




Barriers preventing the optimal use of e-books: A South African undergraduate perspective

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Background: South African academic libraries are spending large amounts of money annually to provide users access to e-books. In many of the South African Higher Education Institutions (HEIs) undergraduate students form the largest part of the institutional cohort. It is therefore crucial to understand what factors influence the optimal use of e-books by undergraduate students and what possible interventions can be applied to ensure optimum use.

Objectives: This article aims to identify the main factors that prevent the optimal use of e-books by undergraduate students at a South African university.

Method: For this study, pragmatism was used as the philosophical paradigm, with sequential mixed methods using questionnaires and focus groups.

Results: The findings of this study revealed that while e-books can be regarded as an accepted source of information among undergraduate students, there are still several barriers impacting the optimal use of e-books by undergraduate students.

Conclusion: This study identified five significant barriers that negatively influence the optimal use of e-books and provides possible solutions to improve the usage of e-books.

Contribution: The results of this study will contribute towards the lack of information available on the usage of e-books in the South African context.

Keywords: e-books; undergraduate students; e-book usage; digital natives; academic libraries; electronic resources; digital divide; developing countries.

Introduction

The academic library is often referred to as the heart of the university and plays a crucial role in the socio-economic, political and cultural development of the institution it serves by providing access to information and information resources to support the objectives of the institution (Mustafa et al. 2021). It is therefore only natural that the role of academic libraries has evolved over the years to align services and information resources according to the needs of the users and the changes within the institution (Ogungbeni et al. 2018). The changes and challenges academic libraries face are therefore mostly driven by the changes in the external environment, which affect the direction of the library, the strategic development and future scenarios (Petraityte 2014).

However, over the years, the role of the library has changed to accommodate the strategies and changes within the institution it is linked to. Academic libraries had to adapt to the ever-changing developments in information and communications technology (ICT), which inevitably impacted the information resources and services the library provides to support the teaching, learning and research agendas of their institutions (Vasileiou, Hartley & Rowley 2012).

With the increasing availability of digital information, clients' expectations of the library changed. The library is no longer only regarded as a building visited to consult books and journals but also as a space that gives access to information in an online environment. Library users have become accustomed to the fact that the majority of journals and reference works in the library will be available electronically (Kahn 2014). In the 1990s and early 2000s, libraries added e-books to their collections to further expand their electronic collections. Since then, academic libraries have spent large amounts of money on e-books and the supporting infrastructure to make this information resource available to students for free, but the free access may not always lead to good use of e-books and several libraries reported that e-books are not always used to their full potential (Potnis et al. 2018).

While several studies on the use of e-books have been carried out in developed countries, there seems to be less information available and limited research performed when it comes to developing countries (Adeyinka et al. 2018; Leonard & Snyman 2019). Furthermore, it has been argued that developing countries face unique challenges when compared with developed countries. These challenges include, among others, poor education and inadequate access to technology, and Tlakula and Fombad (2017) stated that additional research on the use of e-books within developing countries is needed to fill a much-needed gap.

This led to the purpose of this study, which was to identify factors that negatively impact or influence the optimal use of e-books by undergraduate students at a higher education institution (HEI) in South Africa.

It must be observed that the formulation of the study was developed pre-COVID-19 and data collection was performed during the COVID-19 period. While in some cases it did have an impact on the data collected (because of the national lockdown), it also provided the researchers with valuable information, which give the exceptional circumstances, might not have been discovered.

Literature review

E-books and the academic library landscape

E-books are commonly referred to as electronic books, and for the purposes of this study, they will be defined as 'a digital file containing a body of text and images suitable for distributing electronically and displaying on-screen in a manner similar to a printed book' (Britannica sv. 'e-book').

Internationally, academic libraries started building e-book collections in the late 1990s and early 2000s with the purchasing of information packages and the provision of e-books in the public domain. Interest in the e-format of the book increased as the pricing lowered and with the introduction of the Google Library Book Project, which provides free electronic access to books that are no longer in print and are not copyright protected (Blummer & Kenton 2020).

In 2009, the growth in popularity of e-books in the academic environment was mainly attributed to the decreased cost of e-books and the advantages of the e-format. E-books seemed to offer remedial solutions for the traditional print book as it satisfied the need to access content digitally in the Internet age. E-books also offered more captivating solutions to the monotony of a print book, while introducing a technical foundation for two-way interactivity (Jou et al. 2016).

