.3
State				
Kayin	60.7	44.7	40.5	55.6
Rakhine	39.4	55.3	59.5	44.4
Children's Gender				
Boys	44.9	46.4	45.2	46.5
Girls	55.1	53.6	54.8	53.5
Children's Disability Status				
With disability	1.6	2.1	1.7	2.2
Without disability	98.4	97.9	98.3	97.8
Family Displaced				
No	79.6	82.3	79.6	82.2
Yes	20.4	17.7	20.4	17.8
Children's Median Age	11 years	12 years	11 years	12 years
Primary Language				
Burmese	7.0	2.3	6.8	2.3
Non-Burmese	93.0	97.7	93.2	97.7
Ethnicity				
Burmese	4.0	0.9	3.5	0.9
Mon	7.3	0.5	7.0	0.5
Poah	6.1	0.0	5.7	0.0
Rakhine (Rohingya)	22.4	16.8	22.2	16.7
Rakhine	11.3	37.1	11.2	37.0
Karen (Poe)	38.5	9.4	36.0	8.9
Karen (Sgaw)	6.8	33.6	6.8	33.3
Other	7.6	2.6	7.6	2.6

|	Baseline		Endline	
	Control Group n=683	**Intervention Group n=655**	**Control Group n=661**	**Intervention Group n=651**
Household Ability to Meet Basic Needs (food, clothes, water, and shelter)				
Meet all basic needs	74.5	25.5	73.5	26.5
Most of basic needs	45.1	54.9	44.6	55.4
Some of basic needs	41.0	59.0	40.8	59.2
None or hardly meet basic needs	32.2	67.8	32.2	67.8
Household Head Literacy	100.0	100.0	100.0	100.0
Illiterate	35.4	40.5	35.6	40.2
Literate	64.6	59.5	64.4	59.8
Current School Grade				
Grade 3	60.6	39.4	64.5	35.5
Grade 4	58.2	41.8	56.1	43.9
Grade 5	54.5	45.5	49.5	50.5
Grade 6 or 7	9.5	90.5	8.7	91.3
Not in school	7.1	92.9	0.0	100.0
Attending Community-Based or Ethnicity-Based School	23.4	40.8	22.5	26.3
Seeing/Reading with Family Members	71.1	54.8	68.5	86.2
Aspiration: Remain or progress in school	19.8	13.4	12.3	41.6
Aspiration: Study at a higher level/fulfill the dream	52.6	44.0	54.6	59.1

Note: Numbers in parentheses are standard deviations of mean values; percentages shown for categorical variables.

Our sample of children with a disability was very low, just 1.9 percent. In terms of economic conditions, nearly one in four (24.0%) children's parents or caregivers reported that they were only able to meet some or none of their basic needs (i.e., food, nonfood items, shelter, education, water, and family health care) or were from relatively poor households. A higher proportion of children from the intervention group than from the control group were identified as being relatively poor.

## DISPLACEMENT AND BELONGING TO AN ETHNIC MINORITY

A vast majority of children who participated in the study belonged to ethnic minority groups and reported that the primary language spoken at home was not Burmese (see Table 2, above).

Figure 2: Displacement Status, by Village Type
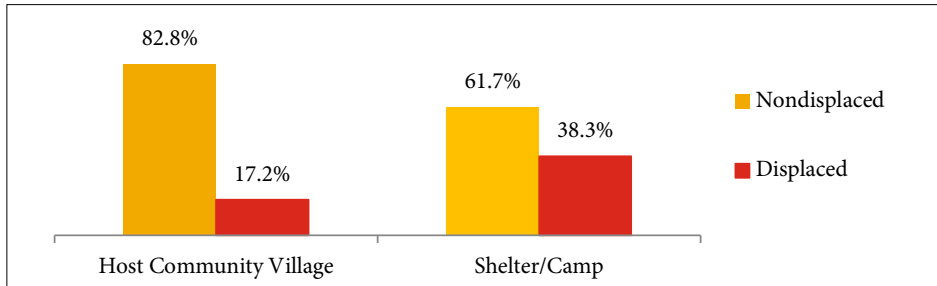
One in five (19.1%) children were from families who reported having been displaced from where they normally lived since the military coup in February 2021. As seen in Figure 2, more than one-third (38.3%) of displaced children were living in an IDP shelter or camp. About three in five (61.7%) IDP children had been staying in the camp or shelter before the military coup and had not moved since then.

*Figure 3:* Children's Displacement Status, by Ethnic Minority Group
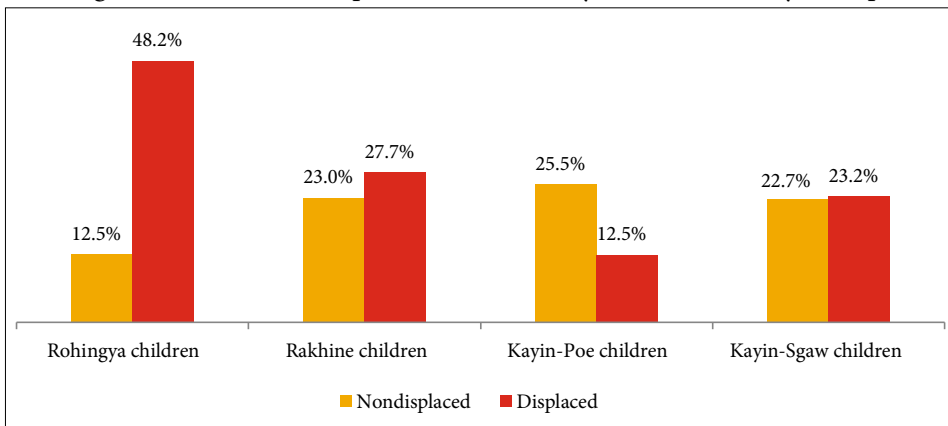
The largest proportion of displaced children belonged to the Rohingya ethnic minority group (48.2%), followed by the Rakhine (27.7%), Karen-Sgaw (23.2%), and Karen-Poe (12.5%).

