

Student responses to e-books: a study carried out at the Faculty of Allied Health Sciences, General Sir John Kotelawala Defence University

CB Ranaweera

Faculty of Allied Health Sciences, General Sir John Kotelawala Defence University, Sri Lanka

cbr2704@kdu.ac.lk

Abstract— *Traditionally printed books have been preferred as the best reading material by many of us. But with the latest advancement of the modern technology, nowadays some of us seem to appreciate E-Books (Electronic books) as the future of reading while majority of us still believe that these E-Books (Electronic books) will never be popular among readers and in an academic environment while many of the universities across the globe have adopted the concept of E-Books (Electronic books). However the E-Books (Electronic books) concept is still at its infancy in Sri Lanka and so far no research work has been conducted in Sri Lanka to investigate its impact on country's academic environment.*

Objective: This study was designed in order to understand Student's perception of E-Books (Electronic books) in an academic environment.

Method: An anonymous questionnaire based on voluntary participation of the students, was distributed among the first year undergraduate students from the faculty of Allied Health Sciences at General Sir John Kotelawala Defence University and descriptive statistics were used for reporting purposes.

Results: The sample was made of 174 students (67 males, 107 females) and 91 (52.29%) of them had used E-Books (Electronic books) previously for their studies as a standard reading material. Based on the responses received, 39% of the students preferred to read E-books over hard copy version books and the factors which may have affected their current preference to use hard copy books against E-books were also identified. 156 students (89.65%), suggested that they would use E-books more frequently for the academic studies, if the recommended text books were available electronically and most astonishing finding of this study was that 97.12% (169 students) of them believed that the E-book concept will have a stronger impact on Sri Lanka academic environment in future.

Conclusion: It was very evident that the students want the E-book facility at the faculty of Allied Health Sciences at General Sir John Kotelawala Defence University and it was evident that they wanted these E-books facility for their standard recommended text books so they can use these E-books more frequently and in a useful manner.

Therefore more research work with large scale surveys such as library surveys with library users and direct one to one interviews with academics and educational consultants and also with the general public will provide a much deeper insight to the actual demand for E-books and its real potential impact it can have on Sri Lankan academia. Hence future financial investments for E-books need to be implemented as these have the great potential to offer great benefits to the institution itself, to the students, and academics at General Sir John Kotelawala Defence University.

Keywords— **E-Books (Electronic books), Sri Lanka, General Sir John Kotelawala Defence University (KDU)**

I. INTRODUCTION

Traditionally, printed books have been preferred as the best reading material by many of us. But with the recent advancement of the modern technology such as Internet, Nowadays many of us tend to do our studies on line, do reading online and now it has come to a situation where some of us may even question whether E-books (Electronic books) will replace traditional printed books in the near future (Hillesund 2001).

According to a research conducted by Ian Rowland at the University College London (2007), he mentions that even though the E-books (Electronic books) are the new kind in the block, most of the research studies have been conducted primarily on journals to investigate how digital resources are used within academic environment and argues that more research needs to be done to see the impact of E-books in the academic environment.

According to Lamothe (2013), the definition of an E-book has varied from time to time, where many tend to consider an E-book (Electronic book) as simply being the content reproduced digitally either in text, PDF or even web compatible formats and it is also worth mentioning here that according to Lynch (2001), some E-books which have been printed digitally cannot be converted back in to print as well.

An article published by Nicholas Carr on Wall Street Journal (January 5th 2013), states that the opinions regarding E-books (Electronic books) and their printed hard copy

versions, have varied from time to time. Based on his findings he believed that E-books (Electronic books) will play a role more like as audio books rather than replacing the printed books.

Based on a research article published by Mark Nelson (2008), the higher education will adapt to E-books within next few years and few academic institutions such as Stanford University have invested a large amount of money in E-books (Electronic books), sending a very clear signal to the rest of the academic institutions that E-books will be the front runners in the library catalogue.

