Students' Preferences of Reading E-Books and Printed Books in Developing Reading Proficiency

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Abstract - This study aimed to examine students' preferences between e-books and printed books in relation to their reading proficiency, using a quantitative approach with a survey design. The research was conducted among students from the 2022 cohort (classes 2022A, 2022B, and 2022C) of the English Education Study Program at the Indonesian Catholic University St. Paul Ruteng. A structured questionnaire comprising 24 English-language items was used to collect data on students' reading habits, technological familiarity with e-books, and factors influencing their format preference, including the types of electronic devices they owned. The survey was administered online via Google Forms and distributed through platforms such as WhatsApp, Instagram, Telegram, and Facebook. Data analysis followed a structured process of data reduction, presentation, and conclusion drawing. The findings revealed that while students recognized several advantages of e-books such as customizable font styles, environmental benefits, and travel convenience they generally favored printed books. Respondents cited emotional attachment, ease of exchange, and enhanced comprehension and memory retention as reasons for preferring print. Despite the perceived benefits of e-books in promoting study interest and facilitating digital content management, issues like eye strain, notification distractions, and difficulties in digital note-taking posed significant challenges. Ultimately, printed books remained the preferred medium for academic reading among the participants.

Keywords: *E-books, Printed Books, Student Preferences, Reading Proficiency.*

I. INTRODUCTION

Reading is the process of understanding and interpreting written text. According Paige et al., (2019), "Reading means getting meaning fom certain combinations of letters. Teach the child what each letter stands for and he can read……words are written by putting down letters from left to right." This definition clearly tells that by reading one comes in contact with letters, words organized properly in language and tries to identify them. It involves recognizing words, comprehending their meanings, and the ability to analyze and connect information from various sources. Reading can encompass various types of texts, such as books, articles, and documents, with the aim of gaining information, entertainment, or knowledge. Reading is a tool of communication in written language

through the texts form. It is the most efficient way to gain information about many aspects of life, including science and technology (Ismail et al., 2017). Reading media today is increasingly diverse, with two main forms often chosen by readers: printed books and electronic books. Technological developments and changes in people's lifestyles have created a new dynamic in the way people access and enjoy reading content. The development of education over time has undergone significant changes. In the past, education relied heavily on limited resources such as printed books. Printed books are physical copies of written works that have been a fundamental part of learning and information dissemination for centuries. They provide a tactile reading experience, allowing readers to physically highlight, annotate, and easily flip through pages without the need for batteries or electronic devices. Despite the rise of digital formats, printed books continue to hold value due to their accessibility, ease of use, and the sensory experience they offer (Byars, 2015). Printed books help improve concentration and information retention, and provide a pleasant sensory experience. In addition, physical books do not require electronic devices, so they can be read anytime and anywhere. It should be noted that the information presented in the printed volumes differs from the information available online, which can be noticed by the number of book-lists available on the website compared to those presented in print. Printed books were the main source of learning, where students and teachers had to access information from physically printed materials Printed textbooks were major source of knowledge for the students and teachers in twentieth century (Piramanayagam 2020). In this context, the learning process was linear and centered on materials provided by teachers or obtained from the library.

The advent of modern technology has brought about great changes in education. The rapid evolution of mobile information technology and multimedia technology results in diversified teaching models for information education. The advance of mobile information technology changes traditional fixed-point teaching to a mobile learning situation (Sun & Pan, 2021). The advent of modern technology, the approach to education is changing. According to Pardede, (2019) Advances in modern technological devices, such as computers, tablets, and smartphones, have led to an increasing shift from reading in print to digital reading, as well as more opportunities for online education. Technology brings innovation in learning methods, one of which is the use of electronic books or e-books. In recent years, interactive E-books have become a common medium for children's books and shared book reading is diminishing Kozminsky & Asher-Sadon, (2013). In this digital era, e-books offer a more flexible solution compared to printed books. Students can access thousands of books from electronic devices such as mobile phones or tablets, anytime and anywhere, without having to carry many physical books. Additional features such as text search, built-in dictionaries, and hyperlinks make the reading experience more dynamic.