Children's Foundational Literacy

At baseline, we had a relatively balanced proportion of children across literacy levels (see Table 2). At endline, the literacy levels of the children in the intervention group improved significantly. A higher proportion of CuC children than non-CuC children had reached the high literacy levels—Level 4-Story (57.7% vs. 28.4%, $p < 0.05$) or Level 5-Comprehension (21.4% vs. 10.1%, $p < 0.05$). However, the number of children from both groups who reached the highest level—comprehension—remained relatively low at endline. The high proportion of children speaking a language other than Burmese at home may be a factor in this, since comprehension requires knowledge of the vocabulary and oral proficiency in the language.

Figure 4: Children's Foundational Literacy,
by Literacy Level, Period, and Group
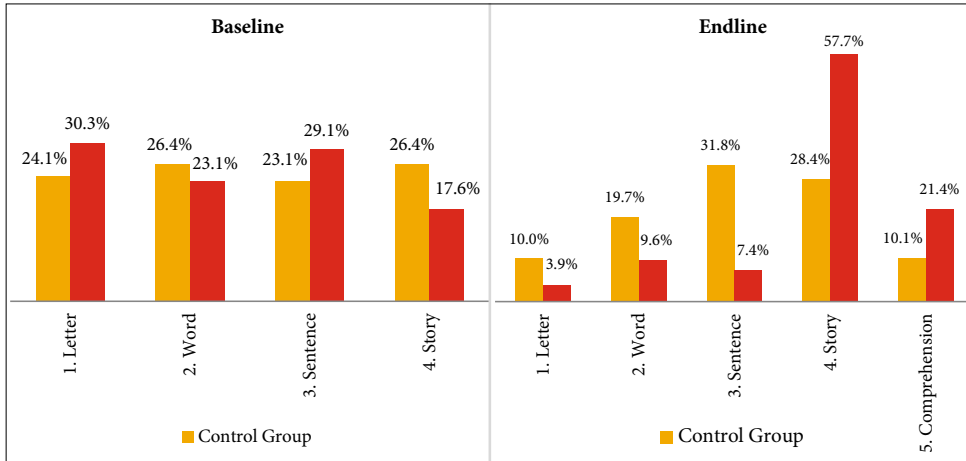
At baseline, we found that children in the control group had slightly higher literacy levels than those in the intervention group. At endline, this was reversed: children who attended the CuCs reached higher literacy levels than those who did not. The overall literacy level of the intervention group children increased by 0.92, which suggests that the CuCs were effective in enabling children to improve their foundational literacy by nearly one level.

Table 3: Mean Value of Literacy Level at Baseline and Endline

|	Mean Value of Children's Literacy Level			
	Control	**Intervention**	**Difference**	**Significance (p-value)**
Baseline	2.5	2.3	-0.18 (0.060)	0.003***
Endline	3.1	3.8	0.74 (0.060)	0.000***
Total Difference			0.92 (0.085)	0.000***

Notes: R-square: 0.22. The statistics in parenthesis show the standard errors. * Means and Standard Errors are estimated by linear regression. Statistical significance: * p < 0.05, ** p < 0.01, *** p < 0.001.

Figure 5: Children's Literacy Progression from Baseline to Endline, by Group
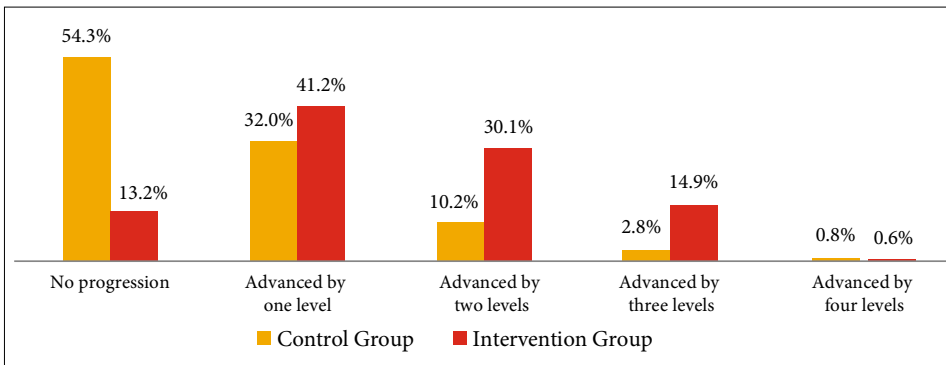

In terms of literacy progress from baseline to endline, more than half (54.3%) of the control group children did not progress, as compared to 13.2 percent of the intervention group children. A much higher proportion of children who attended the CuCs than those who did not advanced by one to three literacy levels.

Figure 6: Children's Literacy Progression, by Gender and Group
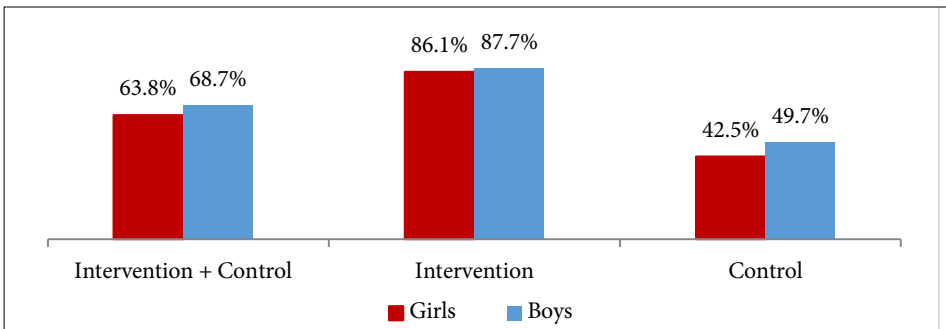
Overall, a slightly higher proportion of boys than girls advanced their foundational literacy over time (68.7% vs. 63.8%, p<0.05). This is mainly attributed to the fact that a higher proportion of boys than girls in the control group advanced (49.7% vs. 42.5%, p<0.05). There was no statistically significant difference between the progression of boys and girls in the intervention group. This may suggest that the CuCs were able to support the literacy progression of boys and girls equally.