Ismail and Zainab (2005) mention that libraries tend to go for E-books (Electronic books) simply because of the facts such as limited shelving spaces, increasing cost of new buildings and resources, decreasing budget and most importantly the increasing demand from users for electronic books. It is also worth mentioning that E-books have also created a convenient and easier access for reading materials for everyone including remote users-books have many user friendly features making this version of reading material more popular among readers where they can easily navigate through books, watch videos, on line dictionaries or even do a full text search within a book or a collection of books, Snowhill (2001).

The concept of E-books is still at its infancy in Sri Lanka. But with the modern advancement in technology more and more people have become heavy internet users. Therefore it is vital to evaluate their perceptions on E-books (Electronic books) before any large investments in library catalogues of Sri Lankan academic institutions and so far no research has been done to evaluate the impact of E-books and perceptions of E-books (Electronic books) in Sri Lankan academic institutions.

A. General and specific Objectives of the study

The study population was made of 174 first year undergraduate students (Including both males and females) from the Faculty of Allied Health Sciences at Sir John Kotelawala Defence University and the main aim of this study was to evaluate the student's perception of E-books in an academic environment. The questionnaire was designed in order to identify if the selected students had used E-books previously or not and if they hadn't used them previously, then what were the main reasons to not to use them and also they were asked if they were provided with necessary facilities will they be more likely to use E-books in future or not and to identify their perception regarding the future of E-books in Sri Lanka in an academic environment as well.

II. RESEARCH METHODOLOGY

A questionnaire was developed related to the usage and the perception towards E-books and this questionnaire was distributed among the first year under undergraduate

students of Faculty of Allied Health Sciences. The responses for the questionnaire were collected and Statistical analyses were carried out on using Software Package called GraphPad Prism®.

Each student was given the questionnaire as they were entering the classrooms and the content of the questionnaire was explained to them before they had started answering the questionnaire and this was carried out in class rooms at the faculty of Allied Health Sciences.

The study group was made of 174 first year undergraduate students (both males and females) and the questionnaire was in both English and Sinhalese language and they were only expected to complete the questionnaire in one language only. The answered questionnaires were collected on the same day at the same premises.

The participation of the participants was on voluntary basis and they had the right to refuse their participation or leave the study at any time and this was clearly explained to the participants prior answering the given questionnaire.

A. Ethical Issues

A request to conduct this study was handed over to the dean of the Faculty of Allied Health Sciences, to the dean of Faculty of Defence and Strategic studies and to the university ethical committee, prior to the data collection. A verbal consent from each participant was collected once after explaining the main aim and objectives of this study to the participants.

The privacy and the confidentiality of each participant were respected and protected at all times and the collected data were destroyed (under proper supervision) once after the completion of this study.

B. Data Analysis & Results Interpretation

The collected data were analysed using GraphPad Prism® statistic software. The survey was depending on voluntary participation of the students. Therefore there was no central control over individual samples. So the general interpretation of the results should be treated with great care. However, this study will provide valuable information for a clear and better understanding of E-books perception and its usage among students and this study can be further developed to apply for all the students at Sir John Kotelawala Defence University and the new findings will be an asset to the library and the academics at Sir John Kotelawala Defence University.

III. RESULTS

A. Demographic Data

174 students were participated in this study and among them 107 (61.5%) were females and 67 (38.5%) were males. Of the 174 participants 45.9 % (80 students) of

them were between ages of 19 years to 21 years and 54.1 % (94 students) of them were between the ages of 22 years to 24 years old.

	Percentage (%)
Age	
19-21	45.9
22-24	54.1
Gender	
Male	38.5
Female	61.5

Table 1. Demographic Data

When the students were asked whether they were bringing any text books to the class room and as illustrated in Figure 1, 81.6 % (142 students) of them replied back saying they were bringing text books to the class room occasionally while 12.6% (22 students) of them said that they were bringing the text books all the time to the class room and 10 (5.8%) students mentioned that they never bring any text books in to the class room.

