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INTRODUCTION
The use of E-Books in the recent past has been considered as the best alternative for university libraries in view of their inherent advantages. The trend of providing E-Books to supplement and substitute print books has various advantages and is gaining popularity with many libraries in Kenya. University libraries are increasingly availing E-Books to their users. According to Czechowski (2011), E-Books enable users to access the most current editions and also ensure cost savings. Conyers, et.al (2017) observed that many university libraries have been adopting policies that prioritize E-Books over print. E-Books promise to provide solutions to challenges experienced by university libraries by providing alternative resources to evade delays experienced in the procurement of print books; freeing of space and through provision of virtual and unlimited access to more resources.

Additional advantages that have made E-Books popular with libraries and users include portability, access by multiple users at the same time, faster access, eco-friendly in terms of paper, time and space, search ability of multiple files simultaneously, capacity for frequent content updates, diversity of resources provided, provision of extensive links to additional related resources, easy dissemination and easy manipulation for sharing among many users, and global virtual access. Including the fact that they will never be unavailable because they are on loan, and are cheaper in comparison to print, have tools that allow users to make notes, highlight, apply sticky notes, and use the personal bookshelf (Allison, 2013; Omeluzor, Akibu, & Akinwoye; 2016; Walters, 2018; Worden & Collison, 2011).

E-Books are acquired among other electronic information resources for university libraries in Kenya mainly through Kenya Library and Information Services Consortium (KLISC) in partnership with International Network for the Availability of Scientific Publications (INASP). INASP is an international development charity organization with partnerships in Africa, Asia and Latin America to support institutions to produce, store and use research and knowledge. The resources are selected by the consortia for their research and user needs (INASP/KLISC, 2011).
STATEMENT OF THE PROBLEM

E-Books have been viewed as a panacea to information access challenges especially for undergraduate students owing to the fact that this can be used in a virtual environment and hence are accessible to multiple users at the same time any time of the day, require minimum storage space, and are popular for the independent users. However, research has shown that E-Books, among other library resources, are grossly underutilized especially by the undergraduate students despite their advantages (Gakibayo, Odongo & Obura, 2013; Kwadzo, 2015; Omeluzor, et.al, 2016). Kiilu & Kiilu (2014) also observe that only a third of the undergraduate student population effectively use library services including electronic resources.

Despite public universities in Kenya providing E-Books since 2003, their utilization by undergraduate students is deemed low. This study was intended to identify possible reasons for such a scenario with a view to proposing appropriate strategies that would lead to enhanced use.

OBJECTIVES

The objectives of the study were:

1. To establish the perceptions of undergraduate students in public universities in Kenya on E-Books in the library in comparison to print books.
2. To establish the expectations of undergraduate students in public universities in Kenya on E-Books in the library.

LITERATURE REVIEW

Perceptions on E-Books in Comparison to Print

The perception and use of library resources depends on user awareness, packaging format, ease of use, and reading lists (Omeluzor, et.al, 2016). Poor perception and low inclination to use E-Books was found to have been contributed to by low levels of information literacy from earlier schooling (Tlakula & Fombad, 2017).

It was observed by Rafiq and Warraich (2016) that the use and non-use of E-Books by undergraduate students was almost equal. They identified gateways to E-Books to include Google books (83%), publishers’ websites (7%), college library and national digital library (5%).
Walton (2014) observed that use of E-Books for most undergraduate students in a college in America was as a result of forced use as students preferred print. He also observed that the undergraduate student use of E-Books was equal or higher than the use of print books but that there was need for less restrictive Digital Rights Management to enhance adoption and popularity of E-Books. Undergraduate students preferred E-Books because of their convenience and also for research.

It was also observed that there was a mix of students who preferred E-Books and those who preferred print books. While some students enjoyed reading E-Books there were those that disliked reading them (Rafiq & Warraich, 2016; Walton, 2014).