Current studies indicate that print books are gradually being replaced by e-books in academic libraries as they offer major advantages to both users and the library itself. These advantages include:

- Convenience: users have access to e-books at all times without having to visit the library (Adeyinka et al. 2018)

- Searchability: the ability to search and find an exact word in seconds by using the search tool in the book (Cheek & Hartel 2012)
- Portability: a single device can contain several e-books (Blummer & Kenton 2020; Cheek & Hartel 2012:5)
- Space saving: libraries have started to use e-books mainly owing to decreasing budgets for information resources, limited shelving space and the costs to increase shelving space (Adeyinka et al. 2018).

Despite these advantages, the disadvantages of e-books have also been reported and these include:

- the lack of standardisation and limited cross-platform compatibility
- digital rights management (DRM) as e-books is governed by publisher licences, which place restrictions on the viewing, printing, and downloading of the book. Some of these licences also restrict the number of users, their use in course reserves and interlibrary loans (Blummer & Kenton 2020).

However, it seems that the advantages take precedence over the disadvantages and that e-books are becoming increasingly popular at academic institutions (Zinn & Langdown 2011). Even in developed countries, the uptake of e-books has increased, mainly owing to the convenience they offer.

However, some researchers do argue that in many developing countries, such as South Africa, the uptake of e-books was not as well as expected, owing to the lack of ICT resources needed to access and use e-books (Wiese & Du Plessis 2015). In their study, Wendo and Mwanzu (2016:4) further emphasised the imperative role that technology plays with regard to access to and the use of e-books and concluded that, in the South African context, devices alone are not the only contributor to slow usage and adoption but also other technological factors such as Internet speed and connectivity. According to Chisenga (2006), this is owing to the challenges libraries in sub-Saharan Africa face because of the limited funding available for financing and sustaining the technical infrastructure that is required.

Kahn and Underwood (2016) did a comprehensive study regarding the use of e-books by students at academic institutions in South Africa. According to the findings of their study, students were eager to use e-books, but the lack of awareness of e-books was the biggest stumbling block. In addition to this, they also established that students who had used e-books via their libraries felt that the collection of e-books was not sufficient to meet their needs.

A more recent study conducted by Makwanya and Oni (2019) at the University of Fort Hare in South Africa concluded that students have a positive attitude towards both print and e-books and will use the format that will assist with the relevant information for their studies. They also suggested that because the ownership of devices, especially mobile phones, is increasing libraries in South Africa should consider investing more resources in e-books.

E-books, publishers and publishing models

There is often a general misconception that e-books are cheaper to produce than print books. Publishing is an industry and to stay in business, publishers must produce profits. Digital publishing is not necessarily cheaper than print publishing because of the massive amount of work that needs to be performed before the product is ready for publishing and all of these have to be included in the pricing of the product. Libraries can therefore not expect e-books to be cheaper, as the business models can be very expensive and come with loaded DRM restrictions (Kahn 2014). Figure 1 displays the value chain of the e-book publishing industry versus that of the print book industry.

The models offered to libraries by vendors and aggregators have developed significantly over the years (Zinn & Langdown, 2011:105). These acquisition models include single-title purchases, aggregator-subscription packages, short-term rentals and evidence-based models. Typically, vendors will offer three options to libraries: (1) perpetual access, (2) an annual subscription or (3) pay-per-use. In order to make the e-books available to students, libraries have to purchase platforms such as Springer, MyiLibrary, EBSCO and Emerald. Current e-books are also further developed to include features such as hyperlinked bookmarks, annotations, text searching and linking complex multimedia objects (Adeyinka et al. 2018).

In recent years, the relationship between publishers and libraries has become uncomfortable, with publishers placing restrictions on the use of e-books, while libraries advocate the free flow of information. Furthermore, a new role player entered the e-book and publishing industry and that is: self-publishing. The development of technology has made it easier for authors to self-publish their books; for example: Amazon's self-publishing tool allows an author to publish their own books and list them on Amazon, Audible and Apple iBooks (Howarth 2022).

Awareness and adoption of e-books

It is important that students are aware of the availability of e-books for academic use. It is rather obvious that if students do not know that e-books are available at the library, they will not use them (Kahn & Underwood 2016). Several studies have

been performed regarding student awareness of e-books. According to the outcomes of studies by Borchert et al. (2009) and Corlett-Rivera and Hackman (2014), faculties and students seem to be aware of e-books but they are often not aware of the comprehensive e-book collections academic libraries offer.