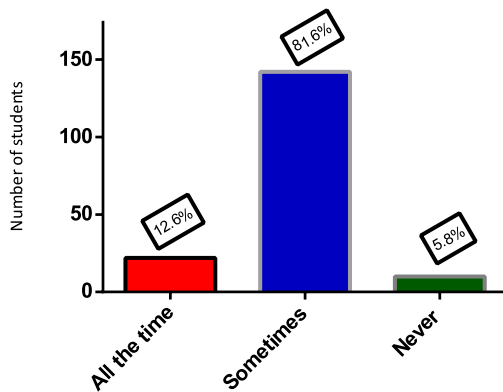


Fig 1. Student response for bringing text books to the class room (n=174).

Based on the students who said that they were never used to bring any text books and the students who said that they were bringing text books occasionally in to the class room, were asked again for the reasons for not bringing any textbooks in to the class room. 77 Students (44.25%) of them mentioned that the weight of the books was the main reason for either not bringing these books in to the class rooms or for bringing these occasionally in to the class room.

Only 48 students (27.58%) said that they don't have these recommended text books with them and 8 students (4.59%) said that they share text books with other students in the class room.

When the students were asked whether they have used an E-book before ,91 students (52.30%) said 'yes' and 82 students (47.13%)said 'no' while there was only one student who didn't answer to that question.

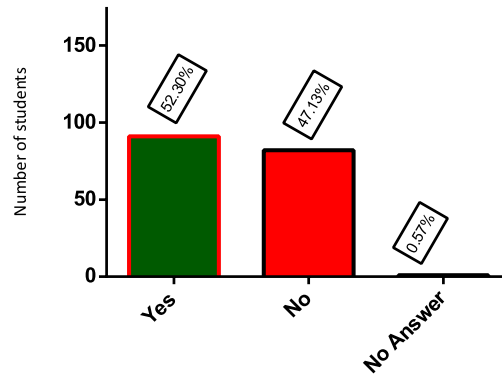


Fig 2. Student response for if they have used an E-book on a previous occasion (n=174).

Students were also asked whether they prefer reading E-book version of the recommended text books or the hard copy version of the recommended text books. 68 Students (39.08%) said that they prefer E-book version while 98 students (56.32%) said that they prefer the hard copy version the recommended text books. There were only 8 students (4.6%) who actually preferred to both versions of the recommended text books.

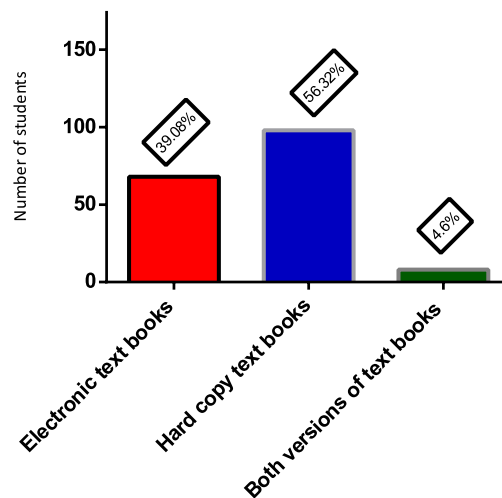


Fig 3. Student response for their preferred reading version of recommended text books (n=174)

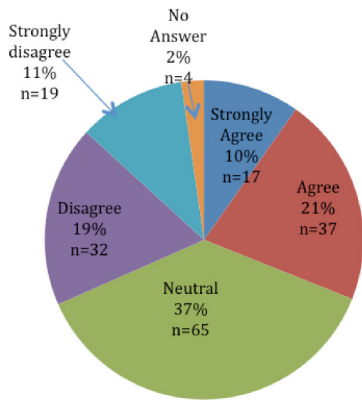


Fig 4. Student response for the question If the textbooks used in the classes were available electronically would they more likely to bring textbooks to class (total number of participants = 174).

As demonstrated in the figure 4, at least 30 % of the students wouldn't not bring the hard copy version of recommended text books in to the class room if these were available as E-books.

As illustrated in the figure 5, Out of 174 students, 156 (89.65%) students said that they would more likely to use the electronic version of the recommended text books if they were available electronically while only 14 (8.06%) students rejected this idea and only 4 (2.29%) students refrained from answering this question.

Out of the 174 students, 170 of them (97.70%) said that they want to try E-books in future while only 4 of them (2.30%) said that they still want to use hard copy version of recommended text books in future (Figure 6).

