



Exploring reading habits and academic success in rural Kenya

Florence N. Mugambi

Indiana University-Purdue University Fort Wayne, USA

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Abstract

This study explores the relationship between reading habits and reading materials, and academic success of primary school students in the Ontulili community of Kenya. The study revealed high levels of satisfaction and contentment among the participants with respect to the availability of resources, reading abilities, educational performance, and overall preparedness for further education; yet, the data pointed to severe scarcity of learning materials, low reading skills, poor infrastructure, below average educational performance, and low preparedness for further education. It was concluded that lack of exposure to relevant reading materials, educational resources, and opportunities leads to subtle contentment alongside individual inability to excel as manifested by low test scores in the national examinations. In order to realize academic success in the study area and other comparable communities, well-designed interventions such as promotion of reading across the school curriculum and establishment of fully equipped libraries consistent with the rigors of modern academic demands, must be created.

Keywords

Reading habits, reading materials, reading culture, community libraries, literacy, primary education, rural Kenya

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Introduction

In 2003, Kenya introduced free and compulsory public primary school education, abolished school fees, and started providing textbooks to students for free. As a result, schools experienced an unprecedented surge in enrollments. However, the sudden growth in enrollment was not matched with proportional growth in learning resources. The learning environment in schools remained largely the same or declined and the actual gains in literacy and academic achievement have been minimal across time. Such is the case in Ontulili, according to a review of the results of Kenya Certificate of Primary Education (KCPE) examination for five schools in Ontulili for the years 2005 to 2012 (see Appendix). The yearly mean score for the five schools from 2005 through 2012 out of a possible 500 was as follows: 195.78 (2005), 197.07 (2006), 202.86 (2007), 206.88 (2008), 208.65 (2009), 198.26 (2010), 195.28 (2011), and 207.93 (2012). As the results indicate, the majority of eighth grade students in the study area performed far below average making it almost impossible to be selected to join

high school. KCPE is an annual national examination that is taken at the completion of eight years of primary school in Kenya. Individual KCPE scores are used in selecting eighth grade graduates for high school placement. The KCPE results data was publicly and freely available by school and year, through the Ministry of Education online portal¹ and the same data was obtained from the respective schools. This finding gave the impetus for this study.

This study hypothesized that underdeveloped reading habits and a lack of basic reading skills were key predictors of low scores in the KCPE examination. There are several variables – individual, familial, societal, cultural, and economic – to which the underdeveloped reading habits among primary school-age children in the study area of Ontulili and in rural Kenya in general could be attributed. To understand

Corresponding author:

Florence N. Mugambi, Indiana University-Purdue University Fort Wayne, 2101 E. Coliseum Blvd, Fort Wayne, IN 46805, USA.
Email: ntheta@yahoo.com

this underdevelopment, it is important to look beyond the formal education system and to recognize the broader literacy environment that characterizes the society as a whole (Barton, 1994; Parry, 2009). This environment may include the reading culture; availability of positive role models, career mentors, libraries; and a general culture that prioritizes education over other cultural aspirations.

The objectives of this study were: (1) to investigate the individual, familial, societal, cultural, and economic barriers to proper reading habits among school-age children in the Ontulili community; and (2) to examine how those barriers can be removed.

A review of the literature

As a response to low literacy levels in developing countries and the need to address literacy concerns, the Education for All movement was formed in 1990 at the World Conference on Education for All. The frequent reviews of the movement over the years culminated in the adoption of the Dakar Framework for Action (UNESCO, 2010). The Framework committed governments to achieving quality basic education for all by the year 2015. This commitment led to the now-witnessed expansion of formal education in Africa and other developing countries. Kenya abolished all tuition fees in public primary schools and made it compulsory for all school-age children to attend school. The subsidiary effect of the mass enrollment was a strain on the already limited educational resources. This led to a steady decline in the quality of education and academic performance (Improving Institutions for Pro-Poor Growth, 2009). Test results and other alternative indicators of learning such as ability to read basic text, showed that students were not achieving the standard expected of their grade levels. For example, 25-75 % of children in grades two to four in low-income countries cannot read any words in the first line of a simple, grade-appropriate reading passage (Global Partnership for Education, 2012).

