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Early learning attainments of children of naturalized citizens of refugee backgrounds in the sub-Saharan region: Evidence from Tanzania

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Abstract

Research has consistently indicated that children of naturalized citizens from refugee backgrounds lag in most indicators of development. The disparities are more nuanced in contexts with limited educational resources, such as the sub-Saharan region of Africa. However, that is not the case with children of naturalized citizens from refugee backgrounds of Burundian origin living in Tanzania. The early learning attainment of these children is comparable to children from more advantaged urban majority groups. In this article, I discuss the role of the home learning environment and families' socioeconomic status in children's development of early math and reading skills by linking global and local perspectives. Challenges facing children from this group in Tanzania include issues related to curriculum, cultural practices and parental beliefs, mastery of Kiswahili, and the quality of teachers in the early grades. In light of the evidence, I argue for improvements in learning experiences and recommend research to inform policy and improve practice.

KEYWORDS

early reading and math, home learning environments, naturalized citizens from refugee backgrounds

INTRODUCTION

Recent reports and empirical evidence indicate that while the sub-Saharan region of Africa has broadened access to basic education, most children there are not acquiring basic learning skills on par with their grade levels (Ndijuye, 2020; UNESCO Institute for Statistics, 2021). The effects and resulting implications persist into adulthood in terms of developmental outcomes such as personality and income (García et al., 2021), especially for children from households with low incomes in rural areas (Ndijuye & Tandika, 2022b; Susperreguy et al., 2022). The effects are more severe for children of naturalized citizens from refugee backgrounds who live in rural areas in the sub-Saharan region which are characterized by acute shortages of educational resources (Ndijuye & Tandika, 2022b). Although evidence from developed

countries has consistently emphasized the dominant role of cognitive skills (Jones et al., 2015; Leyva et al., 2019), most recent findings establish that early reading and math skills provide solid foundations for future learning (Leyva et al., 2019). For instance, cognitive skills developed during preprimary school and in first-grade predict learning achievements and earnings in adulthood (Heckman et al., 2018; Reardon & Portilla, 2016).

HOME ENVIRONMENTS, FAMILY SOCIOECONOMIC STATUS, AND EARLY READING AND MATH ATTAINMENT

Across contexts and countries, empirical studies have documented the linear relations among home learning

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environments, families' socioeconomic status (SES), and early learning achievement (Ip et al., 2016; Ndijuye, 2020; Susperreguy et al., 2022). For example, in developed countries, children from households with low incomes or from refugee backgrounds are less prepared for schooling than those from well-to-do households (Leyva et al., 2019). Evidence from cross-cultural studies indicates that active parent—child interactions, play, frequent engagement, and the availability of print materials at home influence these children's early reading and math attainment (Susperreguy et al., 2022).

As a result of economic hardship and parental stress, children of naturalized citizens from refugee backgrounds and from families with low incomes have experienced hostile parenting and difficulties with child management (Mitchell & Kamenarac, 2022). These children are less likely to engage in mentally and physically stimulating activities than children from local majorities. According to research from both developed and developing countries, improvements in families' SES increase resources and opportunities for children's development and learning outcomes (Kafle et al., 2018; Susperreguy et al., 2022), especially in refugee households (Ndijuye & Tandika, 2022a). However, emerging evidence from Tanzania indicates that even though children of naturalized citizens from refugee backgrounds tend to come from households with relatively low incomes, their early learning attainment is comparable to that of children from rich urban local majorities (Ndijuye, 2020, 2022; Ndijuye & Tandika, 2022b).