The student's responses regarding the advantages of E-books and disadvantages of E-books are listed in figure 7 and figure 8, respectively. The responses for not using E-books at this moment and their responses regarding the future of E-books in Sri Lanka are listed in figure 9 and figure 10, respectively.

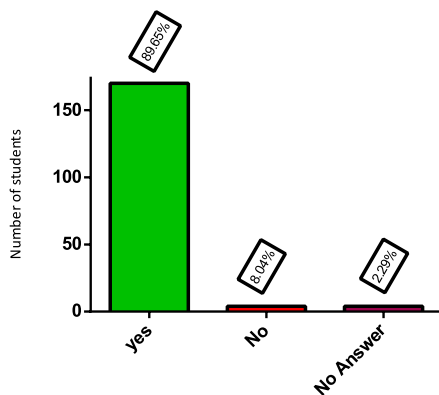


Fig 5. Student responses for the question whether they would more like to use E-version of the recommended text books if these were available electronically (n=174)

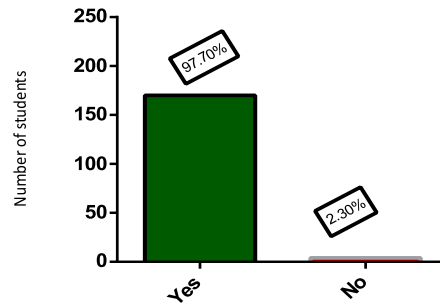


Fig 6. Student responses for the question whether they want to try E-books in future (n=174).

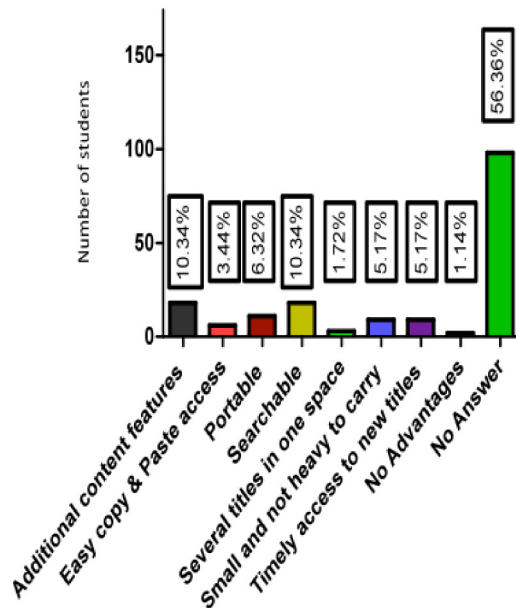


Fig 7. Student responses regarding the advantages of E-books (n=174)

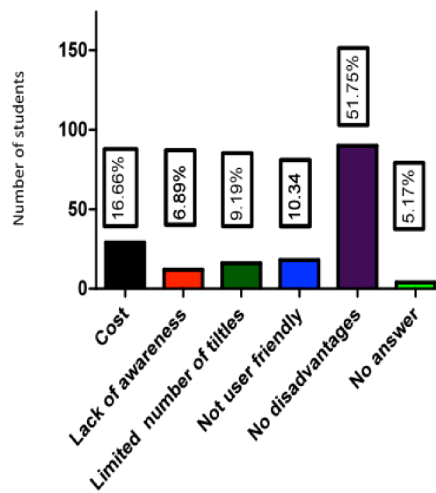


Fig 8. Student responses regarding the disadvantages of E-books (n=174)

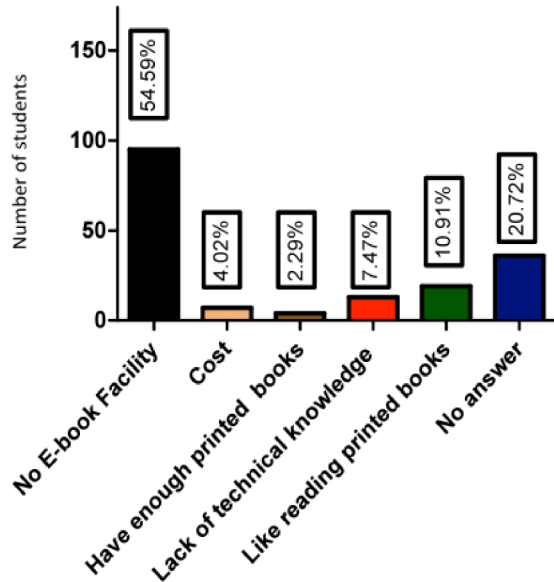


Fig 9. Student responses for not using E- books at the time of this study (n=174)