Figure 7: Children's Literacy Progression, by State and Group
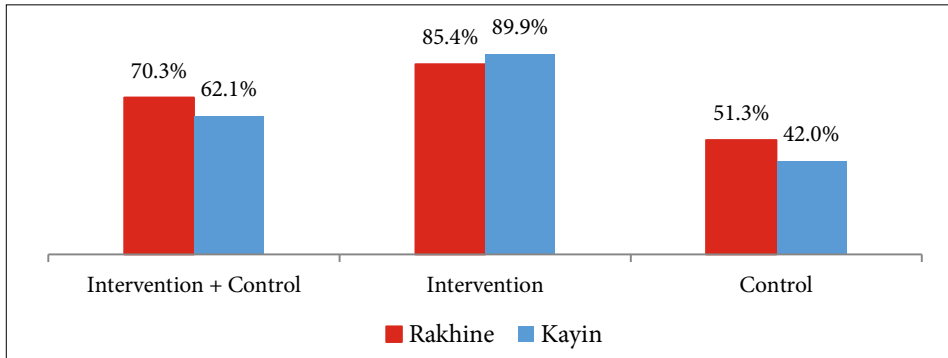
Overall, a higher proportion of children in Rakhine state than in Kayin state advanced their foundational literacy (70.3% vs. 62.1%, p<0.05). However, among the intervention group, a higher proportion of children in Kayin state than in Rakhine state advanced (89.8% vs. 85.4%, p<0.05). This suggests that the CuCs helped the children in Kayin state improve their foundational literacy and achieve a level of progress similar to that of the children in Rakhine state, where the control group made greater progress than those in Kayin state.

EFFECTS OF THE CuC INTERVENTION ON CHILDREN'S FOUNDATIONAL LITERACY

Overall, the results of the regression analysis (see Table 4) showed that, from baseline to endline, children's foundational literacy advanced by about 0.56 levels. However, when we controlled for other variables, such as children's characteristics, wellbeing status, and schooling or learning, the CuCs were able to improve children's foundational literacy by nearly one level (0.85).

Table 4: Regression Results Estimating the Average Effect of the CuC
Intervention on Children's Literacy Levels

	Average Literacy Level (Model 1)
DiD (intervention*time)	0.85***
Intervention group (ref: control group)	-0.15
Time-endline (ref: baseline)	0.56***
Children's Characteristics	
Girl (ref: boy)	0.12**
Age group (ref: age 10 years or below)	
11-12 years old	0.02*
13 years or above	0.01*
Kayin state (ref: Rakhine state)	-1.35***
Family displaced/moved (ref: not displaced)	-0.15**
Ethnicity (ref: ethnic majority Burmese)	
Mon	0.24
Paoh	0.68***
Rohingya	-1.48***
Rakhine	-1.53***
Karen (Poe)	0.03
Karen (Sgaw)	-0.33*
Psychosocial and Socioeconomic Wellbeing	
High SEL competency	0.16***
Household ability to meet basic needs (ref: unable to meet all)	
Able to meet all	0.32**
Able to meet most	0.26**
Able to meet some	0.21*
Household head's literacy status (ref: illiterate)	0.19***
Children's Schooling and Learning	
Current grade (ref: grade 3)	
Grade 4	0.52***
Grade 5	0.85***
Grade 6 or 7	1.34***
Not in school	0.50**
Attending community-based or ethnicity-based school	-0.07
Seeing/reading with family members	0.03
Aspiration for learning: remain or progress in school	0.07
Aspiration for learning: study at a higher level/achieve dreams	0.12**
Constant	2.87***
Observations (N)	**2,425**
R-square	**0.422**

Note: Statistically significance (p-value): ~p<0.10, *p<0.05, **<0.01 ***<0.001.

In Kayin state, girls and children overall showed a greater increase in their literacy levels than those in Rakhine state. Children from families that were not displaced or had moved due to the coup also showed improved foundational literacy. However, children from the Rakhine, Rohingya, and Karen-Sgaw ethnic minority groups appeared to have greater difficulty improving their literacy than children of Burmese ethnicity. As expected, children's higher literacy levels were significantly correlated with their SEL competencies and the family's socioeconomic status, including the ability to meet basic needs and the head of household's literacy status.

Relationship between SEL and Achieving Foundational Literacy

Our results show that children's SEL competency is statistically significant in contributing to higher literacy outcomes. This validates the CuC design principle of combining remedial and SEL activities to improve children's literacy skills.

Likelihood of Reaching the Highest Literacy Level

In terms of progression and of reaching the highest foundational literacy level, our results (see Table 5) showed that children who participated in the CuCs were twice as likely (OR=2.29) as children who did not participate to reach the highest foundational literacy level (comprehension), and nearly eight times more likely (OR=7.79) to improve their literacy by at least one level.

Children's literacy level at baseline significantly affected their level of achievement at endline. As expected, children who started at a higher literacy level had a greater likelihood of reaching the highest literacy level. On the other hand, children who started at a lower literacy level had a greater likelihood of advancing by at least one level. This is rational, considering that the degree of difficulty as learners progress is likely to be more challenging at each level, which affects their progress. The multilingual context in the two states, in which more than 90 percent of the children speak non-Burmese languages at home, may add to the challenges they face in attempting to reach the comprehension level. Our results also showed that Rohingya children were significantly less likely to reach the highest literacy level than children of other ethnic groups. This is possibly due to their language being closer to Chittagonian than to Burmese, which would hinder their comprehension of the texts they were learning to read.