THE GAP IN EARLY READING AND MATH ATTAINMENT IN TANZANIA

The early math and reading achievement gap in sub-Saharan Africa has recently attracted the attention of researchers and policymakers, but it is one of the least documented areas of research (UNESCO Institute for Statistics, 2021). While access to early childhood education has broadened in the last two decades, the gains have not accounted for the quality of education (Ndijuye & Rao, 2018; Piper et al., 2020). In Tanzania, children from rural areas are generally just going to school, not learning at their grade levels (National Examination Council of Tanzania, 2020; Ndijuye & Tandika, 2022b). According to recent findings of government educational bodies and independent researchers, one to three out of every 10 children living in rural and urban households with low incomes could not read a sentence in Kiswahili (the native language of the Swahili people in Tanzania) even after spending 4 years in schools (Ndijuye & Beatus, 2022). Moreover, only 28% of second graders and 43% of fourth graders could do word problem subtraction. Similarly, only about 33% of fourth graders could do numeracy operations at the division level (National Examination Council of Tanzania, 2020).

But these trends do not hold for less privileged naturalized citizens from refugee backgrounds living in Tanzania (National Examination Council of Tanzania, 2020; Ndijuye, 2022; Ndijuye & Tandika, 2022b). While the attainment in early reading and math of rural local majority children has declined sharply, children of naturalized citizens from refugee backgrounds had higher levels of learning attainment (Ndijuye & Tandika, 2022b; Rawle, 2015). Accordingly, about 64% of fourth graders from these backgrounds could do subtraction operations, and about 67% could do division operations (National Examination Council of Tanzania, 2020; Ndijuye, 2022; Ndijuye & Tandika, 2022a; RTI International, 2020). In other words, children of naturalized citizens from refugee backgrounds in Tanzania are learning more successfully than children of the local majority. However, despite these achievements, knowledge about the learning and developmental contexts of these children is limited. Next, I address this gap by examining the curricular and sociocultural developmental contexts of children who are naturalized citizens from refugee backgrounds in Tanzania, which is a typical developing country in sub-Saharan Africa.

DEVELOPMENTAL CONTEXTS OF CHILDREN OF NATURALIZED CITIZENS FROM REFUGEE BACKGROUNDS

Until 2022, Tanzania was home to almost 500,000 naturalized citizens from refugee backgrounds who came from various countries, including Burundi, (82%), Somalia (8%), the Democratic Republic of Congo (4%), Rwanda (2%), Mozambique (1%), and other countries (3%; Ministry of Home Affairs, 2020). Until 2022, more than 22,000 children ages 4–8 years from several groups of naturalized citizens from refugee backgrounds lived in Tanzania (Ministry of Science, Education, and Technology, 2022) and were eligible to enroll in preprimary to fourth grade of primary school.

I focus on the early learning of children of naturalized citizens from refugee backgrounds of Burundian origin, which is the largest group of naturalized citizens from refugee backgrounds. They have been in Tanzania since 1972, following the second Burundian civil war (Kuch, 2017). Between 2007 and 2010, Tanzania naturalized about 270,000 Burundian refugees, most of whom lived in the settlement areas of Mishamo, Katumba, and Ulyankulu in northwestern Tanzania. According to population estimates of Tanzania, about 415,000 naturalized citizens from refugee backgrounds of Burundian origin lived in the country in 2022 (National Bureau of Statistics, 2022). In this group are about 15,000 children ages 4-8 years, which are the formative early childhood years (Ministry of Science, Education, and Technology, 2022). These children were all born after their parents received formal Tanzanian naturalization.

According to recent math and reading assessment tests in the early grades (National Examination Council of Tanzania, 2020; RTI International, 2020) and empirical studies (Ndijuye, 2020, 2022; Ndijuye & Tandika, 2022a), children of naturalized citizens from refugee backgrounds learn more successfully than children from local urban and rural groups. Their higher attainment is presumably associated with parental expectations and beliefs, as well as with improved family living standards and SES. Girls have higher reading scores and boys and have higher numeracy scores. These findings are consistent with those of children from local urban and rural groups in Tanzania (Ndijuye & Tandika, 2022b; RTI International, 2020), and with findings in the United States (Ho & Kao, 2018), Canada, Mexico, and Chile (Susperreguy et al., 2022).