Reading of printed materials, as well as formal education as we know it today, have a relatively short history in Kenya (Chakava, 1996; Parry, 2009). Books and reading were introduced by colonialists and given impetus by the early missionaries but they did not promote reading as something to derive pleasure from (Commeyras and Inyega, 2007). To encourage reading, people were promised rewards and once they achieved the rewards they quit reading since there was nothing more to read for (Chakava, 1982). This attitude of reading for rewards has continued and as a result, the concept of voluntary leisure reading is rare in many Kenyan communities today, yet existing

literature shows that there is a positive relationship among voluntary leisure reading, print exposure, and academic success (Agak, 1995; Elley, 2000; Mol and Bus, 2011).

Reading habits in many Kenyan rural communities and other parts of East Africa are average at best and dismal at worst (Chakava, 1992; Elley, 1992; Mazrui and Mazrui, 1995; Parry, 2009). The fact that Kenya is a multi-ethnic society with hundreds of languages and dialects plays an important role in the poor rating of reading habits. There is scarcity of reading materials in the various languages and dialects for school-age children, students are mostly instructed using the English language which they have not learned yet, and teachers with their students are on their own to sort out the acquisition of the new skills of reading and writing in at least three different languages concurrently (Chakava, 1982; Commeyras and Inyega, 2007; Muthwii, 2004; Ogechi, 2002). Teacher preparedness in language skills is inadequate and curriculums tend to emphasize how to pass national examinations even in the wake of low reading levels (Commeyras and Inyega, 2007; Elley, 2000; Shiundu and Omulando, 1992).

A stable reading culture is recognized as a fundamental factor in quality education, yet studies have shown that many African countries lack the said reading culture (Doiron and Asselin, 2011; Obanya 2003; Magara and Batambuze, 2005). "To develop the culture of reading in a society, it requires knowledge to utilize existing information materials and resources. A reading culture involves a daily activity as essential as a habit" (Magara and Batambuze, 2005: 35). Schools in rural areas face particular challenges in gaining access to books, and even where books are available, they are usually not enough for all students, and most are textbooks (Arden, 2001; Arua, 2001; Greaney, 1996). Similarly, the low socio-economic status of most families in rural areas makes it difficult to afford reading materials. This scarcity of reading materials means that African children rarely have the opportunity to read for enjoyment or for other non-school purposes, and when they leave school, they enter a nearly bookless culture (Walter, 1996). Family support and family literacy are also major factors in facilitating learning and development of reading habits in children (Commeyras and Ketsitlile, 2013; Smith and Barrett, 2011). Early readers come from homes where adults read to them regularly and where books and reading materials are readily available (Neuman, 2006 as quoted by Debruin-Parecki, 2008; Krolak, 2006).

Yet another factor responsible for low reading habits is the failure to use locally intelligible languages in publishing reading materials. In cases where books and

other reading materials are available, they are hardly written in languages of the intended readers and do not draw upon their daily life experiences (Carnegie Corporation of New York, 2000; Chakava, 1982; Commeyras and Inyega, 2007; Parry, 2009). The reader has to constantly think in their most fluent language in order to make sense of the reading materials. Illustrations and examples provided in most reading materials also hardly relate to the intended readers. Education in the local language is vital especially in the first few years of instruction and children who are required to learn in a language other than their mother tongue score extremely low in national assessments (Perry, 2008; Sampa 2003; Williams, 1996).

All these factors have generated considerable interest towards promotion of reading from various local and international organizations in the hope that a culture of reading will eventually take root, especially in rural communities. For example, The Reading Tent Approach, which began in the 1990s under the auspices of the Rockefeller Foundation, has been used by such national agencies as Egerton University Reading Tent Project, Kenya National Library Services, Kenya Library Association, Maendeleo ya Wanawake, Reading Association of Kenya, Kenyatta University Basic Education Resource Center, and the National Book Development Council of Kenya to promote reading. Yet, there are many far-flung areas that have no access to library services (Makenzi, 2004). To ensure that reading thrives in Africa, concerted action would be required in three main areas, namely, improvement of the social and reading infrastructure, promotion of reading across the school curriculum, and development of reading extension services (Obanya, 2003). The same can still be said of the reading landscape in much of Africa today. As Krashen (2004: 1) recaps:

Evidence for the value of free voluntary reading, or recreational reading, continues to accumulate. In the last few decades, evidence from several areas continues to show that those who do more recreational reading show better development in reading, writing, grammar and vocabulary. These results hold for first and second language acquisition, and for children and adults.

