# E-books as Effective Tools for Learning: Understanding University Students' Perceptions

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## ABSTRACT

E-books have quickly become one of the most popular forms of educational media, particularly among university students. E-books can take the form of text stored in digital format, a digitised book, digital reading material, a book stored in a computer file format, or an electronic file containing words or images that have been assigned unique IDs. The purpose of this study is to investigate university students' perceptions of e-books as effective tools for learning. The qualitative research method, using a phenomenological approach and semi-structured online in-depth interviews, was employed as the research design for this study. The interviewees were university students from Universiti Teknologi MARA (Shah Alam Campus) who frequently use e-books in their studies. The findings revealed that e-books are effective tools for learning compared to printed books for several reasons.
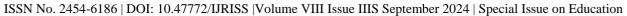
## INTRODUCTION

Human daily lives have been dominated by technology. Most adults agree that they could not live without its presence. The versatility and affordability of these technologies, along with access to the internet, have influenced how people use mobile technology both at work and outside of it. What does technology have to do with e-book usage? E-books are becoming increasingly popular among adults, teenagers, and especially students. The majority of consumers use e-books for both informational and recreational reading. Most adults prefer to use mobile applications that allow them to download and read at their leisure without having to visit a facility such as a library. However, some people have complained that reading or using an e-book while working or studying does not provide satisfaction to users (Akpokodje & Ukwuoma, 2016).

A text in digital form, a book converted to digital format, digital reading material, and an electronic file containing words or images with unique IDs are all examples of e-books. The metadata can be accessed on any computer or formatted for display on specific e-book readers. It can also be viewed on a computer screen, read over a network, or displayed on a desktop, notebook, or dedicated portable device (Chen et al., 2012). In 2009, the growing popularity of e-books in the academic environment was mainly attributed to the decreased cost of e-books and the advantages of the digital format. E-books appeared to provide effective alternatives to traditional print books by meeting the demand for digital access in the Internet age. They also offered more engaging solutions to the monotony of print books, introducing a technical foundation for two-way interactivity (Jou et al., 2016).

According to Arthur (2024), the term "e-book" refers to a digital file containing text and graphics that is suitable for electronic distribution and displays on screen similarly to a printed book. We live in an age

where everything is done electronically—e-commerce, online banking, online ticket purchases, online gift card purchases, electronic cigarettes, and much more. Why? Because consumers appreciate the ability to complete tasks from virtually any location using any device. As noted by Wahl (2018), it shouldn't be surprising that people have started making significant changes to how they approach nearly every aspect of their work. He also stated that what began as a way to simplify daily tasks has now extended into leisure activities, such as reading, which comes immediately to mind. Reading is one of the most popular activities in the world today, and many want to make it more convenient for people to engage in this habit.

Electronic books, or e-books, have recently gained popularity among both the general public and students due to the benefits they offer compared to traditional books. They represent a new paradigm in the educational system, with electronic books being used as textbooks in classrooms. Like traditional books, e-books come in a wide variety of formats that can be tailored to meet the specific needs of students (Fanny Rahmatina et al., 2020). Therefore, a study on students' perceptions of e-books as a learning tool is necessary to gain insights into their usage among university students.

In March 2020, Malaysia was one of the countries affected by the Covid-19 virus. It took Malaysians almost a year to adapt to the new normal, including students at all levels—primary, secondary, and tertiary. At the tertiary level, most classes were conducted online by teachers and instructors, with some participation from students, as noted by Adedoyin and Soykan (2020). With the new normal in place, it is increasingly relevant for students and instructors to use e-books or digital books to reduce contact and save money, as they are significantly cheaper than physical books. Furthermore, the use of e-books or digital books has also increased among people who read for leisure (Moore, 2009).

According to Akpokodje and Ukwuoma (2016), the use of e-books in studies has a different influence compared to using physical books. Nowadays, in this era of modernisation, most people, especially students and educators, find it easier to use e-books because they provide a hassle-free experience and a more affordable means of accessing information. Kant (2019) stated that there has been various research on the differences between print and electronic publications. According to Mbozie (2021), the choice of book material often depends on personal preferences for retaining information.