Use of E-Books among the undergraduate students in Scottish institutions was limited due to the discomfort of reading on the screen for long periods. Users preferred print books for extended reading while they preferred E-Books for reference purposes (Abdullah & Gibb, 2008). Other problems associated with E-Books were lack of sufficient E-Books in areas of interest and poor E-Book reading environment (Hwang, et. al., 2014). Abdullah and Gibb (2008) observed that students preferred print books and lacked knowledge on how to use E-Books. They observed that for undergraduate students, print books have remained the most dominant source of content. Students were prompted to use E-Books because of their convenience as alternatives to print books in high demand or out of print, and for convenience in remote access. Mizrachi (2013) found that more undergraduate students in University of California (USA) preferred print above the use of E-Books. However, convenience, and monetary saving made from not buying the books through using online resources often influenced their decisions to access online. Kahn and Underwood (2016) observed that E-Books were preferred as academic texts because of the convenience they offered in terms of ease in skimming for relevant information.

Ease of use is an important perception in determining if resources will be used or not. However, even though the students understood that library resources were more credible, they still chose the internet instead of the library resources. They cited convenience as a reason for this. The perception that the internet is better ran deep with the undergraduate students and was therefore found to be more popular than library resources (Martin, 2008).
Undergraduate Students’ Expectations on E-Books

Students expected technology and content ubiquity and network access anywhere anytime. They expected more and better content, more and better access, convenience, new capabilities, ability to manage costs, participation and control, and organizational and individual productivity (Neal, 2009). Students expected unrestricted downloads and ability to use offline. They also expected to read without access complications in navigating from one platform to another and not having to learn multiple E-Book systems (Myrberg, 2017; Walton, 2014). It was further observed that UGS lacked patience in perusing over several platforms. Information resource users expected seamless access to resources (Allison, 2013; Connaway, Dickey, & Radford; 2011).

Adeniram (2013) observed that the use of e-resources by UGS in a university in Nigeria was low due to factors such as large mass of irrelevant information; the need to filter the results from the search; download delays; failure to find information; inadequate or lack of search skills; high cost of access, inaccessibility of some e-resources; difficulties in navigating through e-resources. Other structural factors that contributed to low use were the absence of constant electricity supply, lack of facilitation for network resource sharing, inadequate professionals with requisite ICT skills and inadequate funds to support development.

Issues that negatively affected the use of e-resources by UGS in Ghana and South Africa revolved around lack of awareness, information illiteracy, lack of skills, and ICT challenges inadequate library computers, lack of guidelines on how to use the e-resources, poor internet connectivity, inadequate access point, power outages and few subscribed titles (Amankwah, 2014; Tlakula & Fombad, 2017). According to Toner (2008), students were not necessarily interested in more books, instead they asked for more inductions and trainings from the library, easier online access and more staffing.

METHODOLOGY
Mixed methods were used where both quantitative and qualitative data was collected using survey questionnaires and focus group discussions respectively. Both the numbers of undergraduate students using E-Books and the reasons for their use were important to the study hence the choice of mixed research methods. Mixed research methods involve combining different research approaches in order to better understand a particular research problem (Creswell, 2014). According to Johnson, Onwuegbuzie and Turner (2007) mixed methods may be used when there is likelihood that qualitative and quantitative data approaches will add insights to the research. The symbiosis of qualitative and quantitative data collection is important. Mixed methods attempt to consider multiple view points, perspectives, positions and standpoints by drawing from the benefits brought about by both quantitative and qualitative methods.

Four of the older public universities in Kenya were purposively sampled. These were favoured due to the fact that they are largely considered as pace setters to other public universities in Kenya. Other public universities have been largely mentored by these four universities. The four universities were Egerton, Jomo Kenyatta University of Science and Technology, Moi and University of Nairobi. Survey questionnaires had ten structured questions on a five point Likert Scale and also had open-ended questions to allow respondents give reasons for their preferences as well as identify their formats of preference.

Data was collected from undergraduate students using a survey questionnaire and focus group discussions. 300 respondents were drawn from third year students from the four universities. From each university 75 third year students were randomly identified for the survey questionnaires from different academic programs. Third years were thought to have sufficient knowledge on E-Books and were therefore preferred. One focus group discussion from each university was also administered. The focus groups had eight to ten participants of both gender and from diverse programs. These were drawn from different programs to ensure that data collected was inclusive. Data was analysed sequentially and then triangulated in the interpretation stage in order to provide meaningful explanations to the findings. Out of the 300 questionnaires 213 (71%) were analysed as some were not returned or were not adequately
answered for analysis. Survey questionnaires were analysed using SPSS while focus group discussions were analysed descriptively.