Methods and sample description

This study was conducted in the fall of 2011 in Ontulili Location of Meru County, a rural community in eastern Kenya. The study site was chosen due to its low educational performance and the author's familiarity with the area. The study was approved by the Purdue University Institutional Review Board. A

standardized questionnaire was developed in English and translated into the native language, Kimeru. The questionnaire was used as an interview schedule by the author on first, second, and third grade students, who could hardly read or write. For fourth through eighth grade students, the same questionnaire was distributed to each student participant to complete on their own with guidance from the author. The initial sample size was 200 students. Overall, 171 questionnaires were found to be adequately completed and were included in the sample. Some questionnaires were returned blank or with too little and incoherent information to be of use. The students included 98 girls and 73 boys who ranged in age from six to 17 years.

To obtain the sample, a multi-stage sampling process was used. Five out of seven public primary schools in the location were purposively included in the sample. The initial intention was to include all seven schools, but two of them proved virtually inaccessible for the study. Each of the five schools in the sample had eight grade levels and all eight were included in the study. A total of five students were randomly selected from each grade for all five schools, with a target of 200 respondents. The students were given an opportunity to withdraw from participation if they chose to. As is the practice with all research involving human subjects, the students were also informed that participation was voluntary and that they could stop participation at any time during the interview process without adverse consequences. Once the list of participants was drawn, parents/guardians were contacted for consent.

Upon parental consent and students' assent, the students were asked a range of questions that pertained to their reading habits. These questions focused on how often they read on their own in and outside of school, and the frequency and intensity of such reading sessions. They were also asked questions that measured their attitude towards leisure reading. In addition, they were asked questions pertaining to the ownership of materials that they read. The students were further asked questions to measure how well they associated leisure reading with academic success, as well as questions about their socio-demographic characteristics that included gender, age, and family background, among others. Finally, they were asked about their academic performance, which was used to create the main dependent variable – academic success. This variable was hypothesized to be influenced by the amount of leisure reading. The survey responses were used to create variables that were analyzed using descriptive statistics of the SPSS software. The study combined both quantitative and qualitative methods.

Table 1. Respondents' family structure.

Family support	Percentage of respondents
Both parents and other family (PO)	59.1
Mother and other family (MO)	24.6
Father and other family (FO)	4.7
Grandmother and other family (GO)	8.8
Siblings and other family (SO)	2.3
Other (O)	0.5
Total	100

Data analysis

Students' family support in educational endeavors

Stability of the family and family support are both important in a child's development including educational performance and overall success. Parental involvement has a significant effect on children's achievement and adjustment even after such factors as social class, maternal education, and poverty, have been taken out of the equation between children's aptitudes and their achievement (Desforges and Abouchaar, 2003: 86). As Morrow et al. (1995: 72) points out, parents are the first teachers that children have, and, beginning at birth, children's experiences affect their success in becoming literate individuals. In order to gain an understanding of the students' family support, students were asked to state whom they lived with as their primary guardians. The responses were categorized into five groups as presented in Table 1.

The category PO consisted of a family in which the respondent lived with both parents as the primary guardians; MO consisted of a family structure in which the respondent lived only with the mother; FO was a family structure in which the respondent lived only with the father; GO consisted of a family structure in which the respondent lived only with the grandmother; SO consisted of a family arrangement that had the respondent living with a sibling as the primary guardian although other members of the extended family lived within the homestead. In all, the number of families where the respondent was not living with both parents as the primary guardians was slightly over 40%.

Students' reading obligation

In order to establish the people who may have an active involvement in the educational process of the respondents, the study sought to find out if students were required or at least encouraged to read and if so, by whom. About 93% of the students said they

Table 2. Rank-ordering of reading ability.

Rank	Kimeru	Kiswahili	English
1	18 (11%)	0	1 (1%)
2	49 (29%)	4 (2%)	8 (5%)
3	59 (35%)	14 (8%)	20 (12%)
4	22 (12%)	30 (18%)	74 (42%)
5	23 (13%)	123 (72%)	68 (40%)
Total	171	171	171

were required to read. Out of these, 59% said they were required to read by their teachers; 15% by their mothers; 12% by their grandmothers; 10% by their siblings; and 5% by their fathers. In order to establish the level of collaboration in educational activities, students were asked to state who they read with. About 55% said they read with friends. This was the single most mentioned category of reading partners. Other responses included classmates, teachers, and siblings, but a significant observation was that parents were the least involved as reading-mates, accounting for only 3% of reading partners. Tutors were not a known category of reading partners in the sample. In their review of teaching reading in Kenyan primary schools article, Commeyras and Inyega (2007) discuss information from non-empirical literature that points to the importance of teachers encouraging students to read. In Botswana, interviews with parents revealed that they did not usually read with their children, but children who read at home reportedly did so because their parents encouraged them to do so (Commeyras and Ketsitlile, 2013).

