

Early Learning of Children in Tanzania: A Comparison Study of Naturalized Refugee, Rural Majority, and Urban Majority Population Groups

Abstract

This study compares school readiness and family experiences of children of naturalized refugees with the learning and experiences of a rural majority population group and urban majority population group in Tanzania. A total of 150 pre-primary children (50 in each group) were selected and completed a modified version of the School Readiness Composite of the Bracken's Basic Concept Scale-Receptive (BBCS-R). Additionally, 45 parents of the children (15 from each group) were interviewed to explore the influences of demographic factors, home and health contexts on children's early learning. School readiness of the naturalized refugee group was higher than those of the rural majority population, and comparable to skills of the urban majority population group. Parental home practices, beliefs and expectations about education were possible influences on why naturalized refugee children demonstrated comparable early attainment to that of the urban majority. Naturalized refugee parents considered that their children's education was a path to upward social mobility. These findings highlight the importance of fostering the early learning and developmental potential of all disadvantaged groups in sub-Saharan Africa.

Keywords: School readiness, Pre-primary education, Naturalized refugee, Parent aspirations, Tanzania

Résumé

Cette étude compare l'état de préparation à l'école et les expériences familiales des enfants de réfugiés naturalisés avec l'apprentissage et les expériences d'un groupe de la population majoritaire rurale et d'un groupe de la population majoritaire urbaine de Tanzanie. Un total de 150 enfants d'âge pré primaire (50 dans chaque groupe) a été sélectionné pour remplir une version modifiée du composite sur la préparation à l'école de l'Échelle des concepts de base - Réceptivité de Bracken (BBCS-R). De plus, des entrevues ont été effectuées auprès de parents des enfants (15 de chaque groupe) afin d'explorer l'influence des facteurs démographiques, du contexte à la maison et du contexte de santé sur l'apprentissage chez les jeunes enfants. L'état de préparation à l'école du groupe de réfugiés naturalisés est supérieur à celui de la population majoritaire rurale et comparable aux habiletés du groupe de la population majoritaire urbaine. Les pratiques parentales à la maison, les croyances et les attentes figurent parmi les influences pouvant éventuellement expliquer pourquoi les enfants réfugiés naturalisés font preuve d'une réussite préscolaire comparable à celle de la majorité urbaine. Les parents réfugiés naturalisés considèrent que l'éducation de leurs enfants est une voie vers la mobilité sociale ascendante. Ces résultats soulignent l'importance de favoriser l'apprentissage en bas âge et le potentiel de développement de tous les groupes défavorisés en Afrique subsaharienne.

Resumen

Esta investigación compara la disposición para iniciar la escuela y las experiencias familiares entre hijos de familias de refugiados, y el aprendizaje y experiencias de un grupo de población, en su mayoría rural, y un grupo de población, en su mayoría urbano, en Tanzania. Se seleccionó un total de 150 niños de preescolar (50 en cada grupo) y una versión modificada de la Batería de Preparación Escolar de la Escala de Conceptos Básicos de Bracken – Receptivos (BBCS-R). Adicionalmente, se realizaron entrevistas a los padres de

los niños (15 de cada grupo) para explorar las influencias de factores demográficos, contextos del hogar y de salud, en el aprendizaje temprano de los niños. La preparación para iniciar la escuela del grupo de familias de refugiados fue más alta que la de la población rural, y comparable con las habilidades del grupo de población urbano. Las prácticas en casa, las creencias y expectativas posiblemente influenciaron el hecho de que los niños de familias de refugiados demostraron logros tempranos comparables con aquellos mostrados por las familias urbanas. Los padres de familias de refugiados consideran la educación de sus hijos como una vía para el progreso social. Estos hallazgos resaltan la importancia de promover el aprendizaje temprano y el desarrollo potencial de todos los grupos desfavorecidos en la región subsahariana de África.

Introduction

The early years set the foundation for children's holistic development, and appropriate stimulating experiences are essential during this period for children to reach their full potential (Engle et al., 2007; Heckman, 2011). Children's brains develop very rapidly in the first five years of life, and are influenced positively by effective stimulation through high-quality early childhood education (ECE) (Shonkoff & Phillips, 2000). Current evidence supports investment in pre-primary education, especially for disadvantaged, minority and marginalized groups (Aboud & Hosain, 2010; Weiland & Yoshikawa, 2013), in order that inequalities in learning through the school years can be reduced.

Investing in early childhood education can bring about greater economic returns than investing in other types of formal education (Heckman, 2006, 2011); promote children's development and school readiness (Britto, 2012); and level the playing field for children from disadvantaged groups (Engle et al., 2007; Weiland & Yoshikawa, 2013). Additionally, young children living in conditions of war, disaster, and displacement are at high risk for

developmental difficulties that can follow them throughout their lives (Black et al., 2016; Janus et al., 2014).

Disparities in Children's Early Development and Learning

Research has consistently indicated that children from socially disadvantaged and immigrant backgrounds are less prepared for primary school, and more likely to be left out of any formal ECE programs than other children (Engle et al., 2007; Janus et al., 2014).

Educational reports from sub-Saharan regions indicate that pre-primary enrolment rates among children aged from 5 to 6 years is about 56%, and that large disparities exist in school readiness, across and within sub-Saharan African countries (UNESCO, 2016).

Investing in pre-primary education, especially for children from disadvantaged groups, has been found to be an effective means of remediating early learning deficits, fostering children's development, and reducing poverty and inequality (Atinc & Gustafsson-Wright, 2013; Weiland & Yoshikawa, 2013). While there is growing evidence about the role of pre-primary education on naturalized refugees in western societies (Henrich et al., 2010), little is known about these children from low-and-middle-income sub-Saharan countries which are home to more than 20 million refugee children.