According to a survey conducted by Noor Aina and Hayati (2022) at UiTM, 62.9% of students believe that it is simple and straightforward to obtain e-books, while 27.7% prefer to read printed books. It is reasonable to conclude that the majority of students are aware that e-books are available in the library and make full use of this resource. According to Majid et al. (2019), e-books offer a variety of advantages that distinguish them from their print counterparts, contributing to their increased popularity. Some of the key benefits of e-books include portability, ease of access, convenience, interactivity, multimedia capabilities, display personalisation, hyperlinks to reference sources, language conversion, simple searching and navigation, and access to a large number of free e-books in the public domain. This study aims to explore students' perceptions of e-books as effective tools for learning.

## LITERATURE REVIEW

According to Lebert (2009), the initial steps of Project Gutenberg, a digital library for works in the public domain, were taken in 1971. This marked the beginning of the electronic book, also known as an e-book. More than 40 years have passed since its creation, which is relatively brief compared to the print book, which has been around for five centuries. Lebert (2009) also mentioned the opinion that the internet did not bring an end to other forms of media such as film, radio, or television. Instead, it established its own place as a new medium, allowing for the acquisition of information, access to documents, the expansion of knowledge, and the communication of ideas across national boundaries and linguistic barriers. It wasn't long before booksellers began selling books online, both in their home countries and abroad, including excerpts on their websites. Libraries started developing websites to serve as "virtual" windows and began creating digital libraries based on their print collections. Online versions of newspapers and periodicals, along with their back issues, became readily available. To avoid the financial burden of print publishing while still

providing print-on-demand services, some journals have transitioned to an "exclusively" electronic format. Additionally, some newsletters, zines, and journals were initially published solely online, without ever having a print counterpart (Lebert, 2009).

The main difference between an e-book and a traditional book is that the former is published on the internet, while the latter is distributed as a physical book. Due to advancements in technology and the growth of literature, there has been a significant increase in the number of people reading books in digital format in recent years (Harman, 2023). According to Day (2016), support materials such as practice problems, discussion questions, test questions, section outlines, and summaries are typically provided to assist with the student learning process and help them succeed. In some college classes, instructors require students to use traditional textbooks. However, Day (2016) suggested that, as preparatory material for tests, instructors may choose to use either a standard book or a course book presented in electronic format. Students who are enrolled in university or college are defined as university or college students. An average university student spends a significant number of hours on their devices, such as laptops and mobile phones (Nyamwaya, 2021). According to Wang and Bai (2016), the majority of the time that students spend reading electronic books is for leisure purposes, which is especially true for college students. Postgraduate students, on the other hand, are more likely to obtain their academic readings from e-books than undergraduate students. When it comes to reading academic e-books, students prefer to use mobile devices and laptops.

A study by Sujatha (2018) found that approximately 70 percent of book publishing companies in the country have begun digitising their publications for online distribution. The e-book industry has reached unprecedented heights, largely due to the proliferation of self-publishing platforms. The convenience of e-commerce, which makes it easy to buy and read digital books without the need to visit a store or wait for delivery, is a major factor contributing to this surge in popularity. The issue of storage was one of the major challenges that the introduction of e-books was able to overcome. Being a voracious reader can be particularly challenging because there is often never enough storage space. Books are cumbersome to keep and maintain due to their size, weight, and general unwieldiness. However, digital readers such as the Kindle have led to the development of devices that are barely larger than a thin book yet can store hundreds of volumes at once. Additionally, since these devices are connected to the internet, it is possible to trade books, purchase them, rate them, and write reviews with just a few clicks. Many of these devices come with built-in backlights and touch capabilities, allowing for reading in virtually any environment. It is feasible to carry an entire library in a backpack or container that is only a few inches tall (DeFosse, 2012).