Students' ability to read in local languages

A basic assumption of this study was that students would be more fluent in reading in the language that is used at home. The Kimeru language, which is the mother tongue, is the language spoken at home and sometimes in school, although it is generally not encouraged in school. To find out their ability to read in their spoken languages, students were asked to rank-order their reading ability for the languages they commonly used both at home and at school. They were to use a scale of 1 to 5 where 1 represented no reading ability at all and 5 was the highest reading ability. The languages were Kimeru, which is the mother tongue for the residents in the study area, Kiswahili, which is the national language and sometimes language of instruction in school, and English, which is the official language and language of instruction in schools especially after the fourth grade. The results are presented in Table 2.

According to the results in Table 2, a significant number of students (10.5%) expressed that they had no reading ability in Kimeru. Considering that Kimeru is the mother tongue and the fact that most reading materials come in languages other than Kimeru, it is evident that students develop reading skills depending on availability of and sustained exposure to reading materials and the language in which the materials are published. This finding is also consistent with the fact that there are relatively more reading materials in Kiswahili and English, which further explains the high self-reported ability to read Kiswahili and English. In addition, Kiswahili is used in informal daily conversations especially where there are people who possess a different mother tongue. Piper et al. (2015) explored assessment data for 2000 Kenyan children in two or three languages and found that many children could read English words more easily than words in Kiswahili or their mother tongue. Nevertheless, their reading comprehension was significantly lower in English than in Kiswahili and mother tongue. A similar language scenario has been reported in many other countries and this is attributed to the fact that the local people in those countries perceive English as a higher status language.

Students' ownership of reading materials

It is recognized that reading is enhanced not only by availability of the reading materials, but also by personal ownership of the materials. In a global study of comparative reading scores, countries with high reading scores are those in which learners have greater access to reading material at home, in the community, in libraries, and at school (Elley, 1992).

To find out ownership of such materials, students were asked what type of reading materials they personally owned. Only 30% said they owned anything, if at all. This finding was similar to those of several other studies that have reported a lack of ownership of books and other reading materials by rural families in Africa (e.g. Arua, 2001; Dent and Goodman, 2015; Dent and Yannotta, 2005; Elley, 2000; Walter, 1996) which they refer to as "book famine", "bookless homes", and "a bookless culture." Of the 30%, 69% reported that they owned Bibles, 59% owned textbooks, and 54% owned storybooks. Less than 1% of the respondents reported that they owned newspapers and magazines. These percentages are not mutually exclusive and therefore do not total to 100% because some respondents owned more than one category of reading materials. For those who indicated that they did not own any reading materials, a

follow-up question was asked about where they got their reading materials from. Over 38% reported that they borrowed reading materials from friends while a negligible number reported that they borrowed from their teachers, neighbors or extended family. When the respondents were asked whether there was anything they have wanted to read but had no access to, 62% answered in the affirmative. When they were asked to specify what materials they had desired to read but had no access to, 64.9% singled out the encyclopedia and storybooks. It was not clear why or what encyclopedia, but almost all respondents (98.8%) were aware that reading storybooks could help them perform better in school in some way. Similarly, in their Uganda study, Dent and Yannotta (2005) found that very few families surveyed owned reading materials with the exception of the Bible and the Koran.

Types of materials students read

Once a list of the locally available reading materials was established, students were asked if they read those materials, which included textbooks, storybooks, Bibles, newspapers, and magazines. All the respondents (100%) answered in the affirmative. When they were asked to specify what they read, 99.4% reported that they read textbooks; 95.3% read storybooks; 87.7% read Bibles; and 47.4% read newspapers and magazines. These reading material categories are not mutually exclusive as students read from more than one category. A direct observation on school collections showed that four of the five schools in the study area had no collections of any type at all besides textbooks. Only one school reported having about 100 storybooks, but that could not be verified as the books could not be easily located.