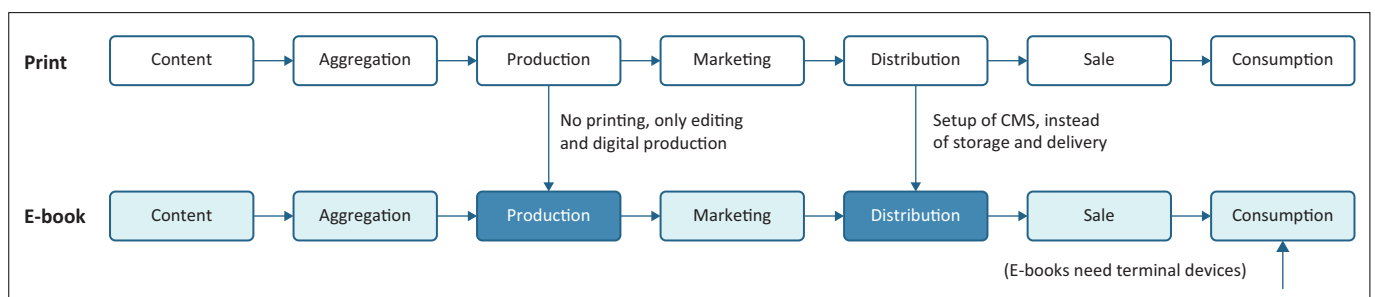
Some studies also indicate that there are differences with regard to awareness and use e-books among the various environments within universities. Undergraduate students tend to have a greater awareness of e-books, and graduate and postgraduate students tend to use them more while the lowest awareness and use were among faculty members (Wang & Bai 2016).

E-books and the coronavirus disease 2019 pandemic

The data collection and analysis for this research were completed in 2020 and 2021 during the COVID-19 pandemic. The outbreak of COVID-19 pandemic in 2019 had a massive impact on all aspects of life including libraries (Becker 2020). The pandemic changed the way in which libraries had to deal with user services, technology and collections. Despite the fact that libraries were closed during the COVID-19 pandemic, in many cases, faculties and students were fortunate enough to still have access to electronic information resources (Hendal 2020).

Some researchers refer to the pandemic as one of the greatest challenges the education systems worldwide faced as many institutions had to change overnight from a face-to-face or contact learning system to an online teaching system. The change was abrupt, dramatic and drastic and posed many challenges to both lecturers and students (Bordoloi, Das & Handiqui 2021). Both educators and students had no option but to become more proficient in the use of information technology in the online world (Rashid & Yadav 2020).

In response to the pandemic, many publishers opened their resources for free online access and softened the limits on e-book lending options, which broadened the access to online information for clients (Chisita & Chizoma 2021). Although many journals have already been provided online, the pandemic had a big impact on the use of e-books. The closure of libraries meant that print books could not be accessed, which



Source: Mordor Intelligence, 2020, *Global e-book market-growth, trends, and forecast (2021–2026)*, viewed 01 September 2022, from <https://www.mordorintelligence.com/industry-reports/e-book-market>

CMS, content management system.

FIGURE 1: The value chain of the e-book publishing industry.

could have been the turning point for the transition from print books to e-books. A study performed by Kodama et al. (2021) indicated an increase in the demand and use of e-books in Japan and other countries reported similar results.

E-books and related technology

Supporting technology is a fundamental enabling component in the e-book environment, as without which access to e-books will not be possible. These supporting technologies consist of the following: (1) e-book hardware, which comprises the devices that are used to read the publications; (2) e-book software, which assists in making the content available on the screen; and (3) the content the users interact with; at present, it can include text, graphics, audio and video (Davidson & Carliner 2014). Although some e-books need a special reader, many e-books are available in user-friendly formats such as PDF and HTML, which can be easily accessed using laptops, tablets and smartphones (Blummer & Kenton 2020).

Digital information seeking behaviour of undergraduate students

Each generation displays different and very specific characteristics regarding information and information retrieval. Knowing one's users and the characteristics of the users enables the library to develop the best way of providing effective services to the users (Vassilakaki 2016).