The technologies used to create e-books today include features that are beneficial for students with a variety of skills, languages, and special needs. Many students require accommodations such as adjustable text size, text-to-speech functionality, and interactive elements in order to succeed with text-based materials. The unique features and capabilities of e-book technology can provide these accommodations. This type of text is becoming increasingly available, and many believe that electronic text will replace printed text in the not-too-distant future (Smyth & Carlin, 2012). Modern desktops, laptops, or handheld computers equipped with e-book software can assist teachers in providing their students with access to text information that incorporates universal design concepts and enhances interactivity with the content. This can be achieved by offering students access to information contained within e-books (Cavanaugh, 2002).

There are many advantages to collecting online books as opposed to print. Jonathan Bunkell, Vice President of Online Book Sales at Elsevier Ltd., claimed that online books are a cost-effective solution that becomes increasingly economical over time. He demonstrated that e-books optimise the usage of book titles, enhance access and discoverability, and allow for cross-linking with other online content, creating a dynamic research experience. Furthermore, while print books can become more expensive to maintain, online books offer an attractive alternative. They can be accessed by any user with an internet connection, unlike print books, which can only be read by one person at a time and often require multiple copies. We should consider whether online books provide a better way to deliver information to staff and students. Users are not restricted by location when using e-books, which often provide superior access. Additionally, online books
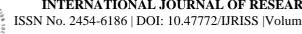
have negligible handling costs compared to print, and their acquisition and operational costs remain consistent over time (Bunkell & Correia, 2009).

The creation of digital journals in the 1990s significantly improved the efficiency of accessing journal articles and transformed the way research was conducted. Accessing journal articles in electronic format offers numerous advantages in terms of discovery, accessibility, and usability, making it no surprise that users not only accepted this shift in format but embraced it. Although using online journals required some learning on the part of users, the flexibility and convenience they provided were compelling, and scholars quickly adapted to take full advantage of the new options available for finding and reading journal articles (Tenopir et al., 2009). With the success of online journals, the transition from print books to electronic books was to be expected. The clear strengths of e-books, similar to e-journals, include improved discovery and delivery, 24-hour access from anywhere, full-text search functionality, and portability. These factors contribute to a more efficient use of e-books compared to their print equivalents in many respects and are generally rated highly by users (Shelburne, 2009).

In 2022, Hackman et al. published the results of a survey conducted in 2019 that gathered data on perceptions and use of e-books from undergraduate students, graduate students, faculty, and staff at two research universities in Maryland. This survey follows two previous studies conducted in 2012 and 2014 by the same team, with slight changes in personnel, and compares results over time, by user affiliation with the university, and by STEM versus non-STEM disciplines. Findings from the current survey reflected prevailing patterns from the 2012 and 2014 surveys, with the percentage of respondents indicating frequent use of e-books for academic purposes increasing, while the percentage of those choosing less frequent use decreased. The percentage of respondents who reported that they "never" use e-books for academic purposes dropped significantly each time the survey was conducted, from 31.5 percent in 2012 to 15.95 percent in 2019. If these trends continue, this "anti-e-book" bias may continue to diminish, even if it never completely disappears. Overall, this trend likely reflects a growing familiarity with e-books as part of the broader landscape of academic resources. There was no statistically significant difference in responses between STEM and non-STEM disciplines (p = .10) or between undergraduate and graduate students (p = .12), but students reported using e-books for academic purposes more frequently than faculty members and staff did (Hackman et al., 2022).