Students' preferences in choosing between e-books and printed books are influenced by several factors, including convenience and accessibility. E-books are defined as electronic formats of written content that can be accessed and displayed on various digital devices, while traditional books are physical printed materials that provide a tactile reading experience and emotional connectivity for many readers (Mary et al., 2020). E-books are often considered more convenient as they can be accessed on various

devices such as tablets and smartphones, allowing students to read anywhere without having to carry a lot of printed books. This is evidenced by research conducted by Amirtharaj, A. D., et al. (2023) with the study results that Students prefer e-books for their portability but printed books for ease of studying and note-taking. Features such as font size and lighting settings also provide a more customized reading experience. In addition, e-books provide faster access, allowing students to download or purchase learning materials instantly without the need to go to a bookstore or library.The relationship between printed books and e-books in the context of education lies in their role as learning media. Printed books, with their long presence, provide a certain physical experience and comfort for readers. However, e-books offer the ability to integrate technology into learning, allowing students to interact more with the text. This study aims to investigate college students' perceptions of the effectiveness of printed books versus e-books in improving reading skills. While printed books have long existed and provide a convenient physical experience, e-books offer technological features that support self-directed learning. The research problem was formulated to understand how university students assess the two formats. How do students perceive the effectiveness of printed books compared to e-books in improving their comprehension and engagement while reading? Also, how important is the convenience and accessibility offered by e-books. It is important to explore students' learning experiences with these two media, including the interactive features of e-books that may affect engagement and learning outcomes. This research is expected to provide insights into students' choice between printed books and e-books, as well as the factors that influence their preference and satisfaction.

Several recent studies have shown varying trends in students' preference for e-books and printed books, and their impact on reading experience and learning outcomes. A study by Alfiras & Bojiah, (2020) revealed that students at Gulf University prefer e-books, reflecting the increasing adoption of digital learning resources. However, research by Casselden & Pears, (2020) showed that although e-books have advantages in terms of convenience, accessibility, and search features, many students still prefer printed books due to the physical experience they offer, ease of navigation, and reduced eyestrain, especially when studying in-depth material. Research by BAO et al., (2019) adds that printed books provide higher satisfaction than e-books, with a stronger preference for printed books among readers. In addition, Chen et al., (2019) found that the acceptance of e-books by students and faculty was influenced by their reading preferences, previous experience with digital formats, and perceptions of the credibility of printed materials. Meanwhile, Reich et al., (2019) showed that children demonstrated similar behavioral engagement with e-books and print books, but had lower recall for story order when reading on tablets, suggesting that print books may better support com prehension and memory retention. Research by Lim et al.,(2020) showed that the use of interactive e-books with animation can improve student comprehension, especially in complex topics. On the other hand, research by Alamri, (2019) confirmed that ESL students prefer printed books, while Makwanya & Oni, (2019) found that students view both formats as equally good for academic purposes. Amirtharaj et al., (2023) noted that students prefer e-books for their portability, but prefer printed books for ease of study and note-taking. The findings of Sadaf, (2023) support the preference of e-books among college students in

Bangladesh, while Mizrachi (2018) shows that globally, college students prefer printed books for academic reading.

While previous research has provided valuable insights into the preference between e-books and printed books, there is still a gap in the understanding of how this preference impacts the development of college students' reading skills, especially in the context of English language education. Research such as that conducted by Casselden and Pears (2020) suggests dissatisfaction with e-books due to compatibility issues and eyestrain, but does not link it specifically to developing reading skills. In addition, although the study by Lim et al. (2020) showed that interactive e-books can improve comprehension, no study has directly investigated the relationship between reading media preferences and reading skill development among EFL students. Study, "Students' Preferences of Reading E-Books and Printed Books in Developing Reading Proficiency," aims to fill this gap by investigating how college students' preferences for e-books and printed books affect their reading skill development. Focus is to understand the factors that influence their choices and how such choices can be integrated in the curriculum to enhance learning effectiveness. As such, this study is expected to make an important contribution to the existing literature and assist in formulating more effective learning strategies in the digital age.