Mark Prensky (2001) first coined the term 'digital native' in 2001 to describe students who have grown up surrounded by and exposed to technology. Zimmerman (2012) concurs that digital natives are the generation of people who had access to technology since birth and elaborated by including similar terms such as iGeneration, Generation I, Generation Z, First Digitals, Millennials, Born Digital and the Google Generation. Similarly, these terms were collectively referred to as digital natives throughout this article.

Thinyane (2010) performed a study to investigate if digital natives are in fact a worldwide phenomenon. The findings indicated that in some cases, students had access to and were comfortable with technology, whereas other students had less exposure to technology. She recommended that universities cater for a diverse student population. A few years later, Leonard et al. (2016) did a study to explore Prensky's theory on digital natives in the South African context. According to the outcome of this study, digital natives in South Africa still need support and education on basic digital literacy skills. The authors further argue that access to ICT does not necessarily leads to an understanding or the ability to apply ICT skills in an academic environment. As universities cater for the digital natives of Africa, they should support students who are not yet comfortable with ICTs.

Research design and methodology

This section provides information on the research problem and the objectives of this study. It will also explain the research design and methods used for this study.

Research problem

Many academic institutions invest in information resources to make e-books available to library users and while undergraduate students form the largest groups of academic library users, insufficient information seems to be available on what the major factors are in preventing the optimal use of e-books by this group specifically, especially within the landscape of a developing country. Furthermore, by understanding the major factors that have an impact thereon, will assist academic libraries in putting measures in place that can remove barriers and assist students to fully utilise this valuable information resource.

Research design and methods

The focus of this study was to identify possible influences that may negatively impact the optimal use of e-books by undergraduate students within the context of a developing country such as South Africa. Therefore, the philosophical paradigm used for this study was pragmatism as the aim was to provide possible practical solutions to ensure the optimal use of e-books. The research method used for this study was sequential mixed methods. Mixed methods involve both qualitative and quantitative methods of gathering data as well as the analysis thereof (Cameron 2009; Saunders et al. 2016). These methods were applied to both data collection and analysis.

A phased approach was used with regard to the collection of data. Phase one involved the collecting of quantitative data by asking students to complete a questionnaire. As a result of the high number of undergraduate students (population), random sampling was applied to obtain a representative sample of the population by making use of the Raosoft calculator. The number of undergraduate students equated to 39 286 and at a 95% confidence level, with a 5% margin of error and a 50% response distribution, a minimum number of 381 undergraduates was sampled translating to 0.97% of the total population (Raosoft 2020). The second phase of data collection involved the collection of qualitative data by using focus groups. Focus groups were compiled according to faculty, and in total, 33 students participated in the focus groups representing all eight faculties at the university.

Quantitative data retrieved during phase one was analysed through descriptive analysis and making use of the SPSS (Hall & Vincenzi 2001).

The qualitative data gathered during phase two were analysed through thematic analysis using computer-assisted qualitative data analysis (CAQDAS). In addition, ATLAS.ti (Rambaree 2013) was used to facilitate the process of systematic and effective data analysis.

Results and discussion

During the data collection phases, 381 students completed the questionnaire, and 33 students participated in the focus

group discussions. Figure 2 indicates the number of students who participated in each of the phases as well as their year of study.

The questions posed to students in the questionnaire (phase one) were strategically structured with the intention to gather quantitative information regarding the use of e-books in comparison to other library information resources, e.g., databases, print books and print journals. The second objective of the questionnaire was to determine the type of technology students have access to when searching for information sources.

Upon concluding phase one of the data collection (via the questionnaire), phase two commenced. Information retrieved from the first phase was used to inform the discussions of the focus groups. The objective of the focus group discussions was to gain a more in-depth understanding on three key issues: (1) where do students naturally go to retrieve information for their studies; (2) what technology do they use during this process and why; and lastly (3) what impact do they think COVID-19 had on both the use of e-books and technology in general.

The analysis of the information gathered during these two phases revealed five major factors that negatively impact the optimal use of e-books. These factors include: (1) a lack of awareness of library e-books; (2) technological challenges linked to the digital divide; (3) the information-seeking behaviour of students as digital natives; (4) difficulty in finding, accessing and downloading library e-books; and lastly (5) the need for human interaction.

A lack of awareness

Wang and Bai (2016) stated that according to previous research, in general, at least 50% of academic library users have and awareness of library e-books. The 50% awareness was used as a standard for the research at hand as well.