In 2023, Owens et al. published the results of their survey on the use and non-use of e-books among graduate students and faculty, following up on data collected in 2011 from the same mid-sized public university in southeast Texas. The survey results showed that while the proportion of respondents who are library e-book users has increased significantly over the past decade, both e-book users and non-users maintained consistent attitudes toward e-books and print books. Most e-book users appreciated features such as keyword searches and the ability to copy and paste, but the majority also valued the option to print out pages and chapters. Respondents' format preferences shifted based on their academic needs; however, some of the limitations that led users to switch from or avoid library e-books were related to DRM restrictions that could potentially be addressed by publishers (Owens et al., 2023). Among the recent studies on e-books in academia is the Brush and Kipnis (2024) research. Their study aims to understand the level of graduate students' awareness and usage of e-books purchased by their university library since the COVID-19 pandemic. The results showed that doctoral students (80%) are more aware of e-book availability through the library than master's students (64%), and usage rates are higher among doctoral students (78%) compared to master's students (52%). Additionally, the frequency of e-book usage has changed since COVID-19, with more than half of respondents using e-books more often. The majority of respondents who use e-books do so because they are required as textbooks. While international students tend to use their laptops or smartphones for reading e-books, domestic students prefer laptops. Comments from students at the end of the survey suggested ways for libraries to improve e-book awareness.

The era of the Fourth Industrial Revolution demands that the learning process gradually shift from conventional face-to-face classroom instruction to the integration of information technology, in order to keep pace with rapid technological advancements. Various forms of information technology can provide

convenience and efficiency in supporting the learning process. Examples of these advancements include hybrid learning, digital libraries, blended learning, and digital books or e-books, among others (Sugiharni, 2018; Divayana et al., 2016). The importance of digital books in supporting the learning process is felt at all levels of education, from elementary to secondary to tertiary, due to the need for practicality, speed, and ease of access. For this reason, ongoing efforts are necessary to develop learning media. One important step in this process is raising awareness of the significance of developing effective learning media for the future. Teachers are working to enhance their skills in creating engaging, affordable, and efficient media. Digital books are expected to foster a conducive learning environment and provide materials for subjects, particularly physics, in a way that is both easy and efficient (Fanny Rahmatina et al., 2020; Hidayatullah & Rakhmawati, 2016).

In 2020, Fanny Rahmatina et al. conducted research on the effectiveness of e-books for students in relation to learning materials. The approach used in this study was a document analysis. The researchers examined various types of literature, including books, journals, research findings, and data related to the use of e-books in the learning process. The data was then analysed using quantitative descriptive methods, resulting in a narrative that explained the study's findings. Based on the data, the researchers concluded that e-books are highly effective for learning, supported by their analysis of 12 journals concerning the use of e-books in education. Of the 12 journals analysed, 5 reported an effectiveness percentage between 80% and 85%, 6 journals reported a score between 85% and 90%, and 1 journal indicated a score of more than 95%. Overall, the analysis concluded that the use of e-books in the learning process has a positive impact, as evidenced by their effectiveness levels. Additionally, Fanny Rahmatina et al. (2020) explain that the effectiveness of an e-book can be evaluated based on the consistency between the typology of expectations and actual experiences, as well as the typology of expectations and perceived benefits. The effectiveness of e-books is determined by two factors: first, expert or practitioner ratings based on their experience; and second, the alignment of results with the expectations of the developers. Thus, an e-book is considered effective if it can improve student competencies during each session, specifically by achieving minimum proficiency in knowledge aspects and attaining both categories in the attitudes and skills sections of the assessment sheet.

According to Abdul Ghofur (2015) and Sanjaya (2006), there are many benefits to using digital media in the learning process: (1) it attracts more student attention, fostering motivation to learn; (2) teaching materials are clearer, allowing for better understanding and mastery of learning objectives; (3) teaching methods become more varied; (4) students engage in more learning activities, as they not only listen to the educator's explanations but also participate in activities such as observing, doing, and demonstrating; (5) it helps eliminate student boredom by providing varied media; (6) it is very beneficial for independent learning activities; (7) it prevents boredom even when in book form; and (8) e-books can be accessed offline. Additionally, another advantage of using e-books in the learning process is that they can help students understand abstract concepts more easily due to the varied delivery of content. Students can learn from pictures, animations, and videos that the teacher has included in the e-book. E-books offer benefits in terms of colour and graphics, enhancing realism and stimulating students to engage with the material and complete exercises that aid in their understanding of concepts (Parulian & Situmorang, 2013; Suryani & Sukarmin, 2012). Fanny Rahmatina et al. (2020) emphasised that the key advantages of digital books compared to printed books are their interactive and cost-effective features. Digital books are interactive because they allow readers to easily access and read content through information technology, creating an experience similar to reading a printed book. They are also cost-effective, as they do not incur additional printing costs.