Children's School Readiness and Home Environments

Home learning environments markedly influence children's development and learning (Aboud & Hosain, 2010; Lau, Li & Rao, 2011). However, the strength and magnitude of the relationship may not be the same across contexts and cultures (OECD, 2004). Home learning environments may include parental expectations and beliefs towards education, attitudes, availability and exposure to print materials, parental involvement in academic-related activities at home, and children's first language spoken at home (Lau et al., 2011). However,

in the context of this study, other aspects of the home environment will also be explored that include children's health and regular health practices at home.

In this study, it is necessary to broadly define the home learning environment because in Tanzania children's learning experiences are characterized by relatively large urbanicity and gender divides (Kafle & Jolliffe, 2015). Better learning outcomes have been associated with enriched home environments in Tanzania (Uwezo, 2015). It is therefore, imperative to understand which aspects of the home environment affect different learning outcomes for children and which factors most critically determine academic outcomes among rural and immigrant children attending schools in Tanzania with limited educational resources.

Family socio-economic status (SES) has been associated with children's cognitive and language development (Malmberg, Mwaura & Sylva, 2011). Children from lower SES families tend to demonstrate poorer cognitive and language development. Empirical evidence indicates that higher family SES leads to increased resources available in the home and opportunities for child development (Kafle & Jolliffe, 2015).

Parental education has also been described as the most important predictor of children's school readiness, with maternal education being the most important (Malmberg et al., 2011; Sammons et al, 2004). Parents from lower SES groups are said to invest less in their children's development and learning and use less appropriate parenting strategies, which ultimately leads to disparities in child development (Ip et al., 2016). Higher SES families spend more time than their lower SES counterparts reading and storytelling (Bradley & Corwyn, 2002), parents' engage more in children's play-related activities (Nelson & Sheridan, 2010), and spend more time on children's academic-related activities (Lau et al., 2011).

Contexts and Civil Status of Naturalized Refugees in Tanzania

To understand the complex, multi-dimensional educational challenges in children's development, it is necessary to understand diversity across contexts (Henrich et al., 2010). Indeed, some of the educational challenges for disadvantaged and minority children are context-specific, and addressing their needs requires specific knowledge (Rao et al., 2012). There has been a dearth of research on naturalized refugee children as a distinctive immigrant group in sub-Saharan Africa. Thus, very little is known about the educational needs and practices of this minority and mostly disadvantaged immigrant group. To bridge this gap, this research compares the school readiness of naturalized refugee children to that of rural and urban majority population groups in Tanzania.

For the past fifty years, Tanzania has been a safe haven for almost two million refugees who fled their countries for political or economic reasons, or because of civil war (Ministry of Home Affairs (MoH), 2014; UNHCR, 2013). Most come from neighboring countries, such as Burundi, the Democratic Republic of Congo (formerly Zaire), Rwanda, and Somalia. The first wave of refugees, commonly known as "the first case-load," came to Tanzania in 1972 (Center for the Study of Forced Migration - CSFM) 2008; UNHCR, 2012). This group was initially settled in different parts of the Kigoma region, especially in border villages along the towns of Kigoma and Kasulu. About two-thirds of these refugees were later moved to Ulyankulu, Mishamo, and Katumba settlement areas in the Tabora and Katavi regions, while the rest of the refugees remained in villages among the local majority, as "self-settled refugees" (CSFM, 2008)

By 2010, the first case-load refugee population had risen from 150,000 to about 240,000, while the self-settled population had grown from about 55,000 to 90,000 (UNHCR, 2013, 2014), some 72% of whom were born in Tanzania (MoH, 2014). A distinctive feature of the self-settled refugees was that they did not receive any kind of assistance from the

UNHCR, apart from support for their educational needs. This was financed through the government of Tanzania (Ongpin, 2008, UNHCR, 2014). The second wave of refugees (or second case-load) came to Tanzania throughout the last decade of the 20th century, and was settled in camps in north-western Tanzania (UNHCR, 2014). However, some illegally moved from those refugee camps to urban areas across Tanzania and beyond (Chaulia, 2003; CSFM, 2008).

By 2005, peace and stability had been officially restored in almost all the neighboring countries of Tanzania that had experienced socio-political upheaval, and the second case-load was repatriated, or resettled in a third country (CSFM, 2008). In 2007, Tanzania announced its readiness to naturalize those who wanted to stay (CSFM, 2008). However, the 1972 self-settled refugees were not included in this program until 2010, when the government resolved their civil status by naturalizing them (Chaulia, 2003; MoH, 2014; UNHCR, 2012, 2014). This study focuses on how the current educational policy in Tanzania addresses the educational needs of children from the first case-load of self-settled naturalized refugees.

Research Questions

This study sought to answer the following research questions:

- 1) Are there differences in school readiness between children of naturalized refugees and those of the urban and rural local majority populations in Tanzania?
- 2) How do differences in family SES and home environments among the three groups influence children's school preparedness?

It is hypothesized that children from local majority groups, regardless of their urban status, would demonstrate higher school readiness than naturalized refugee children, because of their citizenship status and socio-economic advantages.

Methods

Sample Selection

About 40% of Tanzania's self-settled naturalized refugee population are in Kigoma region (National Bureau of Statistics (NBS), 2012). This region was purposively selected, specifically the Kasulu and Buhigwe districts. Kasulu was selected because it is the urban center closest to the naturalized refugee population, while Buhigwe was selected for its high population of naturalized rural refugees' population. The quality of services was assessed in the selected schools to control broadly for school quality, and to ensure comparability of educational services provided to children from the three groups (naturalized refugees, rural majority population, and urban majority population).