It must be noted that the educational policy requires that students be provided with textbooks, although in many cases there is one copy to be shared among several students. This increases the odds of each student having read a textbook, and explains the high percentage of students who said they had read a textbook. High textbook readership can also be explained by the fact that education seems to be the driving force of literacy in rural areas, as Mathangwane and Arua (2006) note from their study in Botswana. The existing scarcity of books left students reading the few storybooks that were circulating among friends, and the downside of this was that on most occasions, the storybooks were not age-, interest- or reading level-appropriate. Cases of eighth grade students reading third and fourth grade level books were very common.

Students' after school reading routines

A tremendous amount of reading takes place after school, and this includes not only leisure reading but also homework assignments and other school-related reading activities. To find out how the respondents spent their time after school and other free time, they were asked to describe how they spent such time. Three major response categories emerged. They included household chores, reading, and playing. About 82% of the students indicated that they spent much of their free time doing chores that included washing dishes, fetching water, fetching firewood, farm activities, cooking, looking after animals, and washing clothes. Another 59% said they spent a part of their free time reading; while those who mentioned play as one of their free time activity accounted for 30%. These response categories were not mutually exclusive as respondents mentioned more than one category, so the total of the percentages exceeds 100%.

Studies exploring the impact of reading frequency to academic achievement have concluded that the amount of reading can explain differences in students' academic achievement (Dent and Goodman, 2015). To establish the routine and frequency of their reading, the participants were asked to estimate on average how many days in a week they read. About 21% said they read every day, 14% read six days in a week, 30% read five days in a week, 13% read for four days in a week, and 19% read for about three days a week. To find out the intensity of reading per session, the participants were asked to estimate how long they read per day. In response 13% said they read for less than 30 minutes, 27% said they read for about an hour, and 49% said they read for over two hours.

Homework help and library use

High test scores and ultimate academic success co-vary with how seriously homework is taken and success in homework is largely dependent on availability of help as needed. Being able to study or read in the home enhances learning, while from the many forms of parental involvement, the 'at-home' relationships and modelling of aspirations play the most important part in impact on school outcomes (Desforges and Abouchaar, 2003; Smith and Barrett, 2011). To establish availability of help for homework, the respondents were asked to state who helped them with the homework. Friends and siblings jointly accounted for 48% of responses while parents accounted for 23% and teachers 16%. Another 23% had no help at home.

Several studies, as reviewed by Dent and Goodman (2015), have found that libraries positively impact



Figure 1. Book shelves in the deputy head teacher's office.

academic achievement. Since regular visits to the library bear a direct relationship with learning and especially enhanced reading, the study sought to find out if students indeed visited any libraries by asking them if and how often they visited a library. A majority of them (67%) said they had never been to any library. Out of these, 11% said they did not even know what a library was. All the 33% who said they had visited a library specified that they visited their own school library. When they were asked to describe the library, some said the library consisted of a few shelves inside the deputy head teacher's office while others said it was the cabinet at the corner of their classroom. Yet others said their library was inside the school storage room. This correlation is confirmed by Elley (2000) who reports that in South Africa, school and classroom libraries are rare and most children come from virtually bookless homes. During the fieldwork visit, photographs of the various library conceptions were taken and are reproduced as Figures 1 and 2.

Self-assessment of academic performance

Confidence in one's own ability to meet a challenge has a direct relationship with the odds of succeeding in meeting the challenge. In order to establish the students' confidence in their academic performance, the respondents in this study were asked to rank themselves with respect to the overall class performance and reading ability on a scale of 1 to 5 with 1 being the lowest and 5 the highest. Most students rated themselves very highly with 65% of them believing their ability to be at level 5 while 28% rated themselves at level 4 and another 7% rated themselves at level 3. In reality however, most of the students could



Figure 2. Storybook section of the school library.

barely read texts at their grade level. Furthermore, of the 171 students involved in the study, 41.5% had been held back in a grade at least once. The two major reasons for being held back were low grade scores and inability to demonstrate an adequate reading ability. Other less significant reasons included change from one school to another; congestion in the classrooms thereby necessitating that some students stay back until sitting space was available; and parental decrees whereby parents felt that for their student, taking a year longer in the same grade would enhance test scores. In some cases, parental decision to have the students repeat a grade was prompted by anticipated financial difficulty in supporting the more financially demanding higher grade levels, mostly high school.

