



# The Utilization of a Small Town Community Library in Africa by Its Community: A Survey

Kaeri Mukora<sup>1</sup>, Ngugi Kinyungu<sup>2</sup>, Mary Wanjiru<sup>3</sup>

<sup>1</sup>Half Hollow Hills East High School, Dix Hills, USA

<sup>2</sup>Donald and Barbara Zucker School of Medicine at Hofstra/Northwell, New York, USA

<sup>3</sup>Limuru Public Library, Limuru, Kenya

Email: mukorak@yahoo.com

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## Abstract

**Background:** Sub-Saharan Africa has the lowest literacy rates of any world region. Public libraries have been noted to contribute to a community's general literacy. **Aim:** To assess the utilization of a small town community library in sub-Saharan Africa by its community. **Findings:** The library was mostly used by young adults around 21.6 years old with 95% of the participants reporting use of the free Wi-Fi and 66% reading the library books. **Conclusion:** The study indicates a high utility level of the free Wi-Fi in a community library, especially by college-age patrons and indicates the need for the establishment of more libraries to further serve the sub-Saharan African population and contribute to literary growth.

## Subject Areas

Library, Intelligence and Philology, Sociology

## Keywords

Africa, Library, Literacy, Community, Utilization, Small Town, Community Library

## 1. Introduction

Literacy is an essential skill and is connected to the overall quality of life, which we see as directly linked to an individual's economic stability [1]. The Global region with the highest illiteracy rate is sub-Saharan Africa with an illiteracy rating of 32.28% and a literacy rating of 67.72% [2]. This number is well under the global literacy rating of 86.3% and likely goes along with sub-Saharan Africa having the lowest median income out of all world regions [3]. One possible

effective way at raising literacy rate among populations and, especially, those in sub-Saharan Africa are libraries as they provide resources for a community to educate themselves and can provide access to much needed literary sources. Community libraries can be defined as non-government funded institutions that provide their respective local population with library services regardless of any distinguishing affiliation, e.g., school, age, gender, ethnicity, income etc. In a study on the effect of a rural community library in Africa, Valeda Dent and Lauren Yannotta found that a library is a great way to improve a community general literacy [4]. The country of Kenya has a literacy rate of 82.88% which while still lower than the world average of 86.3% is uniquely high among sub-Saharan countries [5].

Kenya has 64 government-sponsored public libraries in the country [6] with a population of 56 million people giving a ratio of 1 library per 875,000 people [7]. The United States of America in comparison, has 17,278 public libraries [8] in the country with a population of 333 million giving a ratio of 1 library per 19,273 people. This contrast is striking especially in light of the knowledge that public libraries enhance the overall health and wellness of a community [9].

Limuru public library [10] is a non-government sponsored community library opened in 2019 that is open to the public with free books and Wi-Fi for the public. The library serves the town of Limuru and its outskirts, a total population of 159,000 people [11] and the town had no library open to the general public prior to the founding of Limuru public library. For the purpose of advancing knowledge on how to address the widespread issue of literacy in sub-Saharan Africa and with a smaller focus on a small African town, we conducted a study on the utilization of a Limuru public library, a small town African community library by its community.

## 2. Materials and Methods

### 2.1. Sample Selection

The study was administered in Limuru public library, Kenya from July to August 2024. Random dates were selected so as not to influence or skew the results of the data collected.

Selection Criteria: All ages were accepted, however, individuals under eighteen years old required parental consent. A total of 50 participants agreed to participate in the study.

The study qualified for exempt status. As defined in the federal regulations: Minimal risk standard was applied: The probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests. Per electronic code of Federal Regulations in effect August 2018, Research activities involving human subjects that are exempt from IRB review are identified in 45CFR46.104 d 1 - 8 [12]-[14]. The Office of Human Research Protections (U.S. Department of Health and

Human Services) does not specify who at an institution may determine that research is exempt but recommends that, because of the potential for conflict of interest, investigators not be given the authority to make an independent determination that human subject research is exempt [15]. Per this recommendation by OHRP, this survey was reviewed by an independent reviewer who had sufficient information to make a decision and deemed the study exempt, as identified in 45CFR46.104 d2. Belmont principle [16] of Respect for Persons generally requires that subjects be given the opportunity to choose whether or not to participate in research. In line with this principle, Voluntary informed consent was obtained from participants for this exempt survey. Also, per recommendation by OPHS (Office of Public Health and Science) the participants were provided with the following minimum consent information: 1) The identity and affiliation of the researcher. 2) A clear description of the study procedures and how data will be used in the future. 3) A statement that participation in the research is voluntary. 4) Contact information for questions about the research.

## 2.2. Survey Design and Administration

All Participants provided their age and gender and were asked to answer the following questions:

- 1) Are You in School?
- 2) Are You in Primary School?
- 3) Are You in High School?
- 4) Are You in College?
- 5) Are You Finished with College?
- 6) Do You Use the Library Wi-Fi?
- 7) Do You Read the Library Books?
- 8) Do You Borrow Books from the Library?
- 9) How Often Do You Come to the Library?