In one of the questions of the questionnaire, students were asked whether they knew that they have access to e-books via the library. Only 47% of students indicated that they were aware of e-books in the library, which is 3% below the standard of 50% (see Figure 3). Similarly, the lack of

Phase 1: Questionnaire			Phase 2: Focus groups		
Year of study	N	%	Year of study	N	%
Year 1	336	88.2	Year 1	13	39.4
Year 2	21	5.5	Year 2	7	21.2
Year 3	20	5.2	Year 3	11	33.3
Year 4	4	1.0	Year 4	2	6.1
Total	381	100.0	Total	33	100.0

FIGURE 2: Year of study of participants during phase one (questionnaire) and phase two (focus groups).

awareness of library e-books was identified as one of the main reasons in students not using e-books according to the findings of a study performed by Leonard and Snyman (2019) among undergraduate students at the University of Namibia.

Technological challenges linked to the digital divide

As displayed in Figure 4, 80% of the students have access to a smartphone, while 67% have access to a laptop and only 9% have access to a desktop computer.

Van Dijk and Hacker (2003) identified four major barriers that contribute to the digital divide of which two of these barriers were relevant to this research, firstly a lack of access to devices and network and secondly lack of digital skills, inadequate training and guidance.

Further feedback on the questionnaire indicated that 61% of the students always use their smartphones to access library information resources and less than half of the students (48%) always use their laptops to access library resources, as displayed in Figure 5. This finding was confirmed with the feedback from students of the focus groups, who reported that most of the time they use their smartphones to access library information resources, as this is the device they have easy access to.

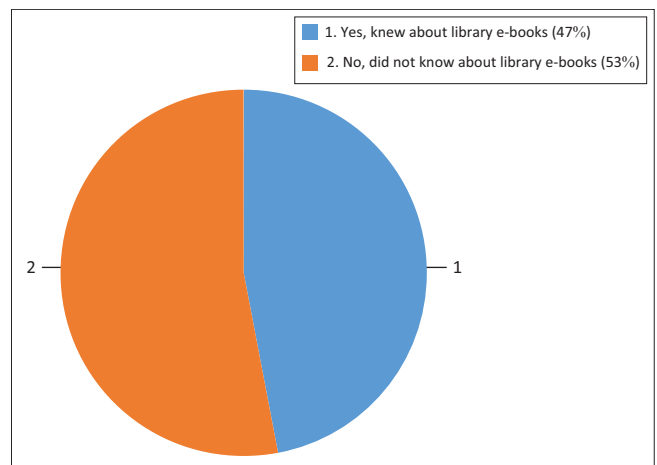


FIGURE 3: Awareness of library e-books.

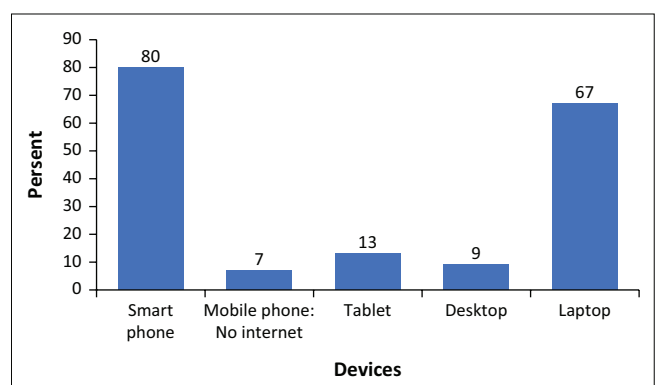
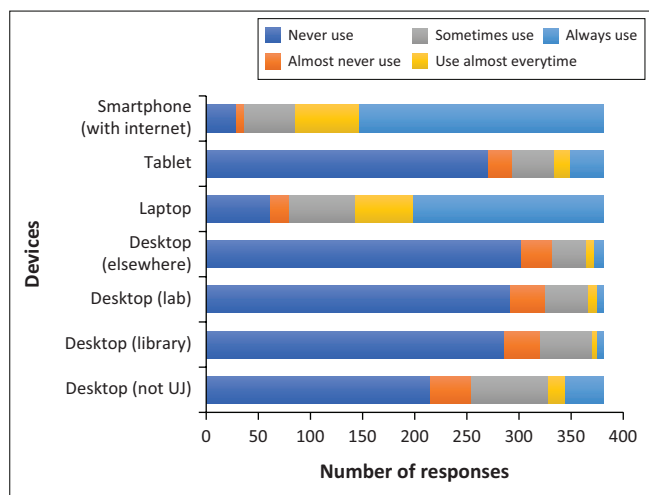


FIGURE 4: Access to information and communications technology devices.