II. METHODS

This study used a quantitative approach with a survey design to analyze students' preferences for e-books and printed books in developing reading skills. The research subjects consisted of students of the English Education Study Program at the Indonesian Catholic University St. Paul Ruteng, specifically batch 2022, with 3 classes 2022A, 2022B, and 2022C. The research instrument used was a questionnaire. This questionnaire comprised of 24 questions in English which questions collecting information on printed book reading habits, e-book reading habits (methods of obtaining, aim of usage etc.) and technological knowledge (e-book related tools, file format) etc. Questions were designed to know whether the selections made by the students were influenced by the electronic devices they owned. The questionnaire was then converted into online filling format using Google forms and shared through Whatsapp, Instagram, Telegram and Facebook. The questionnaire had a combination of selected response to the question and close ended questions (yes/no). It took about 8-10 minutes to complete the survey. In the introduction, students were informed briefly on the aim of the study and assured that data obtained would only be used for the stated purpose of the study. This questionnaire was adapted from Mary et al., (2020)

The collected data will be analyzed using descriptive statistics with JASP (Jeffrey's Amazing Statistics Program). Descriptive statistics provide a clear summary of the data, helping to identify trends and patterns through tables, charts, and graphs. JASP will be used to compute frequency distributions, assessing the prevalence of students' preferences for printed books versus e-books. The software will also calculate the mean and standard deviation to summarize central tendencies and measure the variability in students' responses. This method ensures a thorough and accurate analysis, offering

valuable insights into the factors influencing students' reading habits and technological knowledge related to e-books.

III. RESULTS AND DISCUSSION

This section provides a detailed explanation of the analysis the findings from the research, which aimed to explore students' preferences for e-books and printed books in developing reading skills. At the beginning of this section, demographic information about the participants, including their total number, is presented to establish the context of the research and provide a clearer understanding of the data analyzed.

Table 1. Participants demographic information

GENDER	Frequency	Percent	Valid Percent
Female	44	62	62
Male	27	38	38
Missing	0	0	
Total	71	100	

Based on the demographic information, a total of 71 students participated in the survey. Of the participants, 44 students (62%) were female, while 27 students (38%) were male. There were no missing responses related to gender. The data indicates that a higher proportion of the respondents were female, which helps establish the gender distribution within the sample. This information provides context for understanding any potential gender-based differences or patterns that may emerge in the analysis of students' preferences for e-books and printed books.

Furthermore, the data for this study was obtained using a quantitative approach through the distribution of a questionnaire to participants. Responses were measured on a Likert scale and are presented in percentages to provide a precise and comprehensive overview of participants' perceptions.

Table 2. Findings

ASPECTS	STATEMENT	PRESENTAGE	
		YES	NO
Attitudes (Emotions and Preferences)	Do you think adding e-books in your academic libraries increases your interest to study?	87%1	13%
	Do you think animations and digital illustrations make e-books more attractive**?**	15%	85%
	Do you feel an emotional connectivity of printed books more than e-books?	65%	35%
	Do you agree that printed books are tradable while e-books are not?	70%	30%
	Do you feel like you have genuine ownership towards printed books?	73%	27%

Familiarity (Knowledge and Experience)	Do you have sufficient knowledge about hardware and software issues related to ebook?	68%	32%
	Do you face any difficulties in highlighting/underlining important points in e-books?	68%	32%
	Do you think screen control while reading books demands precision?	70%	30%
	Does license restriction for an e-book a disadvantage?	62%	38%
	Do you think eye movement differs while reading e-book?	79%	21%
Usability (Benefits and Practical Applications)	Do you think changing font styles is an advantage in e-book?	72%	28%
	Do you think e-books are environment friendly compared to printed books?	74%	24%
	Is theft protection an advantage of e-books while travelling?	72%	28%
	Do you think e-books prevent lost page anxiety?	70%	30%
	Will e-books increase the readership among students?	76%	24%
Disadvantages (Challenges and Limitations)	Do you think printed books reduce eye straincompared to e-books?	76%	24%
	Do mobile notifications distract you while reading?	75%	25%
	Do you think digital note-taking process is more difficult?	59%	41%
	Do you think printed books are cost effective compared to e-books?	65%	45%
	Do you think memory retention is more with printed books?	72%	28%
Accuracy (Comprehension and Retention)	Do you think level of understanding is higher when you hold the book in your hand?	73%	27%
Ethical Considerations (Ownership, Accessibility, and Future Trends)	Have you purchased any e-book or a printed book?	85%	15%
	Do you agree that shipping and handling charges is an advantage for e-books?	75%	25%
	Will e-book lending business work in future?	78%	22%

This data reflects respondents' views on e-books and printed books in various important aspects such as attitude, familiarity, benefits, challenges, accuracy, and ethical considerations. In terms of attitude, printed books are more valued as they provide a deeper sense of emotional connection. Most respondents felt that printed books are more enjoyable to own due to their tangible and tradable nature. E-books, while having a certain appeal, especially in digital features such as animations and illustrations, lack a real sense of ownership for most users.