Discussion

In this study, attempts were made to find out the relationship between reading habits and availability of reading materials, on one hand, and academic success, on the other. It was hypothesized that underdeveloped reading habits contribute to low academic achievement. The study therefore investigated the students' home and school environments, their study habits, availability of reading materials, and the nature of their interaction with those materials, in order to establish how these factors impact the students' academic success. The study aimed at meeting two main objectives: (1) To investigate the societal, individual, familial, cultural and economic factors that influence reading habits and educational success among school-age children; and (2) To examine how those factors can be improved in order to establish a sustainable culture of reading and enhance academic performance.

The study found that over 40% of the respondents' families did not have both parents present and living with the respondents. Although single-parent families

do not necessarily present a notable challenge to the educational success of a child as long as the present parent or guardian is able to provide the necessary support, the data for this study did not demonstrate that the present parent or guardian was capable of providing all the necessary support. This was especially true as evidenced by the anecdotal confessions of some respondents that the parent or guardian was either not literate enough to help with homework, or was too busy providing for the day-to-day subsistence to find the time for the often low prioritized school activities. Moreover, research has established that the degree of parental involvement is diminished by single parent status (Desforges and Abouchaar, 2003).

The study also found that almost 40% of the respondents were either entirely unable to read in their mother tongue or had a bare minimum ability. While only 13.5% of the entire sample reported that they were fluent readers of their mother tongue, 72% reported fluency in Kiswahili and 40% in English. This finding was consistent with the fact that of the few available reading materials, most were in Kiswahili and English, with almost nothing available in Kimeru. Another important finding was that in spite of students' inability to read in their mother tongue, all 171 participants said they read something, whether it was a textbook, a storybook, or a Bible. This demonstrates the students' eagerness to read and points to the strong need to provide relevant reading materials in order to orient the students toward academic success. Furthermore, school instruction especially in the early years of education would be more effective in the language that the students know best. Benson (2005) notes that mother tongue-based bilingual education not only increases access to skills but also raises the quality of basic education by facilitating classroom interaction and integration of prior knowledge and experiences with new learning. It is essential to address the near-total absence of materials published in local languages through a purposeful effort to publish and distribute storybooks, and other educational materials in the local language especially for beginning readers.

The analysis of the students' reading frequency as well as the intensity of reading per day showed an overall strong inclination to read. However, since the data also shows that students read what is available to them, a sound mechanism of providing leisure reading materials that enhance lifelong learning is warranted. Of the students 64% indicated that they read at least five days a week, yet most of the materials that are available to them are narrow in scope, e.g. religious books or education-focused text books, which perhaps may explain their low overall grade average. Dent and

Goodman (2015) conducted a study in Uganda whose results showed that both reading frequency and certain types of reading materials read for recreational purposes are correlated with higher overall grade average.

It is instructive to note that students generally projected significant confidence in their ability to do well on the final tests, which, in itself, is an important characteristic of personal drive. However, a review of individual scores in yearly examinations revealed that confidence was not related to actual performance as the percentage of students who passed the final examinations well enough to transition to high school was hardly 2% from any given school in the study area. The low examination scores in the midst of much confidence might be indicative of students' limited worldview, which gets substantially challenged by the broad nature of national examinations. To widen their perspectives, the students need to be exposed to a broader reading scope by the provision of adequate reading and other academic materials.

Conclusion and recommendations

This study revealed high levels of satisfaction and contentment among participants with respect to the availability of resources, reading abilities, general educational performance, and overall preparedness for further education. Yet, at the same time, the data points to severe scarcity of learning materials, low reading skills, poor infrastructure, below average educational performance, and low pupil preparedness for further education. Overall the students come from low social economic status households, and attend schools that noticeably lack adequate resources. As for the reading infrastructure, there is shortage of age-, language-, and interest-appropriate reading materials and a lack of school libraries. This state of affairs deprives the students of the opportunity to read even when the reading desire is high. Majority of the students cannot read at grade level and more significantly they cannot read in their mother tongue. Studies by Nassimbeni and Desmond (2011) and Van der Berg et al. (2011) revealed that pupils from schools where books and libraries were available scored better than those at schools without those resources, emphasizing the link between disadvantage and poor performance. In addition majority of the parents and guardians are not literate and this diminishes their level of involvement in their children's education. Given the family circumstances, mainly parents' literacy levels and presence in the home, the students are faced with an enduring inability to get homework help at home.