Table 5: Logistic Regression Results Estimating the Likelihood of Children Achieving the Highest Literacy Level or Advancing by One Level

	Odds Ratio			Odds Ratio		
	Achieve Highest Level (Model 2)	[95% Conf. Interval]		Progress by One Level (Model 3)	[95% Conf. Interval]	
CuC Intervention	2.29*	1.17	4.48	7.79***	5.06	11.98
CuC literacy level at baseline	3.05***	2.34	3.98	0.40***	0.34	0.48
Children's Characteristics						
Girl (ref: boy)	0.84	0.58	1.23	0.81	0.6	1.1
Age group (ref: age 10 years or below)						
11-12 years	1.5	0.87	2.58	1.20	0.85	1.71
13 years or above	1.31	0.68	2.51	1.07	0.64	1.81
Kayin state (ref: Rakhine)	1.31	0.29	5.9	0.03*	0	0.44
Family displaced (ref: not displaced)	0.69	0.36	1.33	0.84	0.56	1.26
Ethnicity (ref: ethnic Burmese)						
Mon	0.39	0.1	1.55	1.18	0.34	4.16
Paoh	1.42	0.38	5.35	1.27	0.34	4.74
Rohingya	0.13*	0.03	0.64	0.02**	0	0.39
Rakhine	0.54~	0.11	2.59	0.01**	0	0.32
Karen (Poe)	0.57	0.18	1.82	0.75	0.25	2.31
Karen (Sgaw)	0.47	0.13	1.63	0.67	0.2	2.27
Psychosocial and Socio-economic Wellbeing						
High SEL competency	1.04	0.7	1.55	1.33~	0.97	1.81
Household ability to meet basic needs (ref: unable to meet all)						
Able to meet all	1.47	0.42	5.21	1.30	0.55	3.07
Able to meet most	1.18	0.35	3.97	1.26	0.55	2.86
Able to meet some	0.79	0.23	2.74	1.23	0.53	2.87
Household head's literacy status	1.75*	1.06	2.91	1.05*	0.74	1.48

	Odds Ratio		Odds Ratio	
	Achieve Highest Level (Model 2)	**[95% Conf. Interval]**	**Progress by One Level (Model 3)**	**[95% Conf. Interval]**
Children's Schooling and Learning				
Current grade (ref: grade 3)				
Grade 4	1.06	0.52 2.15	1.98***	1.34 2.94
Grade 5	1.91	0.92 3.98	3.18***	1.94 5.21
Grade 6 or 7	7.40***	3.12 17.54	6.28**	3 13.16
Not in school			0.29	0.01 11.4
Attending community-based or ethnicity-based school	4.56***	2.33 8.91	1.57	0.82 3.02
Seeing/reading with family members	1.33	0.79 2.23	0.90	0.61 1.33
Aspiration for learning: remain or progress in school	2.38***	1.51 3.78	1.50	0.96 2.35
Aspiration for learning: study at a higher level/ achieve dreams	1.12	0.66 1.88	1.03~	0.67 1.58
Observations (N)	**1,225**		**1,223**	
Pseudo R2	**0.318**		**0.283**	

Note: Statistically significance (p-value): ~$p<0.10$, *$p<0.05$, **<0.01 ***<0.001.

Children's SEL Competency

Nearly half of all children assessed at baseline and endline were found to have SEL scores that indicated their relatively high SEL competency (see Figure 8).

Figure 8: Children with High SEL Competency, by State, Period, and Group
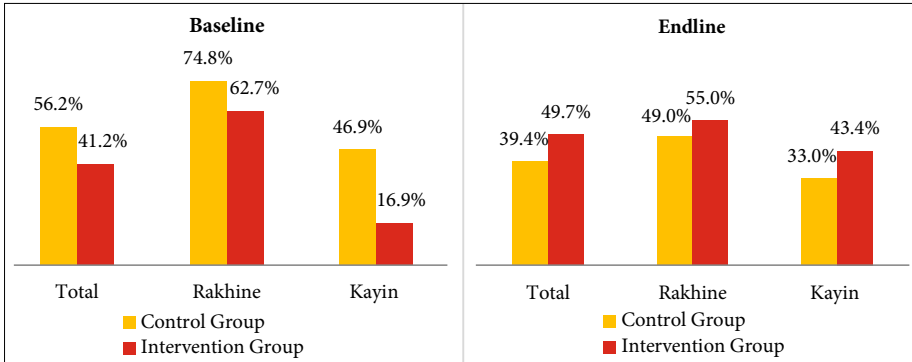
At baseline, we observed that a higher proportion of children in the control group than in the intervention group had high SEL competency (56.2% vs. 41.2%, p<0.05). However, the opposite was seen at endline, when a higher proportion of intervention group children than control group children had high SEL competency (49.7% vs. 39.4%, p<0.05)). The increase in the proportion of intervention group children with high SEL competency was mainly due to the increase in Kayin state from 16.9 percent at baseline to 43.4 percent at endline (p<0.05). The opposite result was seen with the control group children in Kayin state, where there was a significant drop (from 46.9% to 33%, p<0.05). Security concerns due to the active conflict in Kayin state likely exacerbated the children's stress and may have adversely affected their wellbeing and resilience. Because the control group children did not receive any psychosocial support, their SEL skills or competencies may have been negatively affected. The CuCs were designed to support children's development of SEL and to address the needs faced by children experiencing a learning crisis. Evidence on the increasing number of CuC children in Kayin who have high SEL may suggest that the CuC activities improved SEL competencies even when the children experienced prolonged stress.

Changes in the CuC children's SEL were observed in their improved stress management skills, which increased from 65 percent to 82 percent; empathy skills, up from 81 percent to 94 percent; and problem-solving skills, which improved from 71 percent to 78 percent.