In terms of familiarity, the majority of respondents have a fairly good understanding of the technology that supports e-books, such as hardware and software. However, although they are comfortable with these technical aspects, many admit to difficulties in highlighting or underlining important points on the e-book. Using the screen in reading e-books also requires more precision, which may make it less convenient compared to printed books. In addition, the limited license of e-books and differences in eye movement patterns while reading pose additional challenges for users.

The practical benefits of e-books are still recognized by respondents. E-books are considered flexible as they allow for font style changes and are more environmentally friendly than printed books. In addition, e-books are safer when traveling due to lower risk of theft, and they help eliminate the anxiety of losing pages. Respondents also believe that e-books can increase reading interest levels among students due to their modern and accessible nature.   However, the challenges of e-books are also quite significant. Many respondents feel that printed books are more comfortable to use as they reduce eye strain that is often experienced when reading on a screen. In addition, distractions from electronic device notifications while using e-books are one of the major obstacles to concentration. Respondents also felt that the process of taking digital notes on e-books is more difficult and time-consuming compared to writing notes directly on printed books. The cost of e-books is also often perceived to be no cheaper than printed books, making them less attractive from an economic perspective.

In terms of accuracy and retention, printed books are still considered superior. Respondents believe that their comprehension is better when reading a physical book compared to an e-book. The sensation of holding a book in the hand provides a more tangible reading experience and helps improve memory of the material learned. This shows that printed books are still the top choice for those who prioritize the quality of learning and understanding. Ethical aspects are also a consideration in using e-books. Respondents feel that e-books are more practical in terms of delivery as they do not require additional costs like printed books. In addition, the future of the e-book lending business is considered quite potential, given the ease of distribution and accessibility it offers. Nonetheless, many respondents still prefer buying printed books for reasons of ownership and a deeper emotional connection.

Overall, while e-books have a number of advantages in terms of flexibility, eco-friendliness, and ease of access, printed books remain more valued in terms of convenience, emotion, and learning. Print books offer a more personalized and immersive experience, while e-books are preferred for practicality. This difference reflects that the choice between e-books and printed books largely depends on individual needs and

preferences. In the Discussion section, each aspect will be examined in detail, offering an in-depth analysis of the findings regarding e-books and printed books. Each aspect will be explained in more detail so as to accurately analyze the results of this study.

Table 3. Aspects of Attitudes (Emotions and Preferences)

ASPECTS	STATEMENT	PRESENTAGE	
		YES	NO
Attitudes (Emotions and Preferences)	1. Do you think adding e-books in your academic libraries increases your interest to study?	87%1	13%
	2. Do you think animations and digital illustrations make e-books more attractive**?**	15%	85%
	3. Do you feel an emotional connectivity of printed books more than e-books?	65%	35%
	4. Do you agree that printed books are tradable while e-books are not?	70%	30%
	5. Do you feel like you have genuine ownership towards printed books?	73%	27%

In terms of attitudes, a significant majority of respondents (87%) agreed that adding e-books to academic libraries increases their interest in studying. This indicates that e-books have the potential to enhance academic engagement and motivate students to explore learning materials. Their availability and accessibility in digital libraries seem to offer a convenient and modern approach to studying, aligning with the needs of the current generation. However, when it comes to the design and appeal of e-books, only 15% of respondents found animations and digital illustrations to make e-books more attractive. This suggests that visual enhancements, while an innovative feature, may not resonate with many users. The lack of appeal could stem from the fact that users value the content and functionality of books more than aesthetic elements. On the other hand, printed books continue to hold emotional value for readers.

A strong preference for printed books is evident, with 65% of respondents feeling more emotionally connected to printed books than e-books. Additionally, 70% agreed that printed books are tradable, which gives them practical value, while 73% felt a stronger sense of ownership toward printed books. These responses highlight the emotional and tangible advantages that printed books provide, making them a preferred choice despite the growing popularity of e-books.