## METHODOLOGY

This study utilised the qualitative research method because it enhances exploratory analysis. The qualitative research approach served as the foundation for the research design developed for this study. Generally, qualitative research investigates and seeks to understand the significance of a small number of groups or individuals concerning social issues or relevant topics (Creswell & Poth, 2016).

Adopting a phenomenological approach, which involves conducting in-depth interviews with a diverse group of participants from a specific demographic, would be the most beneficial way to pursue this line of inquiry. This approach focuses on studying human experience. In this research, the phenomenon examined is university students' perceptions of e-books as effective learning tools. Interviews with university students were conducted to understand their experiences regarding this issue.

The sample for this research was selected using purposive sampling. The selection criteria included: (1) UiTM students and (2) active users of e-books. Sample size determination followed Creswell's (1998) guidelines, which suggest that five to twenty-five informants are sufficient for qualitative research employing a phenomenological approach. This study involved a sample of seven informants from UiTM.

This study employed online in-depth interviews to gather data from seven university students. The primary rationale for using in-depth interviews was to obtain comprehensive information about the informants' perceptions of e-books as effective learning tools. The findings were analysed using thematic analysis, a method for identifying, analysing, and reporting patterns, referred to as "themes," within the data. This approach organises and describes the dataset in rich detail (Braun & Clarke, 2006). To analyse the data, the study followed the six processes outlined by Braun and Clarke (2006): (1) familiarising with the data; (2) generating initial codes; (3) searching for themes; (4) reviewing themes; (5) defining and naming themes; and (6) producing the report.

## FINDINGS AND DISCUSSION

To understand university students' perceptions of e-books as effective tools for learning, this research focuses on the four dimensions of using digital texts for reading and learning introduced by Manulu (2019). The four dimensions are (1) motivation and interest in reading digital texts; (2) digital texts reading efficacy; (3) difficulty in digital text reading; and (4) preference for reading digital or print text.

**Motivation and interest in reading digital texts**

In the context of this research, motivation and interest in reading digital texts refer to university students' motivation and interest in reading e-books. Based on the findings, several factors influence university students' motivation and interest in reading e-books.

First, the majority of the informants admitted that university students are more motivated and interested in reading e-books than printed books. This is because (i) they can choose the settings that they find most comfortable, and (ii) the features of e-books, such as the font options and word search, make them more engaging to read.
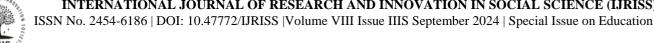
*"reading with e-books is much more interesting because I can choose the settings however I am comfortable with" (Informant 2)*

*"e-books are more convenient, and I can adjust the setting to my own preferences" (Informant 3)*

*".....the capabilities of the e-book, such as the zoom tool, word search, and many more, make reading much more exciting" (Informant 5)*

*"...The features of an e-book is very fun to explore with, as for me I am an iPhone user, so e-books feature I can simply change the fonts or size according to my comfortability" (Informant 6)*

Second, the majority of the informants stated that university students feel comfortable studying or reading with e-books because it is much easier to carry a device than heavy books.

*"it is very comfortable using e-book cause it's very easy to carry around a gadget instead of bulky books" (Informant 1)*

*"utilizing an e-book is incredibly convenient because it is much easier to transport a device than heavy books" (Informant 5)*

*"... e-book is portable and can be access anytime and anywhere" (Informant 6)*

Third, the majority of the informants stated that reading e-books provides a positive experience. Examples of this positive experience include (i) helping students finish assignments more quickly and (ii) allowing them to save on the cost of books.