Figure 9: Children's SEL Skills, by Period and Group
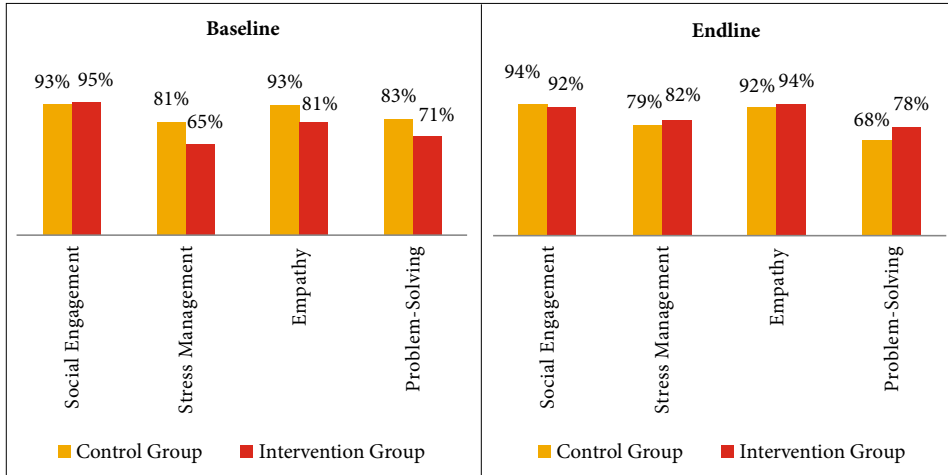
Effects of the CuC Interventions on Children's SEL

The logistic regression results showed that the CuCs increased the likelihood that children would achieve high SEL competency. Looking at the effect of the variable of time, we saw that the likelihood of children having high SEL competency declined over three months, whereas children who participated in the CuCs were more likely to show improved SEL competencies in that same time. Over time, the intervention group children were twice as likely (OR=2.4) to show high SEL competency as the control group children, as seen in the odds ratio of the difference-in-difference variable in Table 6.

Children who attended community-based learning were likely to have high SEL competency (OR=1.61). This suggests that community resources also could have contributed to the children's improved SEL competencies.

Table 6: Logistic Regression Estimating the Likelihood of
Children Having High SEL Competency

	Odds Ratio High SEL (Model 5)	[95% Conf. Interval]	
DiD (intervention*time)	**2.40***	**1.65**	**3.49**
Intervention group (ref: control group)	0.71***	0.53	0.95
Time (ref: period before CuCs)	0.39***	0.3	0.51
Foundational Literacy Level	**1.20***	**1.09**	**1.32**

	Odds Ratio High SEL (Model 5)	[95% Conf. Interval]	
Children's Characteristics			
Girl (ref: boy)	0.98	0.82	1.17
Age group (ref: age 10 years or below)			
11-12 years	1.15	0.92	1.44
13 years or above	1.40*	1.02	1.91
Kayin state (ref: Rakhine state)	1.23	0.47	3.2
Family displaced (ref: not displaced)	1.29*	1.01	1.65
Ethnicity (ref: ethnic majority Burmese)			
Mon	0.93	0.47	1.85
Paoh	0.82	0.4	1.67
Rohingya	2.56	0.87	7.48
Rakhine	0.82	0.27	2.46
Karen (Poe)	0.63	0.35	1.12
Karen (Sgaw)	0.37**	0.2	0.69
Socioeconomic Status (SES)			
Household head literacy status (ref: illiterate)	1.61***	1.3	1.98
Household SES (ref: unable to meet all)			
Able to meet all	0.60*	0.36	0.99
Able to meet most of it	0.48**	0.29	0.78
Able to meet some of it	0.65	0.39	1.07
Children's Schooling and Learning			
Current Grade (ref: grade 3)			
Grade 4	1.1	0.86	1.4
Grade 5	1.16	0.86	1.56
Grade 6 or 7	1.08	0.71	1.64
Not in school	0.15**	0.04	0.54
Attending community-based or ethnicity-based school	1.61***	1.26	2.07
Seeing family members (parents/sibling/others) read	1.43***	1.17	1.76
Aspiration for learning: remain or progress in school	1.09	0.86	1.38
Aspiration for learning: study at a higher level/ achieve dreams	1.21*	0.98	1.5
Constant			
Observations (N)	**2425**		
R-square	**0.183**		

Note: Statistically significance (p-value): ~p<0.10, *p<0.05, **<0.01 ***<0.001.

Children's exposure to reading and their future aspirations also significantly influenced their SEL competency. Children who reported that any of their family members (parents, siblings, or others) read at home or read with them were more likely to have high SEL competency. Moreover, children whose future aspirations included being able to study at a higher level or to achieve their dream job were also more likely to have high SEL competency.

Acceptability, Successes, and Challenges of the CuCs

The findings from our FGDs and a triangulation of the monitoring and evaluation data provided evidence of children's and the communities' positive acceptance of the CuCs. Community acceptance was noted as an important factor in the CuCs' success in improving children's literacy and SEL competencies, in boosting children's confidence, and possibly in transforming children's positive learning experiences and educational aspirations.

### Play-Based Learning and Enjoyable Activities

In FGDs with the CuC children, they attributed their positive learning experiences to the CuCs' play-based learning approach and SEL development activities. More than half (54%) of the children reported enjoying the CuC activities, due to their approach of playing while learning. Children in the FGDs in Kayin said that learning while playing makes it easier to remember and learn, and is also fun. This acknowledges the effectiveness of the CuC play-based approach and SEL activities. Children in Rakhine also shared positive sentiments about learning. As one noted, "We are willing to learn from facilitators because their teaching is more interesting and enjoyable."

A vast majority of the children also found their CuC facilitators to be greatly supportive. In the FGDs, children overwhelmingly agreed that their facilitators were nice, patient, and friendly. One child commented on this patience: "I like attending the CuCs, as the facilitators do not scold the children who are lagging, but explain the lessons until the children understand them."