Table 4. Aspects of Familiarity (Knowledge and Experience)

Familiarity (Knowledge and Experience)	1. Do you have sufficient knowledge about hardware and software issues related to ebook?	68%	32%

	2. Do you face any difficulties in highlighting/underlining important points in e-books?	68%	32%
	3. Do you think screen control while reading books demands precision?	70%	30%
	4. Does license restriction for an e-book a disadvantage?	62%	38%
	5. Do you think eye movement differs while reading e-book?	79%	21%

In terms of familiarity, 68% of respondents reported having sufficient knowledge about hardware and software issues related to e-books. This indicates that technological barriers may not be a significant issue for most users. The ability to navigate devices and applications related to e-books demonstrates a good level of technological competence among the respondents. However, the same percentage (68%) of respondents mentioned difficulties in highlighting or underlining important points in e-books. This suggests that usability features in e-books still lag behind the simplicity and intuitiveness of printed books. For users accustomed to making annotations or quickly marking relevant sections, e-books may present a challenge, thereby affecting their efficiency during study sessions.

Additionally, 70% of respondents noted that screen control while reading e-books demands precision, pointing to potential ergonomic challenges. Another issue raised by respondents was license restrictions, which 62% considered a disadvantage of e-books. Furthermore, 79% of respondents believed that eye movement differs when reading e-books, indicating possible strain or discomfort during prolonged use. These factors may limit the overall appeal and adoption of e-books despite their advantages.

Table 5. Aspects of Usability (Benefits and Practical Applications)

	1. Do you think changing font styles is an advantage in e-book?	72%	28%
Usability (Benefits and Practical Applications)	2. Do you think e-books are environment friendly compared to printed books?	74%	24%
	3. Is theft protection an advantage of e-books while travelling?	72%	28%
	4. Do you think e-books prevent lost page anxiety?	70%	30%

	5. Will e-books increase the readership among students?	76%	24%

Regarding usability, 72% of respondents identified the ability to change font styles as an advantage of e-books. This feature provides flexibility and customization, allowing users to adapt their reading experience to their preferences. Such features contribute to the appeal of e-books, especially for users who prioritize convenience and adaptability. Another notable finding is that 74% of respondents viewed e-books as more environmentally friendly compared to printed books. This highlights one of the key advantages of e-books, as they reduce the need for paper, printing, and transportation, thereby minimizing their environmental footprint. This aspect could make e-books a more sustainable choice, particularly for institutions aiming to promote green initiatives.

Additionally, 72% of respondents considered theft protection an advantage of e-books while traveling, and 70% believed that e-books prevent lost page anxiety. Finally, 76% of respondents thought that e-books could increase readership among students, reflecting their potential to make learning materials more accessible and engaging. These practical benefits demonstrate that e-books have a unique value proposition, despite their limitations in other areas.

Table 6. Aspects of Disadvantages (Challenges and Limitations)

	1. Do you think printed books reduce eye straincompared to e-books?	76%	24%
	2. Do mobile notifications distract you while reading?	75%	25%
Disadvantages (Challenges and Limitations)	3. Do you think digital note-taking process is more difficult?	59%	41%
	4. Do you think printed books are cost effective compared to e-books?	65%	45%
	5. Do you think memory retention is more with printed books?	72%	28%

The majority of respondents stated that print books are more comfortable for the eyes compared to e-books. About 76% agreed that reading physical books reduces eye strain, highlighting visual comfort as a primary advantage. The tactile experience of holding and flipping through pages provides a sensory satisfaction that e-books cannot replicate, making print books a more comfortable choice for many readers. This emphasizes the importance of physical interaction in enhancing the reading experience. However, e-books offer certain advantages over print books, such as accessibility and

cost efficiency. About 75% of respondents agreed that e-books eliminate shipping costs, providing convenience in obtaining content quickly. Nevertheless, digital distractions, such as notifications from mobile devices, often pose challenges. Approximately 75% of respondents felt distracted by notifications while reading e-books, indicating that readers' focus can be disrupted by interactions with electronic devices.

Additionally, user perceptions of the effectiveness of digital reading vary. While 59% found it more difficult to take digital notes compared to traditional methods, 41% disagreed, suggesting some users are comfortable with digital tools. This reflects the challenges users face in adapting to new technologies, despite their advantages such as efficiency and accessibility. The successful adoption of e-books depends on how well the technology aligns with user preferences and needs.