*"definitely positive experience, not only it helps with finishing assignments quicker, e-book also helps me to save cost on books" (Informant 1)*

*"digital reading does emerge positive experience, it helps me to save cost and time" (Informant 3)*

*"reading books on a digital device does have several benefits, including helping me save both time and money" (Informant 4)*

*"...I could get my assignments done in a very short time with e-books than printed books" (Informant 6)*

**Digital texts reading efficacy**

In the context of this research, digital text reading efficacy refers to university students' belief in the effectiveness of e-books. Based on the in-depth interviews, the majority of informants stated that e-books are more effective tools for learning compared to printed books. This is because (i) it makes studying easier for students and (ii) it saves students time when seeking help with assignments.

*"Based on my experience and opinion, e-books are really effective because I can copy any sentence/phrase that I don't understand and paste it online to look for the meanings easily rather than needing to flip through a dictionary all the time" (Informant 2)*

*"e-books are great because I can copy and paste any text or word, I don't understand and look it up online instead of typing on google" (Informant 4)*

*"e-books, in my opinion, are quite useful due to the fact that they are simple and quick to utilise" (Informant 5)*

Furthermore, regarding students' belief in the effectiveness of e-books, the majority of informants stated that e-books enhance students' achievement. This is evident from the informants' comments that e-books (i) make it easier for students to complete their work quickly and (ii) help them obtain better grades.

*"e-books do help with completing my assignments faster and I also believe that it helps me with getting good grades" (Informant 1)*

*"e-books really contribute to increasing my achievement. It saves me more time, and I can read many sources simultaneously" (Informant 3)*

*"e-books make it easier for me to finish my work quickly, and I also think it helps me obtain better grades" (Informant 4)*

Based on the in-depth interviews regarding students' belief in the effectiveness of e-books, the majority of informants stated that e-books help students improve their comprehension of certain sentences and phrases.

*"In my opinion, e-books help with my comprehension with certain sentences/phrases. Like I mentioned earlier, I can easily copy and paste the terms I don't understand and google it rather than flipping through a dictionary" (Informant 2)*

*"In a way, e-books do help. This is because I can easily copy and paste a phrase I don't understand and look it up online, thanks to the features they have"* (Informant 5)

*"Yes, it helps, with the search feature or look up, I can easily google any words that I don't understand fully"* (Informant 6)

**Difficulty in digital texts reading**

In the context of this research, difficulty in digital texts reading refers to significant problems encountered when reading e-books. Based on the in-depth interviews, the informants stated that university students have no issues at all when reading e-books. They never print e-books before reading them because they believe it goes against the purpose of e-books and wastes both time and paper.

*"So far so good I have no problems when reading e-books….and I never print e-book. Why would I print an e-book that goes against the purpose of an e-book?"* (Informant 1)

*"I've never experienced any problem so far….and no, I never print it… e-books can save me from wasting paper"* (Informant 3)

*"...No problem at all in reading e-book……I never print the e-book before reading it, that's waste of time and paper… "* (Infornant 6)

**Preference for reading digital or print texts**

In the context of this research, preference for reading digital versus print texts refers to university students' preferences for e-books or printed books. Based on the in-depth interviews, the majority of informants stated that university students more often read e-books than printed books, having started this practice in high school and continuing into their undergraduate studies.

*"…….I read e-books more often than printed books. I started to read e-books when I first got my mobile phone during my STPM"* (Informant 3)

*"...........I read more e-books than printed books because they are easier to get to. I first used an e-book when I was in high school, but I used it more often when I was in college"* (Informant 5)

*"I read more e-books compared to printed books now, especially during undergrad, it is like once you get the taste of an e-book, you'll never look back…hahahahahah"* (Informant 7)

Additionally, the majority of informants stated that university students prefer keeping e-books on their devices (phones or tablets) because they are easily accessible in one place.