Perceived Positive Learning Outcomes after Joining a CuC

The endline survey results show that a vast majority of the children perceived that they had learned many more skills since attending the CuCs. These included reading and writing as well as social and emotional skills. There was no significant difference between boys and girls.

*Figure 10:* Children's Perception of Learning Outcomes due to the CuCs
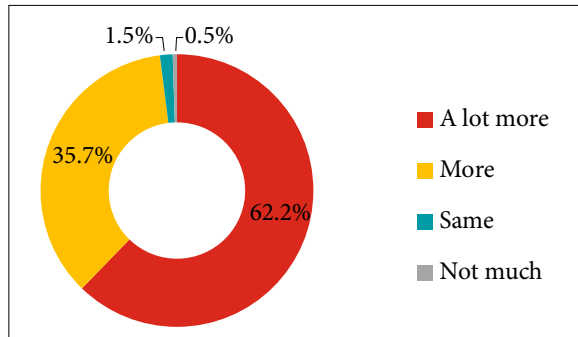
During the FGDs, some children noted how the CuCs have helped them progress in their school lessons and continue learning. As one explained, "At first, I wasn't doing well. Because of my attendance at the CuCs, I caught up with the lessons and that's why I'd like to keep going to the CuCs." The CuCs have also provided learning opportunities for children not in school or those who have dropped out. A boy in Kayin said, "I was happy to come to CuCs because I wanted to study and gain knowledge because I didn't go to school."

CONFIDENCE IN LEARNING

The survey results showed that a higher proportion of children who attended the CuCs reported having more confidence in their learning and in their ability to continue with a formal education than those who did not attend. As one child in Kayin said, "I feel more confident in learning and to go to the formal school." A child in Rakhine noted similarly that, "after attending the CuCs, I've learned to read and that makes me feel confident."

Figure 11: Children's Confidence in Their Learning
and in Continuing Formal Education
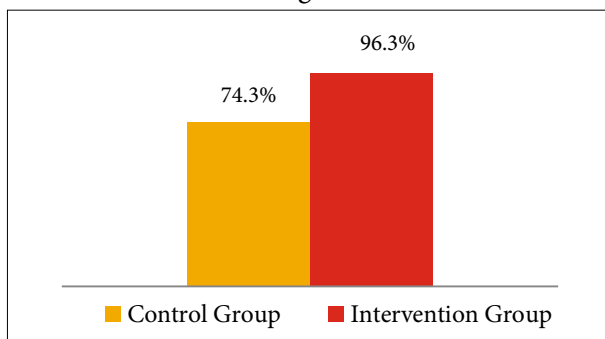
A significant increase in enrollment and attendance at the government-led schools was observed among children who had participated in the CuCs, particularly in Kayin. However, the reasons for this may need to be explored further, such as whether these increases were due to children being more comfortable or confident in engaging with the curriculum taught in the Burmese language.

Figure 12: Children's School Types
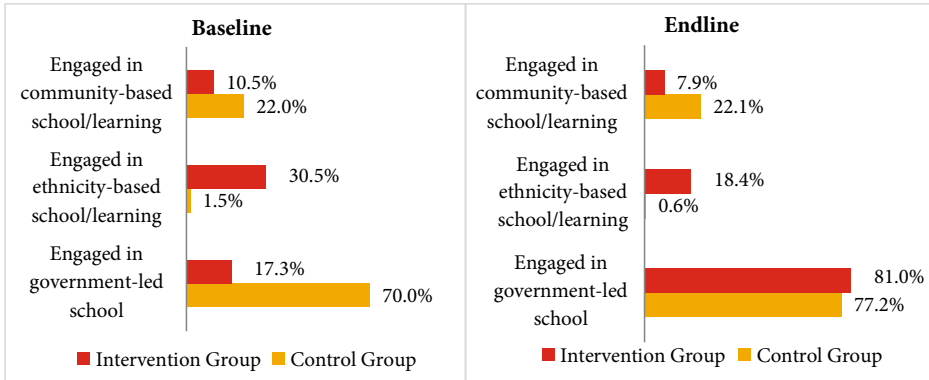
Attending the CuCs also appeared to motivate the children to develop positive reading habits. Children who attended the CuCs increasingly reported reading with their family members, particularly with their siblings. Furthermore, a higher proportion of children in the intervention group than the control group noted that one of their learning aspirations was to be able to read more (59% vs. 43%, p<0.05) or to help their sibling or parents learn to read (59% vs. 49%, p<0.05).

Figure 13: Children's Reading Exposure and Habits
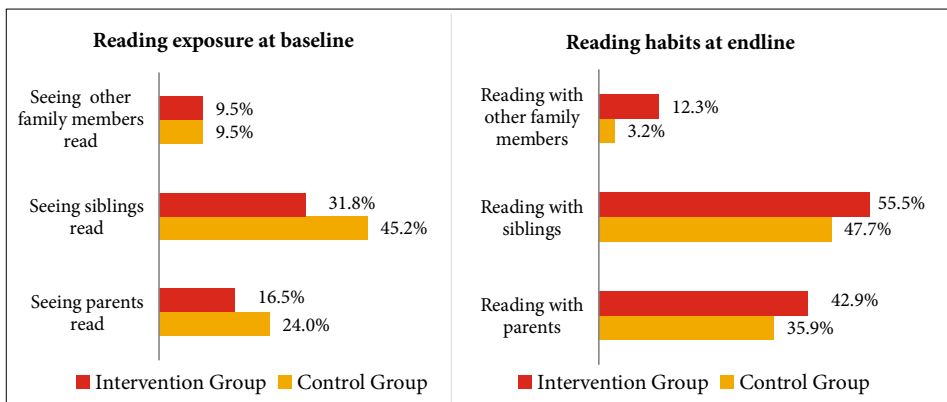
CuC Support: CVA and Child-Protection Services

As a part of the CuC intervention, financial literacy training and CVA (US$45) were given to the parents or caregivers of all children attending the CuCs. These offerings were intended to help alleviate any economic barriers to sending children to school and to their attending the CuCs regularly. One in ten (10.4%) of the control group children also received CVA from other programs implemented by Save the Children or other organizations. During one FGD, the project team revealed that they had received positive feedback from parents, who said that the "CVA was very helpful to support my children's education." One child also said that, when "studying at the CuCs, I received money, a backpack, and books. That's why I'm happy and I'd like to keep going to the CuCs."