Approximately 12 pre-primary schools (4 schools who enrolled children from each group in this study) were initially administered the Early Childhood Environment Rating Scale – Revised (ECERS-R, Harms et al., 2005) to broadly control for the quality of pre-primary education across groups. Three pre-primary classes (one representing each population group in the research) with comparable quality of educational services were then selected. Participants from each pre-primary class were then randomly selected to participate in the research. A total of 150 children (76 boys and 74 girls), aged between 5 to 6 years, were selected. Additionally, there were also 45 parents, (15 naturalized refugees, 15 rural majority population group, 15 urban majority population group) interviewed in individual sessions. Selection criteria for the parents included: (i) not currently serving on the School Committee - to minimize personal biases; (ii) member of the relevant population group; and (iii) in the case of the naturalized refugees, having children who were the first generation after naturalization.

Measures

School Readiness

The school readiness of the 150 children selected was assessed using a modified version of the School Readiness Composite (SRC) of the Bracken's Basic Concept Scale – Receptive (BBCS-R) with the sub-tests of colors, numbers/counting, sizes/comparison, shapes, and direction/position. This tool has been used for child assessments in other low and middle-income countries (Rao et al., 2013). The first author, in consultation with local pre-primary education expert and teachers modified the SRC to reflect the context of this study. The modification involved contextualizing and/or substituting some items (e.g., shapes, colors, pictures of animals, flowers, physical features such as rivers and buildings) to fit into the mental schema of the typical Tanzanian rural/urban child.

For colors, three out of 10 items were redrawn by hand. The blobs of yellow, brown, and orange were replaced with drawings of a ripe yellow banana, cup of brown coffee, and a half an orange, to fit the mental schema of a rural child in sub-Saharan Africa. Answers were scored as either NR (no-response), 1 (correct response), or 0 (incorrect response) for all subtests. In terms of letters, the Tanzanian pre-primary curriculum requires that vowels and consonants be taught individually, so the first author redrew these on separate pieces of paper, before administering the test. The X and Q consonants do not exist in Kiswahili alphabets, and were replaced in the original list with C and V respectively.

For numbers/counting items were slightly changed to reflect the needs of the Tanzanian pre-primary curriculum, which requires that pre-primary pupils be taught number concepts and counting to 20; therefore, numbers beyond 20 were omitted, and/or replaced with subsequent tens (30 instead of 27, 50 for 53, 90 for 95, and 40 for 41). On the subtest of sizes/comparison, five of the 22 pictures were redrawn to reflect the children's physical environmental experiences. For example, a long wall was replaced with a long river; a deep

well with a deep hand-dug hole, oval and pyramid shapes with hand-drawn pictures of an egg and a hut respectively. A tall fence was replaced with a hand-drawn tall mango tree.

Contextualizing a global measure to meet the needs of a study conducted in a specific socio-cultural context is a common practice of pre-primary education scholars (Aboud, 2006; Mwaura et al., 2008). The standard instructions for administration and scoring were translated into Kiswahili, and independently back-translated by two local experts with experience in both pre-primary education and English-Kiswahili linguistics. There were no major discrepancies between the original and back-translated versions.

Family Characteristics and the Home Environment

A modified version of the Parents' Questionnaire developed by Rao, and colleagues (2013) was used to collect information related to pupils' backgrounds and home environments. Specifically, the interview focused on socio-demographic information - gender, home address, refugee status, language spoken at home; parents' highest level of education, and number of years lived in the area. Family SES was assessed by questions focusing on ownership of assets considered basic for survival in the context of developing countries (e.g., number of people in the home, ownership of bicycle, land, radio, and livestock). The family home learning environment focused on the frequency of parent-child interactions, children's health, and regular health and nutrition habits.

Nevertheless, the interview was not strictly structured to focus on the above information, but was modified to allow follow-up questions if appropriate, and field notes were generated for qualitative analysis. The age at entry to pre-primary in Tanzania is between 5 and 7 years, depending on the geographical location (urban or rural). About 40% of rural children in Tanzania are not legally registered and have no birth certificate (NBS, 2012). Hence, parents may not know the precise date of birth of their child. Information on child age was obtained from school records that did not indicate date and month of birth.

The first author coded the qualitative field notes to categorize patterns and differences in family SES and home environments of the children from the three groups. Interview data were qualitatively analyzed using an approach suggested by Miles and Huberman (1994) - data reduction, coding, and description to develop themes and sub-themes. To ascertain inter-rater reliability, 30% of the follow-up field notes were independently coded by two enumerators and inter-rater reliability was calculated by percentage of agreement among the three raters. At the end of this process, 90% consensus agreement was reached.

Procedure

Two enumerators with Bachelor of Education degrees, specializing in pre-primary education, were recruited and trained by the first author for 10 working days on the assessment and interviews procedures. Practical training was conducted at a nearby pre-primary school, whose pupils were from the urban majority group. Enumerators were observed closely and monitored throughout the data collection process.

During data collection, the first author and enumerators spent almost eight weeks with each group, getting used to the local environment and establishing rapport with the respondents, before the actual data collection. The first author personally spent three to four hours with each family to collect home-environment-related data, as most rural populations in north-western Tanzania, where this study was conducted, are not accustomed to researchers. Interactions with “strangers” are very minimal, and citizenship and related topics are very delicate and sensitive issues that are not discussed openly, because there have been occasional deportations of illegal immigrants. It was therefore necessary to spend enough time with children’s families to establish a level of mutual trust that allowed collection of authentic and reliable data.

Ethical Issues and Parental Consent

Ethical clearance was obtained from Human Research Ethics Committee of the University of Hong Kong where the authors were attached. The first author also had to request an introductory letter from Tanzania's Ministry of Education, and permission from districts, wards and village executive officers. Finally, the first author had to consult school authorities to obtain parents' consent to include their children in the study. Confidentiality was observed and unauthorized person had no access to the collected data.