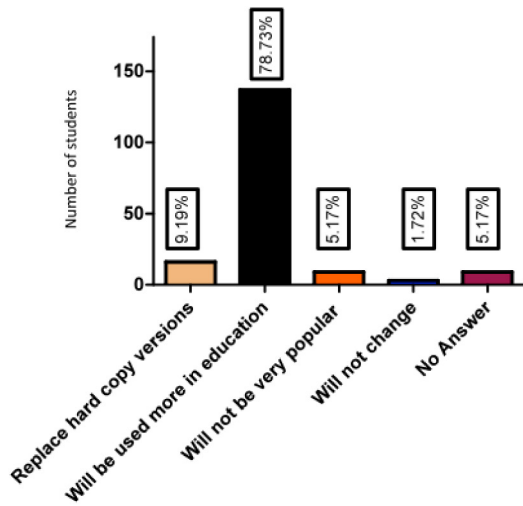


Fig 10. Student responses regarding the future of E-books in Sri Lanka (n=174)

IV. DISCUSSION

The study sample was made of 174 participants, where all of them were below the age of 24 years and were first year undergraduate students at Sir John Kotelawala Defence University.

It was evident that the students didn't want to bring any hard copy version of recommended text books in to the class room. There were only 22 students (12.6%), those who mentioned that they bring text books all the time

while majority of them (142 students, 81.6%) mentioned that they only bring text books occasionally in to the class room.

This was even more evident when they were asked about the reasons for not bringing textbooks in to the class room. 77students (44.25%) mentioned that the weight of the textbooks was the major issue for not bringing text books in to the classrooms. According to Agrawal & Rai (2013), state that an individual carrying a backpack which exceeds 10% to 15% of their body weight may increase the risk of having back pains and even possible risk of back pathology and also may lead to poor posture as well. They have also mentioned that with daily physical stress associated with carrying backpacks can cause significant forward lean of the head and trunk as well. Skaggs *et al* (2006) states that the weights of students' backpacks seem directly proportional to the likelihood of back pain.

According to American Occupational Therapy Association (AOTA, 2013), students shouldn't carry no more than 10% of their body weight. So it is fair enough to expect the students not to bring heavy text books in to the class rooms unless it is needed urgently.

91 students (52.30%) said that they have used E-books previously while only 82 students (47.13%) haven't used E-books on a previous occasion. So it is fair enough to assume that there is a change in reading habits from traditional hard copy books to modern electronic books and this was more evident when considering the given fact that there were more students who had actually used E-books than the students who hadn't used E-books on a previous occasion.

Wouter van der and Olaf (2009) published that Springer publication and Springer's eBook usage was already 50 percent of its journal usage, where Springer still believes strongly in the print model versions. As a result of it, they have introduced huge discounts only in their hard copy version books, expecting to attract more readers to buy hard copy versions. This is a clear indication that there is a cultural shift in people's reading habits and this has been identified and acknowledged by a world leading global publisher such as Springer.

Even though there were clear evidence that students want to use e-books more, students still mentioned that the preferred reading material would be a hard copy book over an E-book (56.32% against 39.08%). This could be due to the fact that there were no E-book facilities available at Kotelawala Defence University at the time of this study and this was clearly demonstrated by student responses in figure 9.

One interesting out come from this study was even though the students mentioned that they want to use e-books more in the future (97.70%), still there was a major neutral response from the students (37%, 65 students) where they

said that they would still bring the text books in to the class room even if these text books were available electronically. This needs to be investigated further more in future for the actual reasons related to the question.