UJ, University of Johannesburg; lab, computer laboratories.

FIGURE 5: Devices used to access library information resources.

From the information retrieved, it is clear that the majority of students make use of their smartphones to access and read e-books. During the focus-group discussion, some participants indicated that although they use their smart phones to access e-books, the experience is not very pleasant as the screens of mobile phones are too small and it becomes difficult to make optimal use of all the functions the e-books provide. Two students specifically mentioned that in their experience not all content of the e-book is available on the screen when using a mobile phone. More than 50% of the participants from the focus groups agreed that laptops are the preferred device to use for e-books because of a larger screen and the option of mobility. Another three participants stated that in their experience the most productive way to use e-books is having more than one screen. By having two screens, the e-book can be opened on one screen while the assignment can be typed on the other screen. Previous studies indicated that it is more difficult to read content from a mobile screen with readability 50% lower on mobile phones than on desktops owing to the small screen of the mobile phone, which makes less content visible at one time (Rauch 2011).

Wendo and Mwanzu (2016:2) state that, among other things, connectivity and the speed of the Internet are key factors contributing to the high rate of access and use of e-books. According to the outcome of this research, access to data (network) also seems to be a likely barrier to the optimal use of e-books. While the majority of students (54%) indicated that they prefer to download the entire book and when asked which type of data they use, 56% indicated that they always use mobile data. Although the outcome of the questionnaire indicates that students most often use their mobile phone data to access library information resources, feedback from the focus groups indicated that, to get optimal access to e-books, Wi-Fi seems to be the better option. However, Wi-Fi is also the more expensive option when students have to connect from home using personal Wi-Fi networks.

Access to Wi-Fi and using smartphones instead of bigger devices such as laptops to access e-books are therefore found

to be limiting the use of e-books by undergraduate students, relating to the lack of devices and network according to the barriers listed by Van Dijk and Hacker (2003).

The second barrier related to the digital divide was the issue of relating to a lack of digital skills and inadequate training. According to the feedback from the focus groups, students mentioned that they find the process of downloading an e-book to be cumbersome and tedious and the training and guidance provided by the library insufficient.

Information-seeking behaviour of digital natives

Undergraduate students as digital natives opt for the easiest and most convenient way to find information and while they appreciate the availability of electronic resources provided by the library, their first choice to find information is often Google (Nicholas et al. 2009). This was the finding of this study as well. Students who participated in the focus groups consistently reported that they use Google and Google Scholar as entry points when looking for information resources. What is even more alarming is that during the focus group discussions, five students (15%) reported that they have little or no need for the library as they can easily source information from outside of the library.

Apart from using Google and Google Scholar, students participating in the focus groups mentioned instead of using library resources, they prefer alternative resources, such as lecture notes and slides, textbooks and videos on YouTube.

According to these findings because of the already established information-seeking behaviour of undergraduate students, their first point of entry when searching for information is Google and Google Scholar. Meaning that the information-seeking behaviour of students as digital natives has a negative impact on the usage of library information resources in general and in particular e-books.

Difficulty in finding, accessing and downloading library e-books

During the focus group discussions, students often referred to the fact that they find it difficult to access and navigate the online library and information resources, such as e-books. Students who did manage to navigate their way through the online library stated that the next hurdle they had to overcome was to download the e-book. They found this to be a tiresome and cumbersome process and reported that they often had to practice and repeat the process more than once before they become comfortable in downloading a book without assistance or guidance. Furthermore, students reported that they were aware of the information-skills training the library offers as well as the training videos but complained that the training often coincided with the classes and found the training videos to be too long, causing them to lose interest.

This was also the finding according to research performed by Slater (2010), who stated that one of the biggest stumbling blocks in the use of e-books is that users find it difficult to find, access and download. One of the reasons for this is that libraries often provide students with several points of entry to e-books while they prefer a single point of entry.