Results

The results of this research are reported in two sections. In the first section, group and gender differences between the three population groups (naturalized refugees, rural majority, and urban majority) in school readiness are reported. In the second section, descriptive quantitative and qualitative information about families is reported drawn from the interviews with 45 parents (15 parents per population group) who had at least two registered children in a given school.

School Readiness Skills and Differences by Population Group

To identify differences by population group and gender on children's school readiness, as measured by the School Readiness Composite (SRC) score of the Bracken Basic Concept – Receptive (BBCS-R), a two-way ANOVA was conducted, with three groups (*naturalized refugees, rural, and urban majority*) and gender (*male and female*), as between subject variables. Means and standard deviations for each population group are reported in Table 1.

There were significant main effects for Gender ($F(1, 144) = 108.05, p = 0.012, d = 0.592$). Follow-up tests indicated that naturalized refugees ($M = 35.44, SD = 13.4$) performed significantly better than rural majority students ($M = 25.4, SD = 12.62$) on the SRC. Boys from the urban majority group ($M = 47.28, SD = 11.95$) demonstrated significantly higher

school readiness than all other gender groups, Girls from the naturalized refugee group ($M=27.33$ $SD=11.78$) outperformed girls from other groups.

< Insert Table 1 >

Child and Family Socio-Demographic Characteristics and Home Experiences

In this section, descriptive quantitative and qualitative information reported by families (15 families from each population group) about socio-demographics, health and nutrition, and family home experiences for the children are reported.

Children's first language across population groups

In Tanzania, Kiswahili is a medium of instruction in all public pre-primary and primary schools. Though widely spoken, not every Tanzania speaks Kiswahili as a first language. About 71% of all children in this research spoke non-Kiswahili languages at home and only about 11% of all children in the study were native Kiswahili speakers; and 18% of all children were multi-lingual (spoke Kiswahili and at least two vernacular languages). These findings are presented in Figure 1.

Most of the naturalized refugee children (67%) were bilingual and reported using Kiswahili during class sessions and another vernacular language at home, although significant numbers (34%) were multilingual and used Kiswahili and two other vernacular languages. For the urban and rural majority population groups, 86% of children were either monolingual or bilingual and spoke a vernacular language and/or Kiswahili.

<Figure 1>

Family size

The average family size in Kigoma varied across groups. In urban areas, the average family size was 5 members (usually 2 parents and 3 children). Among naturalized refugees,

the average family size was 7 people (usually 2 parents, 4 children and 1 senior member). Among rural majority it was 9 members (usually 2 parents, 5 children and 2 senior members).

Parental education

As reported in Table 2, parents from the urban majority group were more educated overall than parents from the other two groups. All mothers and fathers in this group had at least primary education and some of the parents had education qualifications beyond secondary school. Parents from the rural majority population group, were the least educated group overall with 33% of mothers and 20% of fathers having no formal schooling, whereas for naturalized refugee parents, these percentages were 20% for mothers and 20% for fathers.

< Insert Table 2 >

Family assets

The nature of the assets held by families are reported in Table 3. The urban majority families had more overall assets than either of the other two groups and the naturalized refugee families were found to be having relatively more assets than the rural majority group. However, 93% of naturalized refugee parents and 87% of rural majority parents reported owning a house, compared to 73% in the urban areas. Given the pervasive poverty in Tanzania, this could be attributed to the high cost of buying or building houses in urban areas. All participating families in the rural areas (naturalized refugees and rural majority) owned agricultural land, averaging about five hectares for the rural majority, and nine hectares for naturalized refugee families. Owning agricultural land is relatively common for rural families, as farming is a key economic activity. Urban majority parents (67%) were more likely to have a bank account, compared to 60% of naturalized refugee families and 20% of rural majority families.

< Insert Table 3 >

Parent-facilitated health practices

Parents were asked to report on children's health, including vaccinations, regular medical check-ups and daily teeth-brushing (see Table 4). Only 53% of children in the rural majority had received immunizations; whereas 67% of children of naturalized refugees and 87% of urban majority children had been immunized. Few of the children in rural areas (both naturalized refugees and rural majority) had received health checks for hearing, speech and vision. With respect to daily brushing of teeth, most children in the naturalized refugee and urban majority groups brushed their teeth daily while the percentage was lower for rural majority children.

< Insert Table 4 >

Child-related hygiene and nutrition practices

Children from all three social groups did not always wash hands after toilet use nor before meals without adult direction (see Table 4). For rural majority families, only 13% of parents indicated "most times / always" washed their hands after toilet use or before meals. Poor hygiene practices may jeopardize children's health and development. Perhaps this is one of reason for occasional outbreak of airborne and hand-borne diseases such as cholera in rural Tanzania (NBS, 2012).

Findings indicate that more urban majority children (40%) ate vegetables (most times / often) compared to naturalized refugee children (20%) and rural majority children (13%). Eating vegetables is uncommon practice in rural areas, as most families do not have many food choices. Perhaps this is one of the reasons for the high malnutrition facing many rural children in sub-Saharan Africa (UNICEF, 2015).

Family engagement in home learning activities

Parents were asked whether any adult (mother, father, other family member above 15-years of age) had been involved in learning activities with either or both target children at primary school in the past three days (Yes, No). The selected learning activities were those considered culturally-relevant and essential for learning in a rural context. These activities included storytelling, singing, reading children's books, playing games, taking the child outside the home, naming, drawing, and counting. From this information, it was possible to calculate the mean and standard deviation, as well as median for how frequently mothers, fathers, or another family member had engaged with the child in these activities across the last three days.