The findings, therefore, emphasize the underlying need for creating well-designed interventions aimed at creating equal educational opportunities for communities such as Ontulili, in which children are struggling for the basic educational necessities. Such interventions include the establishment of libraries as one way of creating the requisite exposure for the children. The libraries would provide supportive spaces with adequate amenities, access to a wide variety of appropriate learning materials and technology, and suitable reading infrastructure. They would also create and offer quality and relevant programs to the community. Indeed, the Lyon Declaration on Access to Information and Development (IFLA, 2015) recognizes that information intermediaries such as libraries have the skills and resources to help governments, institutions and individuals communicate, organize, structure, and understand data that is critical to development. In addition, a study by Dent and Goodman (2015) found that library access and reading frequency in rural Uganda were correlated with higher overall student grade point averages and recommend support for establishment and growth of the rural village library and related programs in Africa. In the case of Ontulili, among the most critical programs would be a focus on family and adult literacy so that parents, guardians and basically the entire community is able to participate more productively in the reading and lifelong learning process.

Where possible, communities should come together to design local programs that will meet their particular needs. Quality early childhood programs such as reading, games, and other group activities at the library would help instill healthy reading and learning habits. Moreover, the school environments including infrastructure and learning resources need to be improved to facilitate learning. Reading for enjoyment should be championed and highlighted as a pillar for academic success and lifelong learning to the communities and should be integrated into the curriculum. Instruction in the mother tongue should be encouraged and publishing reading materials in the mother tongue should be equally supported. In Ontulili, peer mentors (friends and neighbors) are thriving and taking the place of unavailable or uneducated parents. A mechanism of encouraging and supporting such mentors should be established as their contributions in learning cannot be gainsaid.

Limitations

It is generally understood that there is no successful field study without some type of limitations and this study is no exception. The study was conducted in one

location of a multiethnic country where cultural differences might have significant effects on prioritizing reading and education in general. Although valid generalizations can still be made from the findings of the study, replication in other areas of the region is encouraged. In addition, this study focused mainly on students. Studies that establish the role of other key players – including teachers, parents, and the larger community – in the reading habits and educational attainment of students are also recommended. The study methodology could also have been modified if all factors were equal. The study utilized a purposive sample of schools for practical purposes but while still ensuring that there were no obvious disparities between the purposive sample and a random sample. Five out of the targeted seven schools were included in the sample while two were practi-

cally inaccessible for the purpose of this study due to their remote locations. Although the validity of the findings from five out of seven schools cannot be statistically challenged, a complete count is always preferable to any fraction. Moreover, the study utilized self-reporting of reading abilities and habits, and academic performance. It is understood, however, that self-assessment is much more prone to biased reporting than assessment that is made by a second party. Although there was no clear evidence that this was the case with this study, the likelihood that a second-party assessment would yield a slightly different outcome cannot be ignored. In spite of these limitations, however, the findings of this study still serve as a strong pointer to the type of reading challenges that exist in not only the rural parts of Kenya, but also other developing parts of the world.

Appendix: Scores in Kenya Certificate of Primary Education examination for 2005–2012 (out of a possible 500 points).

Year	School A	School B	School C	School D	School E	Mean
2005	190	N/A	199.48	N/A	197.85	195.78
2006	174	N/A	219.4	N/A	197.8	197.07
2007	201.41	190.72	218.92	N/A	200.37	202.86
2008	202.05	168.81	244.38	N/A	212.29	206.88
2009	211.77	194	262	180	195.5	208.65
2010	194.76	169.9	241.35	203	182.31	198.26
2011	164.08	179.38	249.09	168.19	215.66	195.28
2012	197.04	170	228.22	237.77	186.82	207.93
Mean	191.89	178.8	232.86	197.24	198.58	

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1. Kenya Ministry of Education <http://www.education.go.ke/ShowPage.aspx?department=1&id=285>

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Author biography

Florence N. Mugambi MLIS is Information Services and Instruction Librarian at Indiana University-Purdue University Fort Wayne. She serves as Liaison to the College of Engineering, Technology and Computer Science; and Department of Public Policy. She is also the coordinator of library services for international students and faculty. She holds an MLIS from Louisiana State University and a BA from the University of Nairobi. Her research interests include the role of community libraries in promoting literacy and quality education in the developing world. She is the founder and project coordinator of the Ontulili Literacy & Resource Center (www.ontulilireads.org) a nonprofit organization supporting establishment of a community library in Ontulili. Kenya.