FACTORS AFFECTING EARLY LEARNING OF CHILDREN OF NATURALIZED CITIZENS FROM REFUGEE BACKGROUNDS IN TANZANIA

Curriculum and related issues

The curriculum currently used in most of Tanzania recognizes the importance of developing early reading and math; these subjects are the most common indicators of learning used by parents and teachers (Ndijuye & Tandika, 2022b). Their importance is reflected in the time dedicated to teaching them, which is comparable to that in more developed systems and, in some cases, exceeds international norms (Bethell, 2016; Ministry of Science, Education, and Technology, 2022). While the curriculum is arguably based on competency (Ministry of Science, Education, and Technology, 2022), classroom practices remain largely defined by content and are often delivered by teacher-led pedagogies (Ngorosho & Lahtinen, 2010).

Furthermore, the curriculum in the early grades is centralized and operates in a top-down manner, and it has been criticized for how it was developed, implemented, and evaluated (Edward et al., 2022). Specifically, with minimal or no involvement of other key stakeholders, experts in Tanzania meet to design content and develop syllabi, reference books, and textbooks. Because of financial and logistical constraints, few teachers attend in-service training, so most have limited knowledge and abilities to implement the curriculum (Ndijuye & Tandika, 2022b). Curriculum evaluations at various levels of education are conducted annually by the National Examination Council of Tanzania, but the assessments do not consider learning contexts, children's individual and sociocultural

differences, or families' SES (Edward et al., 2022). The one-size-fits-all approach leads to endless reforms and reviews every few years. However, such challenges are not unique to Tanzania: While policies are intended to help refugee families and children belong to and participate in Aotearoa New Zealand and to uphold their own culture, in practice, young refugee children there have no visibility in early childhood curriculum and funding policies (Mitchell & Kamenarac, 2022).

The medium of instruction policy in Tanzania is of great importance in a country with 123 diverse ethnic groups, each with its own vernacular language. After independence in 1961, Tanzania adopted Kiswahili and English as official languages; Kiswahili is the language of instruction in primary school and English is used in lower secondary to tertiary levels. Among naturalized citizens from refugee backgrounds, the language most frequently spoken at home reflects students' country of origin. For example, children from Burundi predominantly speak Kirundi (Ndijuye & Tandika, 2020, 2022b). While Kiswahili is widely spoken in Tanzania, children from these groups encounter it when starting formal education. Empirical evidence shows that children in bilingual immigrant families who grow up hearing a heritage language that differs from the language of instruction often face learning difficulties and may complete basic schooling with low levels of skill in both languages (Hoff, 2018; Ndijuye & Tandika, 2022b).

Across contexts, children learn and acquire basic skills when they are taught in a language they understand, preferably their mother tongue (Ndijuye & Tandika, 2022a; Ng et al., 2017). Among children of naturalized citizens from refugee backgrounds in Tanzania, teaching is mostly conducted in the unfamiliar Kiswahili language, which learners—and sometimes even teachers—are not fluent enough to use for effective learning (Ndijuye & Tandika, 2022a). This seriously challenges teachers not only in early math and reading but also in other subjects that require teachers' and learners' understanding of the special linguistic register—the way speakers use language differently in different circumstances. In the United States, many children from recently naturalized refugee families encounter language barriers in school and fail to understand instructional content taught in English (Dryden-Peterson, 2015). As a result, both academics and policymakers debate whether such children should be taught in the language of their host country or that of their origin country (Dryden-Peterson, 2015; Hoff, 2018; Ndijuye, 2022).

Cultural issues, parental beliefs, and expectations

Evidence suggests that parental beliefs and expectations are related to children's learning and development (Bethell, 2016; Lee et al., 2017; Ng et al., 2017).

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For instance, immigrant children of Asian origin have made exceptional gains and advanced in learning science, technology, engineering, and math (STEM; Lee et al., 2017; Ng et al., 2017). While this assumption holds in some Western contexts, it is not the case in other non-Western countries with reasonable numbers of children of Asian origin. The value parents attach to education for their children, parents' beliefs and expectations about their children's early learning and development (Ndijuye & Tandika, 2022b), and how learners acquire early learning skills (Ng et al., 2017) may help explain gaps in learning.