As indicated on Table 5, findings show that naturalized refugee parents; especially mothers were more highly involved in home learning activities (Mean for mothers = 4.87, SD = .56) than rural majority mothers parents (Mean = 2.67; SD = 0.63) or urban majority mothers (Mean = 3.67; SD = 0.72). Rural majority children were more likely to be supported by "other family members" (Mean = 3.43; SD = 0.67), for example senior members of the extended family who potentially provided important supervision for children and is common role in extended families where this study was conducted.

< Insert Table 5 >

Work and Family Roles for Mothers reported across the Population Groups

There were distinctive differences across the population groups with respect to women's work and family roles. In the urban majority group, women were independent and more highly educated with some having professional roles. However, it seemed that mothers in this group did not own or have much control over the family resources. In the rural majority group, women were mostly housewives, in the Tanzanian context, tasked with

taking care of the children while the men owned and controlled the family's property (e.g., land, house, and livestock).

In contrast, naturalized refugee mothers contributed to their family's wealth and assets through work outside the home. Mothers seem to have more influence on the management of the family's wealth. The naturalized refugee parents were African of Bantu ancestry; while Bantu society is not typically matrilineal, per se, women are nonetheless highly regarded. Though not considered the heads of their respective households, women were equal breadwinners in providing for the family's daily needs and by managing the household resources. A parent from the naturalized refugee group reported that: "*Struggles to better our lives require joint efforts. However, when we sell coffee or other cash crops, I ... keep the money and allocate the budget myself.*" A father from this group similarly revealed that: "*My wife manages our kiosk (a small shop) because I think women are business geniuses and she is more careful with expenditures than me.*"

With respect to education, the interviews revealed that urban parents (especially mothers) held education in high regard, and used their resources to support their children's learning. Parents from the rural majority group seemed more likely to view sending their children to school as just another *compulsory government program* with which they had to comply, or face imprisonment. A parent from this group said, "*I do not want more troubles with either school principals or government officers. So, my son occasionally goes to school, but sometimes he has to look after my cows and goats.*" Among naturalized refugee parents, educating children was regarded as: (a) an effective means out of poverty; (b) a stepping stone up the social ladder; or (c) a means of protecting them from recruitment as child-soldiers by rebel groups from their former home countries. Education and business skills were considered the "*best inheritance*" to give to their children. One mother reported that:

“Tanzanian citizenship comes with so many opportunities. I fought in the rebel groups at the age of 12, I don’t want my daughters to follow the same pattern, I pray and work hard every day to keep them in school so that when they are grown-up they will be able to live in big cities like Dodoma or Dar es Salaam, working in the government offices or running their own businesses”

Discussion

The objectives of this study were to examine whether there were differences in school readiness between children from a naturalized refugee group of families and the urban and rural local majority populations in Tanzania; and to explore the nature of differences in the families by socio-economic circumstances and home practices that could have an influence on the health and learning environments that children might experience in their home

Differences in School Readiness across Groups

Based on existing research, it was hypothesized that naturalized refugee children might be less prepared for school than rural and urban majority population children. Contrary to the hypothesis, however, the naturalized refugee children demonstrated stronger school preparedness skills than the rural majority population students. While urban pre-primary schools in low and middle-income countries are likely to have more educational resources than rural pre-primary schools (UNESCO, 2015; Uwezo, 2014), children from the urban majority population group did not show significantly higher preparedness for school than the other two groups.

These findings are different from the findings reported by Lewin and Sabates (2012) and RTI International (2014) who found that more resourced and advantaged urban pupils in the sub-Saharan region outperformed rural students on various academic assessments. These findings seem to suggest that, apart from family SES, there are other factors that contributed

to naturalized refugee children to demonstrate comparable school preparedness to that of more advantaged urban majority children. However, this study found that the urban majority significantly outperformed rural majority children. This finding is consistent with other studies from this region (EQUIP-Tanzania, 2015; Rose & Al Samarrai, 2001; Uwezo, 2015).

This research identified gender differences in school preparedness across groups. Boys did better than girls in all groups. The difference was particularly evident for the urban majority population. The gender differences could be due to African socio-cultural beliefs and practices in which, given the choice of whom to send to school, parents would rather send boys than girls (Kassahun & Kedir, 2010). It is also important to note that girls in sub-Saharan Africa (including Tanzania), regardless of their age, do have to help with household chores after school (Lewin & Sabates 2012; Matafwali & Nunsaka, 2011) that leaves them less time to revise their school work or do homework.

Role of the home and family environments on children's school readiness

Naturalized refugee parents appeared to provide supportive home-learning environments for their children. Our findings imply that, in low and middle-income countries in which qualified pre-primary teachers are in short supply, a supportive home environment can make a difference to children's development and learning (Black et al., 2016; Lau et al., 2011; Reardon & Portilla, 2016), with important effects for children from immigrant and refugee backgrounds (Epstein, 2001; Kuch, 2016).

Comparatively, the children from the urban majority population group had more educated, professional and richer parents than did the naturalized refugees. Nevertheless, the children of naturalized refugee did as well as educationally than the more highly resourced urban children. This suggests that socio-contextual practices and parental beliefs are important. The parent interviews with naturalized refugee group revealed that such family

resources were managed by mothers and mothers were motivated to highly support their children's education and general health and wellbeing.

Conclusions

This study focused on the magnitude of disparities among three population groups in Tanzania. While naturalized refugee children performed well on the school readiness measure, the scope of the research did not enable the researchers to collect more systematic quantitative and/or qualitative data that could explore in more depth parental aspirations, values, and parental practices in supporting early learning and parent engagement in school activities. In Tanzania, pre-primary education is a downward extension of primary education, and the quality of services provided to young children is relatively low. Thus, merely being of age for primary schooling does not guarantee that pre-primary children will be sufficiently prepared for school learning when they begin Grade 1. As one parent in this study reported, *“We see children’s legs trotting to school every morning, however we (parents) do not know whether their minds are in school and learning, or roaming somewhere else.”* Further research is needed to understand in more depth, the nature of family values and the expectations that parents hold for their children’s education within, and across, population groups that were the focus of this research. This may be important when children begin school but also as children move through their primary education.