Aside from receiving CVA, most CuC children (89.4%) reported receiving learning materials to support their literacy.

Figure 14: Learning Support Received by Children
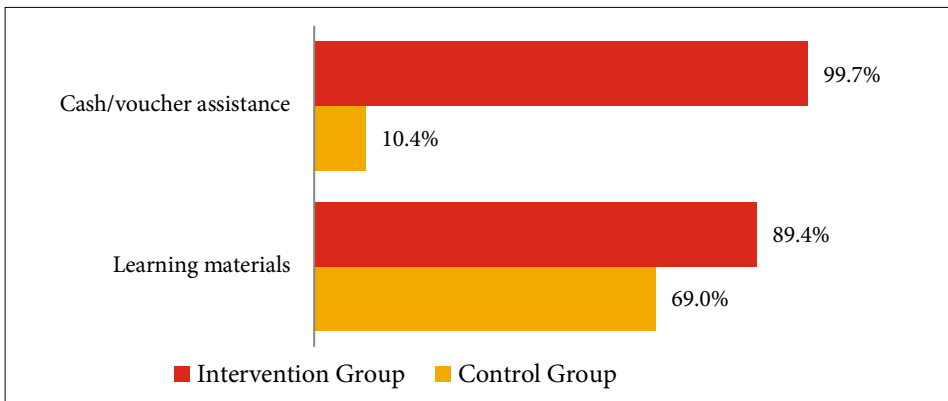
Child-protection components were included in the CuCs and provided in collaboration with local partners. The CuC facilitators received training in various aspects of child safeguarding and were equipped with additional resources to identify child-protection issues and refer children to social services when necessary. At endline, we found that a much higher proportion of CuC children reported receiving caseworker support and case management services than those in the control group (35.9% vs. 8.3%, $p < 0.05$).

Challenges of the CuCs and Unintended Effects

While almost all children who participated in the CuC activities perceived the program to be beneficial (99.5%), one in five (19.0%) reported challenges in attending these activities. Most of these difficulties were related to travel, such as muddy roads during the rainy season (18.8%), the distance from home to the program location (10.5%), and transportation issues (4.6%), such as the lack of transport or of an adult to accompany the child.

In terms of children's wellbeing, although nearly all CuC children perceived the CuC activities to be enjoyable (99.3%), some reported that the CuCs reduced their playtime (12.9%) or their time to rest or sleep (8.9%). Some children also cited issues of safety or security as reasons they did not attend (3.8%), and some felt too tired to attend, including those with health issues (5.2%). For example, a girl in Rakhine noted that "some of my classmates are falling asleep because they are very tired after school. But I try not to fall asleep and [to] enjoy the CuC session." There were no significant differences in these findings between boys and girls, except that a higher proportion of boys than girls reported feeling too tired to attend the CuCs (6.9% vs. 3.7%).

Children also reported having to juggle attending the CuCs with doing chores at home (6.0%) or doing paid work to help the family's livelihood (5.5%). Child labor is a complex issue in Myanmar. It is common practice and appears to be socially accepted, as families typically expect their children to work during the peak farming seasons (Kennedy 2019). This was mentioned by a couple of girls in Kayin, with one explaining that she "was absent because of feeling tired after doing paid work farming."

The unintended effects of the CuCs included children saying that taking part in these activities interfered with their ability to play and socialize with friends. This suggests that, to incentivize participation and attendance, future enrollment efforts could consider allowing participants and their friends and social circles to participate together, as well as the importance of play-based learning, which is a focus of the CuC approach. Additional unintended problems with attending the CuCs included logistical barriers, such as a lack of transport and muddy roads due to adverse weather, as mentioned above. For the CuC innovation to be replicable or suited to scaling-up, more attention needs to be focused on providing easy access.

CONCLUSION

The study contributes to the generation of evidence and to a contextualized understanding of how remedial community-based learning, combined with play-based activities, child-protection, and economic support, enabled children in two states in Myanmar who are the most affected by discrimination and inequality to improve their literacy and SEL capacities, and to do so in the context of disrupted schooling caused by COVID-19 that has been compounded by ongoing conflict. Children who attended the CuCs made significantly greater gains in learning than children who did not participate. The CuC children were nearly eight times more likely to advance by one literacy level and twice as likely to achieve the highest literacy level—the ability to read a story with comprehension. These children have gained more confidence than those not attending the CuCs. There was a minimal gap in reading results between girls and boys in the intervention group, whereas boys were ahead of girls in the control group.

The protracted crises in Myanmar have impacted the SEL competencies of children in two states, Rakhine and Kayin, particularly their stress management skills. Despite this challenging context, the CuCs have helped children strengthen their SEL competencies. Children in the intervention group were twice as likely as those in the control group to have high SEL competencies, and the children's higher SEL competencies in turn had a positive effect on their literacy outcomes.

Our qualitative findings provide some insights into how the CuCs achieved success. The CuC children particularly valued the play-based learning activities, the SEL activities, and the community facilitators' supportive, positive teaching methods.