Generally, the common belief about early learning experiences among naturalized citizens in Tanzania is that children should acquire and master reading and math as early as possible (Edward et al., 2022; Ndijuye & Tandika, 2022b), which has resulted in competitive pressure being placed on children. It has also led to huge gender differences in early learning outcomes, with girls underperforming in STEM-related exams across all levels of education as a result of cultural factors (e.g., most parents hold culturally conditioned mixed views of math and reading; Ndijuye & Rao, 2019; Ndijuye & Tandika, 2022a). In part, the gender gap could be attributed to schools in Tanzania tending to reflect the cultural values of the societies they serve. In such contexts, the education of girls is seen as less important than that of boys (Ndijuye & Rao, 2019).

Popular belief holds that if parents are given a choice of which children to send to school, most would choose to send their sons because they have lower expectations for their daughters (Ndijuye & Rao, 2019). Teachers tend to share this view and have a higher opinion of their male students. As a result, teachers reportedly pay less attention to female students than to male students in the same class (Ndijuye, 2022; Rabiner et al., 2016). Such genderbased prejudices can harm girls' self-confidence and may have particularly damaging implications for their performance on a large scale (Mazana et al., 2020).

Contrary to common trends, emerging evidence in Tanzania indicates that most parents of naturalized citizens from refugee backgrounds regard education as a pathway to upward social mobility (Ndijuye, 2020, 2022; Ndijuye & Tandika, 2022a) and a way to escape intergenerational poverty. For instance, when parents from this group learned about their children's difficulties mastering Kiswahili, they used strategies that had not been used elsewhere, such as sending their children to church sermons conducted in Kiswahili (Ndijuye, 2022) and telling their children not to use vernacular languages at home (Ndijuye & Rao, 2019).

The influence of the expectations and beliefs of parents of naturalized citizens from refugee backgrounds on children's early learning attainment is not uncommon. For example, in the United States, children of Asian origin achieve higher levels in early math and science than do other immigrant children and children of local majorities

(de Brey et al., 2019; Ng & Wei, 2020; Organisation for Economic Co-operation and Development, 2016). Their higher scores are attributed to a Confucian culture that emphasizes virtues, diligence, and achievement in daily activities, as well as to so-called tiger parenting and drills in teaching and learning (Ng & Wei, 2020). However, in the Tanzanian context, parental beliefs and expectations are not based on specific philosophical or religious grounds. Perhaps, this helps explain why not all children of naturalized citizens perform well in Tanzania or in neighboring countries. For instance, children of naturalized citizens from refugee backgrounds in Kenya learn at lower levels than children of local majorities (Piper et al., 2020). For these children, the overall mean score on nationwide tests conducted by the National Examination Council of Tanzania for early reading and early math was lower than that of children from disadvantaged rural groups such as the pastoralist Turkana of northern Kenya.

These findings call for active parental involvement to incorporate and strike a balance between parents' beliefs and expectations and the curriculum (Garvis, 2021). Research has consistently pointed to a linear relationship between parents' involvement, beliefs, and expectations, and children's early reading and math outcomes (Jeynes, 2018; Ndijuye & Tandika, 2022a). This relation is stronger in contexts with limited educational resources and learning disparities across gender, rural and urban areas, families' SES, and immigrant status (Ndijuye & Tandika, 2022a; UNESCO Institute for Statistics, 2021). However, involving parents in a context with limited or no social welfare systems is challenging; issues such as language-related barriers; teachers' attitudes about parental involvement; and the gap between what policy, guidelines, and bylaws stipulated and what happens at school (Ndijuye & Tandika, 2022a) should be addressed.