References

- About, F. (2006). Evaluation of an early childhood preschool program in rural Bangladesh. *Early Childhood Research Quarterly*, 21: 46-60.
- About, F., and Hosain, K. (2010). The impact of pre-primary school on primary school achievement in Bangladesh. *Early Childhood Research Quarterly*, 26: 237-246.
- Atinc, T. M. and Gustafsson-Wright, E. (2013). *Early childhood development: The promise, the problem, and the path forward*, The Brookings' Centre for Universal Education. Retrieved from: <https://www.brookings.edu/articles/early-childhood-development-the-promise-the-problem-and-the-path-forward>
- Black, M. M., Walker, S.P., Fernald, L.H., Andersen, C.T., Digirolamo, A.M., Lu, C., McCoy, D.C., Fink, G., Shawar, Y.R., Shiffman, J., Devercelli, A.E., Wodon, Q.T., Vargas-Baron, E. and Grantham-McGregor, S. (2016) Early childhood development coming of age: science through the life course. *The Lancet*, 1, 1-14.
- Bracken, B. A. (2007) *Bracken Basic Concept Scale—Receptive, 3rd Edition*, San Antonio, TX: Harcourt.
- Bradley, R. H. and Corwyn, R. F. (2002). Socioeconomic status and child development, *Annual Review of Psychology*, 53: 371-399.
- Britto, P.R. (2012) *School readiness: A conceptual framework*, New York: UNICEF publication.
- Center for the Study of Forced Migration (CSFM) (2008) *Citizenship and Forced Migration in the Great Lakes Region. Working Paper No. 1*. Dar es Salaam, Tanzania: University of Dar es Salaam Press.
- Chaulia, S. S. (2003) The politics of refugee hosting in Tanzania: From open door to unsustainability, insecurity and receding receptivity, *Journal of Refugee Studies*, 16(2), 147-166.

- Engle, P. L., Black, M. M., Behrman, J. R., DeMello, M. C., Gertler, P. J., and Kapiriri, L. (2007) Strategies to avoid the loss of developmental potential in more than 200 million children in the developing world, *The Lancet*, 369, 229-242.
- Epstein, J.L. (2001)*School, family, and community partnerships: preparing educators and improving schools*, Oxford, United Kingdom: Westview press.
- EQUIP-Tanzania, (2015).*Briefing Note 2: Early grade pupil learning in some of the most disadvantaged districts in Tanzania, Country report*, Dar es Salaam: Oxford Policy Management.
- Harms, T., Clifford, R.M., and Cryer, D. (2005).*Early Childhood Environment Rating Scale— Revised*, New York: Teachers College Press.
- Heckman, J. J. (2006) Investing in Disadvantaged Young Children is an Economically Efficient Policy, Paper Presented at the Committee for Economic Development/The Pew Charitable Trusts/PNC Financial Services Group Forum on “*Building the Economic Case for Investing in Preschool*” New York. January 2006, Retrieved from http://www.ced.org/docs/report/report_2006heckman.pdf.
- Heckman, J. J. (2011). The economics of inequality: The value of early childhood education, *American Education*, 35(1): 31-35.
- Henrich, J., Heine, S. J., and Norenzayan, A. (2010). Most people are not WEIRD, *Nature*, 466(7302), 29-29.
- Ip, P., Rao, N., Bacon-Shone, J., Li, S.L., Ho, F.K., Chow, C. and Jiang, F. (2016).Socioeconomic gradients in school readiness of Chinese preschool children: The mediating role of family processes and kindergarten quality, *Early Childhood Research Quarterly*, 35: 111-123.

- Janus, M., Brinkman, S., Duku, E., Dunkelberg, E., Marino, E., and Chianca, T. (2014). Socio-emotional development and its correlates among 5-year-old children in Peru and Brazil, *Journal of Latino and Latin-American Studies*, 6(1): 40–53.
- Kafle, K. and Jolliffe, D. (2015, July). *Effects of asset ownership on child health indicators and educational performance in Tanzania*. Presentation for the agricultural and applied economics association (WAEA) Annual Meeting, San Francisco, CA.
- Kassahun, T. and Kedir, B. (2006). Girls' performance in mathematics in upper primary schools of Addis Ababa. *Indian Journal of Gender Studies*, 13(3): 402-424.
- Kuch, A. (2016) Naturalization of Burundian refugees in Tanzania: The debates on local integration and the meaning of citizenship revisited, *Journal of Refugee Studies*, 1-20.
- Lau, E. Y. H., Li, H. and Rao, N. (2011). Parental involvement and children's readiness for school in China, *Educational Research*, 53(1): 95-113.
- Lewin, K.M. and Sabates, R. (2012). Who gets what? Is improved access to basic education pro-poor in sub-Saharan Africa? *International Journal of Educational Development*, 32: 517-528.
- Malmberg, L.E., Mwaura, P., and Sylva, K. (2011). Effects of pre-school interventions on cognitive development among East African preschool children: A flexible time-coded growth model. *Early Childhood Research Quarterly*, 26: 124-133
- Matafwali, B. and Nunsaka, E. (2011). An evaluation of community-based early childhood centres in Zambia. A case of four selected districts, *Journal of Early Childhood Development*, 5: 109-140.
- Miles, M. B. and Huberman, A. M. (1994). *Qualitative data analysis*, London: Sage Publications.
- Ministry of Home Affairs. (2014) *Refugees Status and Statistics*. Retrieved from: <http://www.moha.go.tz/index.php/refugees-service/refugees-statistics>