*"Yes of course I keep it in my gadget, I kept it in my iPad, when I keep it in my gadget, I have easy access to it whenever I want"* (Informant 1)

*"Yes, I like keeping my book in my gadget. I kept it in a tablet. It's easy for me to look at my books whenever I want to, it's like I have a personal library in my tablet"* (Informant 2)

*"I prefer to keep it in my tablet……"* (Informant 7)

Furthermore, the majority of informants expressed that university students prefer free e-books over paid ones; however, they are willing to purchase them if necessary, as they are still cheaper than printed books.

*"I prefer free e-books but I don't mind paying for it….and yes, I am willing to buy it as the costs are way cheaper than having to buy physical books"* (Informant 3)

*"Free e-books…. Sure, I'm willing to buy e-book and I don't have to worry about losing my book because it will be save on my account." (Informant 4)*

*"I prefer free e-book……I'm willing to buy e-book since it is not as expensive as a printed book" (Informant 7)*

The findings of this study indicate that university students recognise e-books as an effective learning tool. This is due to the advantages and unique features of e-books that are not present in printed books, which provide an engaging and positive experience for users, including: (1) e-books make learning easier; (2) e-books save time when seeking help with assignments; (3) e-books enable students to complete work more quickly; (4) e-books help improve their grades; (5) e-books allow students to save on book costs; (6) e-books enhance their understanding of certain sentences and phrases; (7) e-books let them choose the settings in which they feel most comfortable; and (8) features such as font selection and word search make reading more engaging. This study confirms previous research that highlights the various advantages and unique features of e-books, demonstrating that they are useful and effective tools for student learning (Owens et al., 2023; Malaquais et al., 2021; Fanny Rahmatina et al., 2020; Majid et al., 2019; Sujatha, 2018; Sugiharni, 2018; Akpokodje and Ukwuoma, 2016; Divayana, 2016; Hidayatullah, 2016; Ghofur, 2015; Parulian, 2013; Suryani, 2012; Bunkell & Correia, 2009; Moore, 2009; Shelburne, 2009; Sanjaya, 2006).

Additionally, the findings of this research reveal that university students have a favourable impression of e-books as effective tools for learning. The data gathered indicated no significant difference between the sexes; both genders agree that e-books are efficient learning tools. The results also show that university students encountered no difficulties when reading e-books throughout their experiences with this technology. Furthermore, students stated they would never print an e-book, as they believe doing so defeats the purpose of having an electronic format. This finding aligns with previous research conducted by Ismail and Zainab (2015) on factors related to e-book use among IT students. Their study revealed a positive acceptance of e-books among IT students, who primarily became aware of the e-book service while visiting the library website or through referrals from lecturers, friends, or librarians. About 70% of the students rated the e-book service positively, and the research found no significant difference in e-book usage based on gender.

The preference for reading digital text instead of printed text is another aspect examined in this research. The majority of informants stated that university students prefer e-books to printed books due to the accessibility and features associated with e-books. They would much rather complete their everyday tasks or assignments using electronic books rather than printed ones. According to the findings of the research conducted by Wang and Bai (2016), they concur with the conclusion that students at higher education institutions have a significant preference for digital books over physical copies.

## CONCLUSION

This research indicates that e-books are becoming increasingly relevant tools for university students in their learning processes. Students show a preference for e-books over printed books, citing factors such as convenience, portability, and cost. The unique features of e-books, including adjustable font sizes, search functions, and availability, enhance the reading experience. It is evident that e-books make learning easier and improve students' performance, allowing them to complete assignments more quickly and with better quality. Additionally, students recognise the environmental benefits of using e-books, as they reduce the need for paper and printing. The study supports the argument that digital texts are more suitable for contemporary technological learning needs and can serve as substitutes for printed texts. The rise in e-book usage aligns with the development of educational technology, particularly during the blended and online learning phases prompted by the COVID-19 pandemic. Consequently, e-books are valuable resources in higher education, as they are easily accessible, convenient, and can be tailored to learners' needs. Future research may explore enhancements to e-book features to address any remaining issues or constraints that could hinder their effectiveness in improving academic performance.

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