**FINDINGS**

**Perceptions of Undergraduate Students**

Data analysis revealed that undergraduates were familiar with Information Communication Technologies (ICT) and how to access the internet. Undergraduate students were asked to choose from three options the format they preferred from three options including E-Books, print books and both electronic and print books in the survey questionnaire. The survey questionnaire also had a question on the frequency of use of print books. An open-ended question inviting undergraduate student respondents to give reasons for their preferences was also made. The findings on preferred formats were as shown in Table 1.

<table>
<thead>
<tr>
<th>Format</th>
<th>Frequency</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>Electronic</td>
<td>74</td>
<td>34.7</td>
</tr>
<tr>
<td>Both</td>
<td>98</td>
<td>46.0</td>
</tr>
<tr>
<td>Print</td>
<td>41</td>
<td>19.2</td>
</tr>
<tr>
<td>Total</td>
<td>213</td>
<td>100.0</td>
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There were more undergraduate students that preferred both electronic and print formats at 46%. E-Books only were preferred by 34.7% compared to 19.2% who preferred only print. Reasons given for their preferred formats are as observed under the respective formats below.

**Preference for Electronic Formats**

It was observed that 34.7% undergraduate students from the survey preferred the use of E-Books because of their unique qualities. These included the fact that these could be accessed from anywhere through assorted gadgets including mobile phones; were easily portable; time convenience as they were virtual and could be used anytime and from anywhere; recognized as "very easy to use"; a good supplement where print was insufficient; wide coverage of subject
matter and therefore good for research; fast information access; there was less use for paper; and were considered affordable.

Responses received from the focus group discussions indicated preference for E-Books was driven by factors related to good ICT infrastructure and inconvenient access to print books; perception that library online E-Books were cheaper as all one required was wireless connectivity or an internet connection; these could be accessed from anywhere including the fact that they have mobile phones from which they were able to read conveniently; undergraduate students were not always able to visit the library; and had the perception that E-Books were more reliable, easy to access, have direct information, saves time, and reduces the bulk of books to carry. It was further found that it was important to have global perspectives which are most effectively obtained via the internet. The undergraduate students’ preference for E-Books was however unexploited as is shown by the reaction by a respondent stating that they “preferred E-Books but were forced to use print as they used the references given by their lecturers”.

Reasons that hindered effective use of E-Books were distractions to other sites, poor network connectivity, could not download as preferred, and were also perceived by some to be more expensive. Due to these challenges in the use of E-Books, undergraduate students were largely seen to favor the use of both E-Books and print.

Preference for both Electronic and Print Formats
Majority of the undergraduate students (46%) preferred the use of both E-Books and print books. Their responses in the open-ended survey questionnaire identified reasons of preference for both formats as good for comparison and sufficient; do not mind either of the two formats whichever is more easily accessible and available; they supplement each other in providing content; a good alternative where one fails; have sufficient information; comparison between the two leads to information that is reliable; enables good research; both are equally good; both are relevant and easy to use; print books are for deeper understanding while E-Books are fast to access; enhances ability to locate relevant information since where one format is not accessible, then one can result to using the other format. Some books may not be in electronic format while print may be bulky hence a balance of the two is considered better than either electronic or print alone. Some
undergraduate students considered the internet a last resort when they did not get the relevant books from anywhere else.

**Preference for Print Format**
Undergraduate students who preferred print books over E-Books gave the following reasons for their preference: did not require internet connection; perceived to have more information than E-Books; ability to concentrate more without being distracted unlike when using E-Books where the likelihood of diverting to other sites was high; convenient; easily accessible; free access to all the pages of the book; comfortable to the eyes; easy to read; highlighting and notes capabilities. Internet connectivity was sometimes poor; perceived as enabling fast reading and as easier to remember from; enabled better understanding; information needed was readily available so long as one identified the right book; retention of the book unlike where E-Books sometimes ‘disappeared’; provide better storage; perceived to be less costly; they required no gadgets to access the information; easy to navigate and they were less cumbersome to access; they were easy to access and use; they are also more dependable when there is no electricity which is a regular occurrence in the universities; some felt that the use of the internet could be compromised by viruses which distort original information; information from the internet could not be verified especially with regards to practical subjects such as agriculture; for some disciplines such as require formulae, they preferred print as keying in the respective symbols on their keyboard was a challenge. The perception of some undergraduate students was that E-Books in most cases gave unnecessary information. However, they admitted that they still needed E-Books as back up where they failed to get a relevant print book.