Table 7. Aspects of Accuracy (Comprehension and Retention)

Accuracy (Comprehension and Retention)	1. Do you think level of understanding is higher when you hold the book in your hand?	73%	27%

In terms of retention and comprehension, print books are perceived to have the upper hand. Around 72% of respondents believe that reading print books enhances information retention, suggesting that the physical reading experience helps readers absorb information more effectively. This is supported by another finding where 73% of respondents felt they had a better understanding of the material when reading physical books compared to e-books. Nonetheless, e-books hold significant potential in supporting learning, especially with tools like Google Gemini. This technology can offer learning tools tailored to users' needs, boosting motivation and comprehension. However, some respondents remained neutral or disagreed about the benefits of both print books and learning technologies like Google Gemini, indicating a need for innovations to enhance the overall reading experience.

These differences highlight that individuals have unique learning preferences. While most find comfort in traditional methods, some are more drawn to modern technologies. Thus, technology developers must ensure that digital platforms address challenges such as digital distractions and offer more personalized and interactive learning experiences.

Table 8. Aspects of Ethical Considerations (Ownership, Accessibility, and Future Trends)

Ethical Considerations (Ownership, Accessibility, and Future Trends)	1. Have you purchased any e-book or a printed book?	85%	15%
	2. Do you agree that shipping and handling charges is an advantage for e-books?	75%	25%

3. Will e-book lending business work in future?	78%	22%

According to the data, a majority of respondents (85%) have purchased books in either print or digital formats, indicating high awareness of learning media. E-books offer significant accessibility advantages by eliminating shipping costs and allowing readers to access content anytime. About 75% of respondents agreed that this practicality is one of the main benefits of e-books, making them an attractive choice, especially for younger generations. In addition to convenience, e-books hold great potential in supporting the reading and learning industry. Approximately 78% of respondents believe that the e-book lending business will grow in the future, reflecting optimism about the sustainability of this technology. However, 22% remain skeptical, showing that barriers such as comfort and individual preferences for print books still pose challenges. Overall, while e-books offer practical benefits and accessibility, the physical experience of reading print books continues to appeal to many users. Both print books and digital technology have their respective places in supporting learning needs. Therefore, a collaboration between traditional methods and modern technologies could create a more inclusive and adaptive reading experience for diverse audiences.

Based on the survey results regarding students' preference for e-books and printed books, it can be concluded that students tend to prefer printed books over e-books, although they see the potential benefits of e-books in an academic context. Most respondents (87%) felt that the addition of e-books in academic libraries could increase their interest in learning, but the majority (85%) also felt that animations and digital illustrations were not very attractive in e-books. On the other hand, 65% of respondents felt that there was more emotional attachment to printed books than e-books, and 70% found printed books easier to trade. This shows that despite the interest in digital technology, the emotional and practical preference for printed books is still dominant among students.

On the other hand, e-books have some practical advantages, such as the ease of changing font styles (72%), being environmentally friendly (74%), and avoiding the anxiety of losing pages (70%), which are favored by most respondents. However, challenges such as higher eye strain with e-books (76%), distraction of notifications (75%), and difficulty in digital note-taking (59%) are major barriers. In addition, e-books are seen as more efficient in terms of shipping costs (75%) and more practical in travel (72%). Nonetheless, there are still doubts regarding memory retention and better comprehension when reading printed books. Overall, although students appreciate the convenience and practical benefits of e-books, their preference for printed books remains strong, especially in terms of emotional attachment and a more thorough reading experience.

IV. CONCLUSION

In conclusion, this study shows that while e-books offer a number of practical advantages such as flexibility in font settings and environmental friendliness, printed books are still the top choice among university students. Students feel more emotionally connected to printed books, as well as find them easier to trade and provide a better reading experience in terms of comprehension and memory retention. Meanwhile, e-books have some disadvantages, such as eye strain, notification interference, and difficulty in digital note-taking, which can reduce the convenience of using them. Therefore, while e-books offer convenience in terms of accessibility and cost-efficiency, printed books are still considered superior in the context of the overall reading experien.

Future research can explore more deeply how the use of e-books affects students' long-term comprehension and retention of information. In addition, it is important to examine whether technological developments, such as the use of devices with more eye-friendly screens and increased interactive features in e-books, can overcome the current challenges. Further research can also examine differences in preferences between different disciplines or age groups to gain deeper insights into the factors that influence e-book adoption in academic contexts.