Our research also revealed areas where the CuCs could be stronger. Although the intervention group's literacy results were significantly higher than those of the control group, only a quarter of the CuC children achieved the ability to read with comprehension after attending the CuCs for three months. This was attributed to the fact that most of the children speak a language at home other than Burmese, which is the language of instruction in the two states. The CuC activities focused on building literacy skills assumed that the children were proficient in Burmese, as is expected of students at the upper primary level. The research indicates that second language learning should be included for non-native Burmese speakers in the remedial learning support. It suggests further that, in multilingual contexts, the CuCs need to leverage the community's existing linguistic resources by recruiting volunteers who speak both the children's mother

tongues and the primary education language of instruction. Future designs of the CuC instructional approach must use the students' entire linguistic repertoire more efficiently and support their oral acquisition of the school's language of instruction. The CuCs also should promote pedagogical translanguaging and train the community volunteers to use it appropriately.[7]

Some children faced barriers to attendance at the CuCs, such as lack of transport, safety travelling to and from the clubs, and being required to engage in child labor. This suggests the need to combine education, child-protection, and CVA interventions in order to reduce child labor and enable all children to have time for the remedial learning provided by the CuCs. Future research can explore these aspects of the CuCs through randomized control experimentation that examines the impact economic support provided through CVA and child-protection assistance has on children's learning outcomes, including literacy, numeracy, and SEL competency.

Overall, this evaluation study demonstrates that the CuC model is effective in conflict-affected contexts. Through 50-70 hours of engagement in the CuCs, children exposed to political violence and prolonged stress were able to improve their literacy and SEL skills, improve their self-confidence, and develop positive educational aspirations. To boost the reading comprehension of ethnic minority children whose native language differs from the language of instruction, the CuCs plan to adopt additional multilingual approaches and pedagogies. This will enable them to be replicated in Myanmar and in a wider range of multilingual and displacement contexts. It is important to note that this exploratory study has its limitations, primarily in that it only covers conflict-affected areas and displaced populations in Kayin and Rakhine states that have specific cultural and ethnic backgrounds. Therefore, the findings of this study cannot be generalized to all children in Myanmar or other countries.

The CuCs have been successfully implemented in other contexts and have scaled-up rapidly in humanitarian and development settings in eleven countries across four continents: Columbia, Uganda, Malawi, the Democratic Republic of the Congo, Nigeria, Egypt, Afghanistan, India, Bangladesh, Myanmar, and the Philippines. Most importantly, the CuCs have yielded positive results: at the end of the CuC cycle, more than 70 percent of the participating children can read full sentences.

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7   Pedagogical translanguaging is a theoretical and instructional approach that aims to improve children's language and content competencies in school contexts by using resources from the learners' entire linguistic repertoire.

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RESEARCH ETHICS APPROVAL

The study was submitted to Save the Children's Ethics Review Committee and granted ethics approval (SCUS-ERC-FY2022-39) in May 2022, prior to data collection.

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APPENDICES

Appendix 1: Sampling Calculation

Indicators	Values
Estimate proportion at time: P1, est.	0.5
Estimate proportion at time: P2, est.	0.625
Normal probability value: Z1−∝	95% (1.64)
Normal probability value: Z1−β	80% (0.84)
Cluster Design-M (control group)	15
Cluster Design-M (intervention group)	15
# of Cluster 1 (control group)	40
# of Cluster 2 (intervention group)	40
# of Sample 1 (control group)	600
# of Sample 2 (intervention group)	600

Appendix 2: Variables Construction and Definition

Variables	Code	Definition
Foundational Literacy Level		
Level 1: Letter	1	Accomplishing the identification of letters
Level 2: Word	2	Reading words
Level 3: Sentence	3	Reading sentence
Level 4: Story	4	Reading paragraphs
Level 5: Comprehension	5	Understanding the paragraphs
SEL Competency		
High SEL	1	Having a SEL index score above median SEL index
Low SEL	0	Having an SEL index score in the median value or below SEL index
Main Predictors		
CuCs Intervention		
Intervention group	1	Enrolled in CuCs
Control group	0	Not enrolled in CuCs
Time		
Endline	1	End of CuCs cycle (about 3 months)
Baseline	0	Before starting CuCs
Children/Household Characteristics		
Child Age	1	Age 10 years or below
	2	Age 11-12 years
	3	Age 13 years or above
Child Gender	1	Girl
	0	Boy
Child Disability Status		
Child with a disability	1	Parent/caregiver report that their child "cannot do at all" or has "a lot of difficulty" in hearing or/and seeing or/and remembering/concentrating, or/and self-care; or/and walking; or/and communicating
Child without a disability	0	Parent/caregiver report that their child has "some difficulty" or "no difficulty" in hearing or/and seeing or/and remembering/concentrating, or/and self-care; or/and walking; or/and communicating
Location	1	Kayin state
	0	Rakhine state

Variables	Code	Definition
Displacement Status (since February. 1, 2021)		
Displaced	1	Displaced or moved from where they normally lived due to economic/political crises, including military coup
Nondisplaced	0	Otherwise (not displaced)
Ethnicity	1	Burmese
	2	Mon
	3	Poah
	4	Rakhine (Rohingya)
	5	Rakhine
	6	Karen (Poe)
	7	Karen (Sgaw)
	8	Other
Household Socioeconomic Status		
Household Ability to Meet Basic Needs	1	Meet all basic needs
	2	Most basic needs
	3	Some basic needs
	4	None or hardly meet basic needs
Household Literacy Status	1	Literate (able to read and/or write any language)
	0	Illiterate (unable to read and/or write any language)
Schooling and Learning		
Current School Grade	0	Not in school
	1	Grade 3
	2	Grade 4
	3	Grade 5
	4	Grade 6
Attending Community-Based or Ethnicity-Based School	1	Yes
	0	No
Seeing/Reading with Family Members	1	Yes
	0	No
Aspiration for Learning: Remain or Progress in School	1	Yes
	0	No
Aspiration for Learning: Able to Study at a Higher Level/Fulfill the Dream	1	Yes
	0	No