The comparative use of E-Books and print books is as shown in Table 2.
A combined total of 57.7% (123) of undergraduate students used E-Books daily and once a week as compared to 57.3% (122) that used print books at least daily or once a week. While there was a 21.1% (45) who use E-Books daily compared to 18.8% (40) who use print books daily, there were a higher percentage of those who never used E-Books (10.8%, 23) compared to those who never used print books (7.5%, 16) as is shown in Table 2.

### Expectations of Undergraduate Students

**Awareness:** Undergraduate students expected creation of more awareness. They suggested that sensitization on E-Books could be made through social sites, advertising, radio, and television. Along with the training in the use of E-Books they also asked for computer literacy. Some of them requested for sensitization on the advantages of using E-Books.

**Skills for access and use:** Undergraduate students expected to have sufficient capacity in identifying the most appropriate title in the midst of so many. The use of keywords was not sufficient in filtering as it yielded many titles. This led to much time being spent on E-Book searches to getting to know the exact book to use and in getting the appropriate E-Book. UGS felt that searching for relevant titles was time consuming and therefore expected creation of more straight forward links.
Access: Undergraduate students expected to access to computers at will from a library environment where they could receive the support of librarians. They required highly interactive staff to assist in identifying, downloading, printing and saving on portable devices. Resource centers were identified as not conducive to the use of E-Books because of time limitations while undergraduate students expected to access E-Books without being rushed. They expected to access all E-Books they needed without any limitations. They expected to access the very exact titles recommended by their lecturers as well as access all books they needed.

Relevance: Findings indicated that undergraduate students expected E-Books that were directly relevant. They expected locating core E-Books to be easy and straightforward. The current set up of E-Books is such that it is difficult for them to identify relevant E-Books, the E-Books were perceived to be difficult to read as some were perceived to be contradictory. There were mixed responses as there few who were happy with the set up but many were for relevant E-Books being identified for them. Use of even single layer password was sufficient obstruction to the use of W-Books. Undergraduate students expected content they could relate with. They found available E-Books to be characterized by lack of local titles, too many books with inadequate information, coverage was very little, shallow or irrelevant.

Motivation: Undergraduate students were very conscious of the dependence they had on their lecturers and were asking to be encouraged and given assignments aimed at the use of E-Books to motivate them.

Skilled professionals: Undergraduate students expected that libraries would employ skilled professionals to deal with E-Book resources. They expected to be allowed to print E-Books without charges

DISCUSSION AND INTERPRETATION

Perceptions
It was found that at times undergraduate students used E-Books when they failed to get print versions. E-Books in such cases were used as a last resort for some students while for others the scenario was vice versa and they used print when they failed to get an equivalent e-version.
Undergraduate students recognized that the most current knowledge and information is delivered in electronic format. Literature reviewed indicated preference for electronic or print formats was different in different parts of the world. The global experiences in the use of E-Books by undergraduate students were different in different localities. Findings from this research indicated that in Kenya, the preference for both electronic and print formats was the highest while preference for electronic resources was higher than that of print. Walton (2014) observed that where both E-Books and print were available, preference was for print books. He further observed that while some students enjoyed reading E-Books there were those that disliked reading them. Rafiq and Warraich (2016), on the other hand, observed that there was a mix of students who preferred E-Books and those who preferred print books.

The observation by Abdullah & Gibb (2008) that users’ preference for print books for extended reading and preference for E-Books for reference purposes, in institutions of higher learning in Scotland, did not resonate with the research findings of this study. There were those that were easily distracted by other applications when using E-Books from the smart phone. Other problems associated with E-Books as observed by Hwang, et al., (2014) were eye strain when reading from the screen, lack of sufficient E-Books in areas of interest and poor E-Book reading environment which were not identified as challenges in this study. This is indicative of improved screens and perceived convenience of the mobile phone by undergraduate students especially in Kenya.