The quality of early grade teachers

Teacher quality is an indispensable part of education that cannot be compromised and is especially vital in contexts with limited resources and poor social welfare systems (Bethell, 2016). However, Tanzania is currently challenged with attracting and retaining adequate numbers of qualified people to train as teachers in the early grades (Edward et al., 2022; Ministry of Science, Education, and Technology, 2022). Furthermore, even people who are attracted to the field receive inadequate training so they are unable to face the mounting challenges of the profession (Bethell, 2016; Ministry of Science, Education, and Technology, 2022). Poor incentives, unsupportive working conditions, and inadequate in-service training have reduced individuals' motivation to enter the field as well as retention rates among early grades teachers (Ministry of Science, Education, and Technology, 2022; Ndijuye & Tandika, 2019). To wit, in 2022, 8631 trained teachers of early grades

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served 1.2 million children in Tanzania. In the rural regions of Tabora, Kigoma, and Katavi, where most of the naturalized citizens from refugee backgrounds live, the shortage of trained early grades teachers is acute: In 2022, just 1798 teachers served 238,433 children in the three regions. The situation was also complicated in settlement areas with naturalized citizens from refugee backgrounds, where just 52 trained early grades teachers served 6189 children (Ministry of Science, Education, and Technology, 2022).

The quality of teacher training programs and limited opportunities for in-service trainings have implications for how teachers navigate the profession and improve classroom practices (Edward et al., 2022). In a report by the Southern and Eastern Africa Consortium for Monitoring Educational Quality (2020)—of which Tanzania is a member—teachers' mathematical knowledge and skills were tested using a slightly extended variant of the test used for their own students. More than half (56%) scored less than a B grade. This means that more than half of teachers were teaching content that they could not understand. This may be because schools recruited academically weak candidates, screened and selected without rigor, or offered low-quality preservice teacher training programs; researchers should empirically verify these speculations.

Empirical evidence and reports by government bodies have identified significant challenges in Tanzania when facilitating learning attainment among children of naturalized citizens from refugee backgrounds. These include low-quality or extremely old physical facilities, such as classrooms, libraries, and toilets; too many children per classroom; and multigrade teaching in primary schools (Ministry of Science, Education, and Technology, 2022; Ndijuye, 2020; Ndijuye & Beatus, 2022). Yet, we should avoid generalizing these shortcomings to the entire country because of variations across rural and urban areas and among the country's 26 regions. For instance, in Katavi, the region with the most naturalized refugees, only 10% of primary schools have access to electricity, but in Kilimanjaro, another rural region with no reported naturalized citizens from refugee backgrounds, all primary schools have access to electricity (Ministry of Science, Education, and Technology, 2022). Furthermore, in Kigoma, the region with the second-highest number of naturalized citizens from refugee backgrounds, four children share a single early grades picture book. Challenges such as these are not unique to Tanzania; children from naturalized refugee backgrounds also encounter such barriers in educational systems in Germany, Greece, Lebanon, Sweden, and Turkey (Crul et al., 2019).

CONCLUSION AND NEXT STEPS

As I have suggested, even though children of naturalized citizens from refugee backgrounds in Tanzania are

developing foundational learning attainment skills, they still face challenges. We need joint efforts by various stakeholders to support children's holistic development as a cornerstone for future developmental outcomes. However, a link is missing among existing early childhood policies, curricula, and practices. As such, I recommend the following steps.

First, even though Tanzania has a special curriculum in the early grades, research on its development and implementation is scant. As such, most decisions about curriculum and syllabi are not informed by empirical work. This has led to endless reviews and restructuring, which limits children's developmental outcomes and creates unnecessary confusion and "learning and developmental chaos" (Ndijuye, 2017, p. 202). We need more research on early childhood teacher education curricula, early grades curricula, and languages of instruction.

Second, research on naturalized citizens from refugee backgrounds in Tanzania has documented that parents' beliefs and expectations may spur children's higher learning attainment (Matafwali & Bus, 2014). However, we know little about which beliefs and practices affect children's development in a Tanzanian context or in the context of other countries in sub-Saharan Africa. Researchers need to establish that naturalized refugee parents' learning-related practices are driven by their beliefs rather than by their current life difficulties, pressure, or children's responses to the two.

Finally, while most children of naturalized citizens from refugee backgrounds living in the sub-Saharan region, we know very little about their educational needs, learning experiences, and integration strategies. We need more global efforts to research these issues and the associated policies and practices in low-and-middle-income sub-Saharan countries.

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