Another contributing factor relating specifically to the downloading of e-books is DRM restrictions, which only allow students to download or print parts of the e-book. The feedback from the questionnaires indicated that 54% of the students prefer to download the entire book and the frustration of not being able to do so came across during the focus group discussions, as one of the students stated:

'I've had issues with accessing the e-books because most of them do not allow for downloading of the whole book and only a certain amount of pages or chapters. This is an issue for me as I often need access to the whole book.' (male, 21, student)

Need for human interaction

While this research focused on the usage of e-books a surprisingly unexpected topic that was raised several times during the focus group discussions, was the role the physical library plays in the lives of students as it facilitates their need for human interaction. This topic might have been amplified because of the fact that the interviews were performed during the COVID-19 lockdown period (2020–2021). In the focus group discussions, 39% of the participants mentioned that they find the physical library more helpful owing to the human interaction and that it provides them with the opportunity to converse with fellow students on ideas and consult librarians on where and how to find relevant information resources. This finding correlates with that of Most (2011) who mentioned that libraries are more than physical buildings and that users visit libraries for a variety of purposes including social contact and to create or reinforce personal identity. Furthermore, for digital natives, networking is important both in the physical and online spaces (Zimmerman 2012).

E-books basically exist not only in the virtual or online environment, which has the advantage of easy access, but also the disadvantage of little or no human interaction, which is clearly needed and a requirement of these students. It might therefore be important to present e-books in a way that marries the e-book in the online environment with the need of students for human interaction. Although 'the need for human interaction' might not be regarded as a direct barrier in the use of e-books, it does have the potential to become a barrier unless it is presented with the reassurance of human interaction and a social aspect to the undergraduates.

Limitations of this study

The design method used for this study was a cross-sectional design, meaning that the data collected reflect a specific situation at a specific time (Cummings 2018) and ultimately contributed to the limitations of this study. The study was

approved in 2019, and the research process started in 2020 at the start of the COVID-19 pandemic. During the period of data collection, students were not allowed on campus, and all teaching and library support were performed online. It is the opinion of the researchers that the results of this study might have been different, should it have been completed pre-COVID-19. This statement is supported by the participants who indicated that the pandemic had a massive impact on the use of online information resources and technology. Similarly, it must be noticed that the majority of the literature review (resources consulted) displayed usage of resources pre-COVID-19 and therefore must be interpreted as such.

Conclusion

The purpose of this research was to identify possible influences that may negatively impact on the optimal use of e-books by undergraduate students in a developing country such as South Africa. The findings of this study identified five barriers that negatively influence the optimal use of e-books.

The first barrier identified was lack of awareness of the availability of e-books in libraries. The recommendation is that more should be done to create an awareness of e-books among undergraduate students and to involve lecturing staff in the process as well.

The second barrier was technological factors linked to the digital divide especially with regard to access to devices and networks and the lack of skills and guidance in accessing and downloading e-books. Libraries have to ensure that the students have access to the relevant devices and networks to access e-books and more needs to be performed to educate and train students in the accessing and downloading of e-books in a manner that resonates with students as digital natives.

The third barrier is related to the information-seeking behaviour of students as digital natives and their propensity to rather than consult familiar information resources such as Google and Google Scholar than library resources. Currently, there are tools available such as LeanLibrary, a browser extension that refers students to library information resources when doing a Google search. The researchers strongly suggest that this type of tool be implemented and promoted to students to increase their usage of library resources, including e-books.

The fourth barrier which is most possibly linked to the previous barrier, is the fact that students found it difficult to find, access and download e-books. Contributing to this issue is the DRM restrictions placed on e-books by publishers. Library should provide students with a single point of entry to e-books, similar to what they are used to in the Google environment.

The fifth and last barrier that was identified was the need for human interaction. Despite the fact that students are

comfortable in a virtual environment, they still need human interaction and by including human interaction in the e-book environment might have a positive impact on the optimal use of e-books by undergraduate students.

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Competing interests

The authors declare that they have no financial or personal relationship(s) that may have inappropriately influenced them in writing this article.

Authors' contributions

J.v.d.W. contributed towards the data collection and wrote up the research. A.P. contributed towards supervising the project and C.R. contributed towards co-supervising.

Ethical considerations

An application for full ethical approval was made to University of Johannesburg and the College of Business and Economics Research Ethics Committee on 31 October 2020. The ethics approval number is 2020SCiS59.

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Data availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

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