- Mwaura, P.A.M., Sylva, K., and Malmberg, L.E. (2008) Evaluating the Madrasa preschool programme in East Africa: a quasi-experimental study, *International Journal of Early Years Education*, 16(3): 2337-255
- National Bureau of Statistics (NBS). (2012). *Tanzania basic demographic and socio-economic profile*, Dar es Salaam, Tanzania: Tanzania Government Press.
- Nelson, C. A., and Sheridan, M. A. (2010). Lessons from neuroscience research for understanding causal links between family and neighborhood characteristics and educational outcomes, In G. J. Duncan, & R. J. Murnane (Eds.), *Whiter opportunity? Rising inequality, schools, and children's life chances*, (pp. 27–46), New York: Russell Sage Foundation.
- Organisation of Economic Cooperation and Development (OECD) (2004). *Messages from the Programme for International Student Assessment*, Paris: OECD Publications.
- Ongpin, P. (2008). Refugees in Tanzania - Asset or Burden? *Journal of Development and Social Transformation*, 5: 13-23.
- Rao, N., Sun, J., Pearson, V., Pearson, E., Liu, H., Conostas, M.A. and Engle, P.L. (2012). Is something better than nothing? Evaluation of early childhood programs in Cambodia. *Child Development*, 83(3): 864-876.
- Rao, N., Sun, J., Ng, S.S.N., Ma, K., Belcher, Y., Lee, D., Lau, G. L. C., Zhang, L., Chow, C.B., and Ip, P. (2013). The Hong Kong early child development scale: A validation study. *Child Indicators Research*, 6(1): 115-135.
- Reardon, S. F. and Portilla, X. A. (2016). Recent trends in income, racial, and ethnic school readiness gaps at kindergarten entry, *AERA Open*, 2(3): 1-18.
- Rose, P. and Al-Samarrai, S. (2001). Household constraints on schooling by gender: empirical evidence from Ethiopia. *Comparative Education Review*, 45(1), 36-63.

- RTI International, (2014)*National baseline assessment for the 3rs (reading, writing, and arithmetic) using EGRA, EGMA, and SSME in Tanzania*. Dar Es Salaam, Tanzania: RTI International.
- Sammons, P., Elliot, K., Sylva, K., Melhuish, E. C., Siraj-Blatchford, I., and Taggart, B. (2004).The impact of pre-school on young children’s cognitive attainments at entry to reception, *British Educational Research Journal*, 30, 691–712.
- Shonkoff, J.P. and Phillips, D. (2000). *From neurons to neighborhood: the science of early child development*, Washington DC: National Academy Press.
- UNESCO (2007).*EFA global monitoring report: strong foundations - early childhood care and education*. Paris: UNESCO Publishing. Retrieved from:
<http://unesdoc.unesco.org/images/0014/001477/147794e.pdf>.
- UNESCO (2015).*EFA global monitoring report, 2000-2015: achievements and challenges*. Paris: UNESCO Publishing. Retrieved from:
<http://unesdoc.unesco.org/images/0023/002322/232205e.pdf>
- UNESCO (2016). *EFA global education monitoring report: education for people and planet-creating sustainable futures for all*. Paris: UNESCO Publishing. Retrieved from:
<http://unesdoc.unesco.org/images/0024/002457/245752e.pdf>
- UNHCR. (2012). *Global trend report: Displacement – the new 21st century challenge*. New York: UNHCR publishing. Retrieved from:
http://www.unhcr.org/globaltrends/june2013/UNHCR%20GLOBAL%20TRENDS%202012_V08_web.pdf
- UNHCR. (2013). *The labour market integration of resettled refugees: Policy development and evaluation services*. Geneva. Retrieved from:
<http://www.unhcr.org/5273a9e89.pdf>

UNHCR. (2014). *Global trend report: War's human cost*. New York. Retrieved from:

<https://s3.amazonaws.com/unhcrsharedmedia/2013-global>

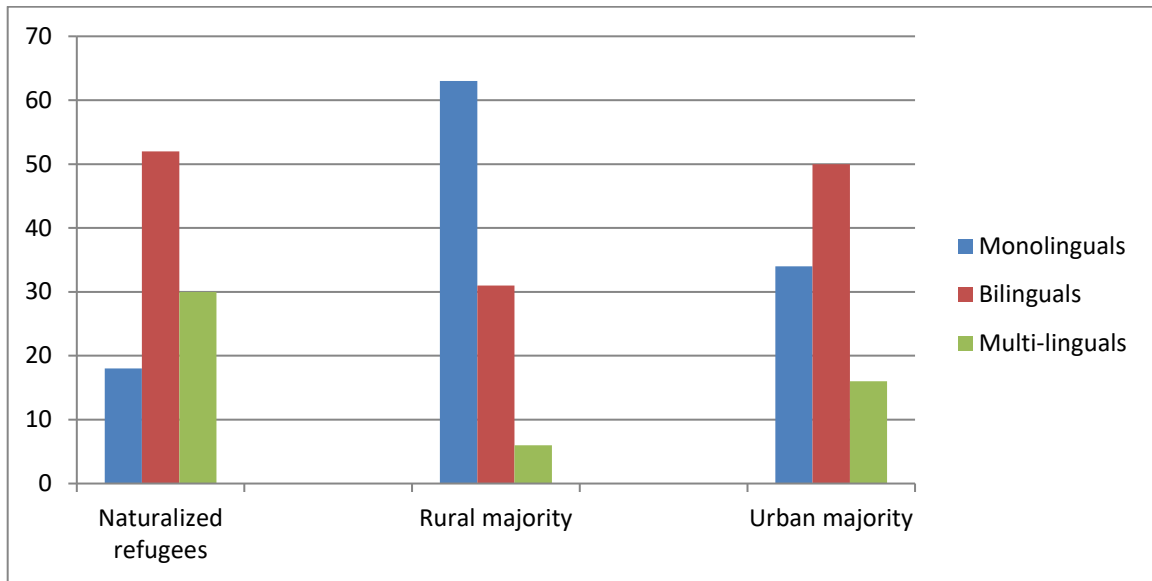
[trends/Global_Trends_report_2013_V07_web_embargo_2014-06-20.pdf](https://s3.amazonaws.com/unhcrsharedmedia/2013-global-trends/Global_Trends_report_2013_V07_web_embargo_2014-06-20.pdf)