REFERENCES

Alamri, B. (2019). Reading preferences of ESL students: Electronic texts vs. printed. *International Journal of Emerging Technologies in Learning*, *14*(4), 169–179. https://doi.org/10.3991/ijet.v14i04.9466

Alfiras, M., & Bojiah, J. (2020). Printed Textbooks Versus Electronic Textbooks: A Study on the Preference of Students of Gulf University in Kingdom of Bahrain. *International Journal of Emerging Technologies in Learning*, *15*(18), 40–52. https://doi.org/10.3991/ijet.v15i18.15217

Amirtharaj, A. D., Raghavan, D., & Arulappan, J. (2023). Preferences for printed books versus E−books among university students in a Middle Eastern country. *Heliyon*, *9*(6), e16776. https://doi.org/10.1016/j.heliyon.2023.e16776

BAO, S., KUBOKI, R., IIJIMA, R., MINAGAWA, H., YAMANAKA, K., & MIZUHIKI, T. (2019). Printed Book or E-book, Which is Better? An Investigation using Manga and Magazine. *International Journal of Affective Engineering*, *18*(1), 9–16. https://doi.org/10.5057/ijae.ijae-d-17-00038

Byars, M. N. (2015). *by*.

Casselden, B., & Pears, R. (2020). *Higher education student pathways to ebook usage and engagement , and understanding: Highways and cul de sacs*. https://doi.org/10.1177/0961000619841429

Chen, Y., Carliner, S., Garcia Martinez, S., & Davidson, A. L. (2019). Exploring perceptions of e-books among cegep students and faculty. *Canadian Journal of Learning and Technology*, *45*(1), 1–29. https://doi.org/10.21432/cjlt27641

Ismail, H., Syahruzah, J. K., & Basuki, B. (2017). Improving the Students' Reading Skill Through Translation Method. *Journal of English Education*, *2*(2), 124–131. https://doi.org/10.31327/jee.v2i2.405

Kozminsky, E., & Asher-Sadon, R. (2013). Media Type Influences Preschooler's Literacy Development: E-book versus Printed Book Reading. *Interdisciplinary Journal of E-Skills and Lifelong Learning*, *9*(December), 233–247. https://doi.org/10.28945/1928

Lim, B. C., Liu, L. W., & Choo, C. (2020). *Investigating the Effects of Interactive E-Book towards Academic Achievement*.

Makwanya, C., & Oni, O. (2019). E-Books preference compared to print books based on student perceptions: A case of university of fort hare students. *International Journal of Interactive Mobile Technologies*, *13*(12), 236–245. https://doi.org/10.3991/IJIM.V13I12.10840

Mary, A. V., Hamsika, N. S., Shalini, D., & Srilekha, D. V. (2020). Do e-books overpower printed books: Student's eye view. *International Journal of Advance Research*, *6*(5), 720–725.

Paige, D. D., Smith, G. S., & Magpuri-Lavell, T. (2019). Learning to Improve: Report of a Three-Year Capacity-Building Project Leveraging Professional Development + Coaching to Improve Third-Grade Reading Outcomes. *Advances in Literary Study*, *07*(04), 193–223. https://doi.org/10.4236/als.2019.74013

Pardede, P. (2019). Print vs Digital Reading Comprehension in EFL: A Literature Review. *JET (Journal of English Teaching)*, *5*(2), 77. https://doi.org/10.33541/jet.v5i2.1062

Philosophy, L. (2020). *DigitalCommons @ University of Nebraska - Lincoln The Choice Between EBooks and Printed Books : A Study Among Hospitality and Tourism Educators and Learners.*

Ramesh Chandra Pradhani. (2021). Reading Skill: A Key to the Development of Language Acquisition. *The Creative Launcher*, *6*(4), 176–186. https://doi.org/10.53032/tcl.2021.6.4.27

Reich, S. M., Yau, J. C., Xu, Y., Muskat, T., Uvalle, J., & Cannata, D. (2019). Digital or Print? A Comparison of Preschoolers' Comprehension, Vocabulary, and Engagement From a Print Book and an e-Book. *AERA Open*, *5*(3), 1–16. https://doi.org/10.1177/2332858419878389

Sadaf, M. (2023). Electronic or Printed Books for Reading: the Preferences of Tertiary-Level Students in Bangladesh. *European Journal of English Language Teaching*, *8*(3), 207–236. https://doi.org/10.46827/ejel.v8i3.4938

Sun, L., & Pan, C. E. (2021). Effects of the Application of Information Technology to E-Book Learning on Learning Motivation and Effectiveness. *Frontiers in Psychology*, *12*(September), 1–5. https://doi.org/10.3389/fpsyg.2021.752303