## 3. Results

### Total Survey Population Results

The study included 50 participants, 31 male 19 female. The ages ranged from 14-34 and had an average age of 21.7 (see **Table 1** for demographics).

**Table 1.** Demographics.

	Male	Female	Total
In School	18	9	27
Primary School	0	0	0
High School	7	2	9
College	12	8	20

**Continued**

Finished College	6	6	12
Reads Library Books	25	8	33
Uses Library Wi-Fi	26	19	45
Borrows Library Books	11	5	16
Visits Daily	16	1	17
Visits Weekly	11	11	22
Visits Monthly	3	3	6
Visits Rarely	1	4	5
Age Range	14 - 34	15 - 29	14 - 34
Average Age	21.2	22.3	21.7

Survey Question 1: Are you in school?

In total 27 out of 50, or 54%, answered yes. 18 being male and 9 female.

Survey Question 2: Are you in primary school?

In total 0 out of 50 answered yes.

Survey Question 3: Are you in high school?

In total 9 out of 50, or 18%, answered yes. 7 being male and 2 female.

Survey Question 4: Are you in college?

In total 20 out of 50, or 40%, answered yes. 12 being male and 8 female.

Survey Question 5: Have you finished college?

In total 12 out of 50, or 24%, answered yes. 6 being male and 6 female.

Survey Question 6: Do you read the library books?

In total 33 out of 50, or 66%, answered yes. 25 being male and 8 being female.

Survey Question 7: Do you use the library Wi-Fi?

In total 45 out of 50, or 90%, Answered yes. 26 being male and 19 female.

Survey Question 8: Do you borrow library books?

In total 16 out of 50, or 32%, answered yes. 11 being male and 5 female.

Survey Question 9: How often do you come to the library?

In total 17 out of 50, or 34%, answered "Daily" with 16 being male and 1 female.

In total 22 out of 50, or 44% answered weekly with 11 being male and 11 being female. In total 6 out of 50, or 12%, answered monthly 3 being male and 3 being female. In total 5 out of 50, or 10%, answered rarely 1 being male and 4 female (see **Table 2** for individual results).

#### 4. Discussion

Literacy disparity continues to be a glaring issue as some world regions have much higher literacy rates than others [2]. The disparity is especially critical when realizing how correlated literacy is with economic stability [1].

**Table 2.** Individual results.

(a)												
Participant	Gender	Age	In School	Primary School	High School	College	Finished College	Reads Library Books	Borrows Books from Library	How Often	Uses Library Wi-Fi	
Participant #1	Male	21	Yes	No	No	Yes	No	No	No	Weekly	No	
Participant #2	Male	18	No	No	No	No	No	Yes	No	Daily	No	
Participant #3	Female	29	No	No	No	Yes	Yes	Yes	Yes	Weekly	Yes	
Participant #4	Female	21	Yes	No	No	Yes	Yes	No	No	Rarely	Yes	
Participant #5	Male	22	Yes	No	No	Yes	No	Yes	Yes	Daily	Yes	
Participant #6	Female	25	No	No	No	No	Yes	No	No	Weekly	Yes	
Participant #7	Male	25	No	No	Yes	No	Yes	No	No	Monthly	Yes	
Participant #8	Male	20	Yes	No	No	No	No	Yes	No	Daily	Yes	
Participant #9	Female	21	Yes	No	No	Yes	No	Yes	No	Weely	Yes	
Participant #10	Male	19	Yes	No	No	Yes	No	No	No	Daily	Yes	
Participant #11	Male	28	No	No	No	No	Yes	Yes	Yes	Weekly	Yes	
Participant #12	Male	21	Yes	No	No	Yes	No	Yes	No	Daily	Yes	
Participant #13	Male	22	Yes	No	No	Yes	No	No	No	Weekly	Yes	
Participant #14	Female	17	Yes	No	No	Yes	No	Yes	No	Daily	Yes	
Participant #15	Female	16	Yes	No	Yes	No	No	No	No	Rarely	Yes	
Participant #16	Male	18	Yes	No	Yes	No	No	Yes	No	Daily	Yes	
Participant #17	Female	25	No	No	No	No	Yes	No	No	Weekly	Yes	
Participant #18	Male	24	No	No	No	No	Yes	Yes	Yes	Daily	Yes	
Participant #19	Male	19	No	No	No	No	No	Yes	Yes	Daily	Yes	
Participant #20	Male	20	Yes	No	No	Yes	No	Yes	No	Weekly	Yes	
(b)												
Participant	Gender	Age	In School	Primary School	High School	College	Finished College	Reads Library Books	Uses Library Laptop	Borrows Books from Library	How Often	Uses Library Wi-Fi
Participant #21	Male	16	Yes	No	Yes	No	No	Yes	No	Yes	Weekly	No
Participant #22	Male	18	No	No	No	No	No	Yes	No	No	Daily	No
Participant #23	Male	34	No	No	No	No	Yes	Yes	No	Yes	Rarely	Yes
Participant #24	Female	24	Yes	No	No	Yes	Yes	Yes	No	Yes	Rarely	Yes
Participant #25	Male	21	Yes	No	No	Yes	No	Yes	Yes	Yes	Weekly	Yes
Participant #26	Female	18	No	No	No	No	No	No	No	Yes	Weekly	Yes
Participant #27	Male	25	No	No	No	No	Yes	No	No	No	Monthly	Yes
Participant #28	Male	14	Yes	No	Yes	No	No	Yes	No	No	Daily	Yes
Participant #29	Female	28	No	No	No	No	No	Yes	Yes	No	Weekly	Yes
Participant #30	Male	21	Yes	No	No	Yes	No	Yes	No	No	Daily	Yes
Participant #31	Male	32	No	No	No	No	Yes	Yes	No	Yes	Monthly	Yes
Participant #32	Male	20	Yes	No	No	Yes	No	Yes	No	No	Daily	No
Participant #33	Female	24	Yes	No	No	Yes	No	No	No	No	Weekly	Yes
Participant #34	Male	15	Yes	No	Yes	No	No	Yes	No	No	Weekly	Yes
Participant #35	Female	15	Yes	No	Yes	No	No	No	Yes	Yes	Rarely	Yes
Participant #36	Male	19	Yes	No	Yes	No	No	Yes	No	No	Daily	Yes
Participant #37	Female	27	No	No	No	No	Yes	No	Yes	No	Weekly	Yes
Participant #38	Female	22	No	No	No	No	Yes	Yes	Yes	No	Monthly	Yes
Participant #39	Male	21	No	No	No	No	No	No	No	Yes	Weekly	Yes