Undergraduate students who preferred only electronic formats were 34.7%. Findings obtained implied that with good ICT infrastructure, internet connectivity, and good ICT knowledge, few undergraduate students would remain hooked to print preference. The researcher observed that it was not clear between the preferences for library subscribed E-Books and those accessible from open access as these were viewed interchangeably. Where undergraduate students were aware of the existence of both print and electronic versions of the same title, the electronic versions were preferred as they were perceived faster to access. E-Books were observed to provide exposure to global information research findings thereby breaking the knowledge divide.
There were 46% of undergraduate students who were comfortable with either format. In this case, both were to supplement information accessed from the other and to fill missing information gaps. When one resource was not accessible then the use of the other became handy.

Various reasons were given by undergraduate students for preferring print books in comparison to E-Books. The reason for some 19.2% undergraduate students who preferred print can be related to the limitations associated with the use of E-Books. For some practical subjects print books were preferred such as required the use of formulae, they preferred print as keying in the respective symbols on their keyboard was a challenge. There was a perception by some undergraduate students that E-Books in most cases gave unnecessary information. This emanated from their inability to identify the relevant E-Books. The researcher is of the view that this kind of difficulty in selection occurred where there were too many titles to select from and this was not unique to E-Books only but could also be experienced with print.

From the findings, it can be surmised that preference for print books results from an inability to access E-Books at will from wherever and whenever required due to irregular internet connectivity; limited access to some E-Books unlike print where one can have full access to the entire text; cultural biases that lead to a misconstrued belief that E-Books could not be fully trusted to have reliable information, and inability by some undergraduate students to have concentration with electronic gadgets for academic assignments. Print books were preferred for better understanding and were perceived by these undergraduate students as enabling fast reading and as easier to remember from. This mainly stemmed from the orientation that most had with ICT gadgets as entertainment tools which tended to prejudice the handling of ICT delivered information. This lead to a scenario where they were unable to handle E-Book content with the seriousness they did with print. Print books were also preferred as they could be easily retraced for reuse where needed.

**Expectations**

Undergraduate students expected better connectivity and awareness of E-Books. They expected relevant E-books with content that was directly connected to their academic programs. Reason to use E-Books was lacking and librarians need to address this indifference by showing the
connection to their academic programs. In access and use of e-books, UGS had the expectations that e-books would be downloadable, sufficient, have unlimited access. They expected more E-Book references and motivation from their lecturers. Undergraduate students suggested that libraries should engage more professionals to assist them in identifying relevant E-Books which they found difficult due to different navigational requirements. They expected to be provided with more access gadgets. They expected ease in access to E-Books. These expectations implied that they did not feel necessarily compelled to use E-Books. The model used by libraries in providing E-Books to undergraduate students needs to accommodate their realities including the fact that these are learners and hence information resources provided should be organized using an easier approach. The undergraduate students expected enhanced ease of use especially in access to relevant titles. Titles of relevance were not easily identifiable from the packages. Use of key words in searching for relevant titles identified many titles which was not user friendly to undergraduate students leading to use of alternative resources.

CONCLUSIONS
The popularity of E-Books depended on how they were perceived in terms of ease of use, time saving, easy identification and direct connection to respective academic programs; and on fulfilled expectations. Library online e-journals have a federated access which was lacking for E-Books. Each database had a different access method which led to a situation where E-Books were perceived as difficult to access. There was also a perception that the e-resources were for postgraduates and researchers. Findings indicated that where E-Books and print were equally accessible, preference was for E-Books. Undergraduate students expected to access all books they needed. However, this was not always possible due to restricted access to some resources.

RECOMMENDATIONS
Librarians should focus majorly on debunking the perception that E-Books are designed for postgraduates and researchers. Perception on E-Books may be improved by enhancing familiarity with electronic forms of information from earlier schooling and advocating for increased references by their lecturers. It is proposed that respective universities should enhance wireless connectivity as well as improved access to access gadgets. Librarians also need to
package E-Books by their relevance to respective university and college undergraduate academic programs in order to enhance likeability and therefore enhanced use.

REFERENCES