Uwezo (2014). *Are our children learning? Literacy and numeracy in Tanzania: annual learning assessment report*. Dar Es Salaam, Tanzania: Uwezo Tanzania. Retrieved from <http://www.uwezo.net/about-us/uwezo-findings>

Uwezo (2015) *Are our children learning? Literacy and numeracy in Tanzania: annual learning assessment report*. Dar Es Salaam, Tanzania: Uwezo Tanzania. Retrieved from <http://www.uwezo.net/about-us/uwezo-findings>

Weiland, C. and Yoshikawa, H. (2013) Impacts of prekindergarten program on children's mathematics, language, literacy, executive function, and emotional skills, *Child Development*, 84(6), 2112-2130.

Figure 1: Number of languages spoken at home by children across population groups



Note: n = 15 for each group

Table 1: School Readiness Competence (SRC): Mean scores for population groups

| | Overall group Mean (SD) | Boys Mean (SD) | Girls Mean (SD) |
|-------------------------|------------------------------------|---------------------------|----------------------------|
| Naturalized refugees | 35.5 (11.8) | 43.6 (11.88) | 27.33 (11.78) |
| Rural majority | 25.4 (12.62) | 34.40 (9.56) | 14.40 (5.12) |
| Urban majority | 36.7 (9.4) | 47.28 (11.95) | 23.42 (7.34) |

Table 2: Parents' formal education experience across population groups

| | Naturalized Refugees | | Rural Majority | | Urban Majority | |
|-----------|----------------------|----------------|----------------|----------------|----------------|----------------|
| | <i>Mothers</i> | <i>Fathers</i> | <i>Mothers</i> | <i>Fathers</i> | <i>Mothers</i> | <i>Fathers</i> |
| | (%) | (%) | (%) | (%) | (%) | (%) |
| None | 20 | 20 | 33 | 20 | 0 | 0 |
| Primary | 67 | 47 | 67 | 47 | 47 | 7 |
| Secondary | 13 | 33 | 0 | 20 | 33 | 47 |
| Dip/Grad | 0 | 0 | 0 | 13 | 33 | 47 |

Note: For each group, n = 15; percentages rounded

Table 3: Specific assets owned by families across population groups

| | Naturalized Refugees (%) | Rural Majority (%) | Urban Majority (%) |
|--------------------|---|-----------------------------------|-----------------------------------|
| Electricity | 7 | 7 | 80 |
| Radio | 100 | 60 | 100 |
| Television | 7 | 0 | 80 |
| Mobile phone | 100 | 93 | 100 |
| Refrigerator | 0 | 0 | 53 |
| Watch | 94 | 60 | 100 |
| Bicycle | 87 | 73 | 87 |
| Motorcycle | 47 | 27 | 67 |
| Animal-drawn cart | 87 | 60 | 100 |
| Car | 7 | 0 | 40 |
| Own a farm | 100 | 100 | 60 |
| Own livestock | 100 | 73 | 80 |
| Own a bank account | 60 | 20 | 67 |
| Own a home | 94 | 87 | 73 |

Note: For each group, n = 15; percentages rounded

Table 4: Parent reported child health and hygiene practices across population groups

| | Natural ized Refugees (%) | Rural Majority (%) | Urban Majority (%) |
|--|--|-----------------------------------|-----------------------------------|
| <i>Child health checks and medical conditions</i> | | | |
| Immunization | 67 | 53 | 67 |
| Regular health check-up | 13 | 7 | 13 |
| Vision checked | 7 | 0 | 33 |
| Hearing checked | 7 | 7 | 27 |
| Speech checked | 7 | 7 | 33 |
| Chronic illness | 13 | 0 | 7 |
| Known allergies | 7 | 20 | 0 |
| Brush teeth everyday | 87 | 60 | 93 |
| <i>Home hygiene /nutrition; percentage indicated as ‘most times’ / ‘always’ on a 5-point scale</i> | | | |
| Wash hands after toilet without adult direction | 53 | 13 | 47 |
| Wash hand before meals | 13 | 13 | 13 |
| Eat vegetables without adult direction | 20 | 13 | 40 |

Note: For each group, n = 15; percentages rounded

Table 5: Family engagement in home learning activities: Number of activities with children in the last 3 days

| | Naturalized Refugees | | | Rural Majority | | | Urban Majority | | |
|--------|----------------------|---------------|---------------------|----------------|---------------|---------------------|----------------|---------------|---------------------|
| | <i>Mother</i> | <i>Father</i> | <i>Other family</i> | <i>Mother</i> | <i>Father</i> | <i>Other family</i> | <i>Mother</i> | <i>Father</i> | <i>Other family</i> |
| Mean | 4.87 | 3.20 | 2.11 | 2.62 | 2.53 | 3.43 | 3.67 | 2.87 | 2.99 |
| (SD) | (0.56) | (0.86) | (0.23) | (0.63) | (0.92) | (0.67) | (0.72) | (1.38) | (0.53) |
| Median | 4 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 2 |

Note: For each group, n = 15; percentages rounded; median is the mid-point of a data distribution when it is ordered from the lowest to highest value.