## Continued

Participant #40	Male	20	Yes	No	No	Yes	No	Yes	Yes	No	Weekly	Yes
Participant #41	Female	34	No	No	No	No	Yes	Yes	No	No	Weekly	Yes
Participant #42	Male	18	Yes	No	No	Yes	No	Yes	Yes	No	Daily	Yes
Participant #43	Female	23	Yes	No	No	Yes	No	No	Yes	No	Monthly	Yes
Participant #44	Male	14	Yes	No	Yes	No	No	Yes	No	No	Daily	No
Participant #45	Female	19	Yes	No	No	No	No	No	Yes	Yes	Weekly	Yes
Participant #46	Male	21	Yes	No	No	Yes	No	Yes	No	Yes	Daily	Yes
Participant #47	Male	29	No	No	No	No	No	Yes	Yes	Yes	Daily	Yes
Participant #48	Female	20	No	No	No	Yes	No	Yes	Yes	No	Monthly	Yes
Participant #49	Male	21	No	No	No	Yes	No	Yes	Yes	Yes	Weekly	Yes
Participant #50	Female	19	Yes	No	No	Yes	No	Yes	Yes	No	Weekly	Yes

As shown in our introduction one possible way of combating illiteracy and improving community wellness is through the presence and use of a library. Accessibility to libraries is a challenge in sub-Saharan Africa and an inference can be made that a community library in a town that heretofore did not have a library would have an impact on the community [4]. We carried out this study to assess the utilization of an African community library by its community.

The results show that the most used resource of the library was the Wi-Fi with Wi-Fi used by 90% (45 out of 50) of the participants. In addition, most participants were relatively young with the average age being 21.7 and 27 out of 50 participants or 54%, still being in school. 78% of the participants endorsed using the library daily and weekly and 66% of the participants made use of the books in the library.

62% of the participants were male which may reflect the global literacy rate differences by gender where a gap still exists [17].

## 5. Conclusions

The Study found that most individuals who attended the library were young, generally around 21.7 years of age. This finding differs from known data where adults aged 30 - 49 are seen to use libraries at a higher number than other age groups [18]. Nearly half of the participants in the study were college students, which probably explains the findings and also indicates a need within the community by college age students looking for a place to study especially with the ability to use Wi-Fi.

The study also found that the most used resource was the library Wi-Fi. This is a crucial aspect of the utility of the library as it has been noted that the ability to connect to the internet is recognized as a public right in some countries and access to Wi-Fi has been tied to digital health [19] [20].

The study indicates a high utility level by college age patrons and indicates the need for the establishment of more libraries to further serve the sub-Saharan African student population as well as the need for additional studies to further delineate the utility of African community libraries and seek novel ways to meet this need and encourage participation by the older population.

The study however has limitations with one being the fact that it was not powered to detect statistically significant utility aspects, and it may also have missed younger patrons as the study was conducted at a time when primary schools were in session. The library traditionally sees an uptick in younger age patronage when schools are closed for break. This study also did not consider how long the participants have been using the library.

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## Conflicts of Interest

The authors declare no conflicts of interest.

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