When the students were asked about the advantages of E-books, majority of them didn't answer the question (no answer). This could have been due to the fact that the options given in the questionnaire under advantages were not related to what they have actually experienced with E-books so far. According to student's responses received, the cost of E-books and the lack of technical knowledge were not the major reasons for not using E-books in their studies. The main reason for not using E-books in their studies was due to the fact that E-book facility wasn't available for them during the time of this study. It was also noticed that a majority of them (51.75%) agreed that there were no disadvantages in using E-books in their studies and this was clear, positive indication to support the idea that student want to have more e-book facilities in future.

Finally it was evident after this study, that majority of the students (78.73%) believed that E-books will be used more and more in the purpose of education in the coming future in Sri Lanka while only 12 students (6.89%) who all together believed that either E-books will not be very popular in Sri Lanka or will not be in a better situation than its current situation. It is also worth mentioning here that even though the students had believed that E-books will be more popular in the future in Sri Lanka, they had also suggested that E-books will not replace (only 16 students, 9.19%) the traditional hard copy version of text books in Sri Lanka as well.

V. RESEARCH LIMITATIONS

The survey was depending on voluntary participation of the students. Therefore there was no central control over individual samples. By conduction a larger scale where the rest of the students from other faculties of various disciplines is required to arrive at more broadly applicable results. So the general interpretation of the results should be treated with great care.

VI. CONCLUSION

Majority of the students have used E-books previously and it wasn't a new concept to them. Students also think that even though E-books will be more popular in Sri Lanka, that they will not replace the hard copy version of text books. The students were interested in using E-books more frequently for their study purposes and by providing them with new E-book facilities at Sir John Kotelawala Defence University will encourage them to use E-books for their study purposes more frequently in a useful manner.

VII. RECOMMENDATIONS

It is recommended to carry out more research work with large scale surveys such as library surveys with library users and direct one to one interviews with academics and educational consultants and also with the general public will provide a much deeper insight to the actual demand for E-books and its real potential impact it can have on Sri Lankan academia. The same questionnaire should be developed further in order to identify the gateways, which the students had used to access E-books and also to have their own opinion regarding the advantages and disadvantages of E-books as well. It is also recommended to conduct awareness programmes to educate students how they can reduce the weight of the backpack by using E-books and its long term health benefits to them as well.

ACKNOWLEDGEMENT

The author wishes to express his gratitude to Col (Dr) PTR Makuloluwa for her invaluable assistance, support and guidance and to Ms Kalpani Abhayasinghe for her support and advice throughout this study. Finally big thanks go to the students in the faculty of Allied Health Sciences at KDU for their kind voluntary participation in this study.

REFERENCES

- Agrawal S and Rai A (2013). "Back Problems Due To Heavy Backpacks in School Children." IOSR Journal Of Humanities And Social Science: Volume 10, Issue 6, PP 22-26.
- American occupational Therapy Association. (2013). Sept. 18 is AOTA's National School Backpack Awareness Day. <http://www.aota.org/en/PublicationsNews/ForTheMedia/PressReleases/2013/070313-BackpackAdvisory.aspx> (Accessed on 05th August 2013).
- Hillesund T (2001). "Will E-books change the world?" First Monday, volume 6, number 10, (2001).
- Ismail R and Zainab AN (2005). *The pattern of e-book use amongst undergraduate in Malaysia : a case of to know is to use.* Malaysian Journal of Library & Information Science, 2005, vol. 10.
- Lamothe AR (2013). "Factors Influencing the Usage of an Electronic Book Collection: Size of the E-book Collection, the Student Population, and the Faculty Population." College & Research Libraries **74**(1): PP 39-59.
- Lynch C (2001). The battle to define the future of the book in the digital world. First Monday 6, no. 6 (2001) <http://firstmonday.org/ojs/index.php/fm/article/view/864/773> (Accessed on 25 March 2013).
- Nelson MR (2008). "E-Books in Higher Education: Nearing the End of the Era of Hype?" ECAR Research Bulletin, vol. 2008, issue 1 (January 8, 2008).
- Rowlands I, Nicholas D, Jamali HR and Huntington P (2007). What do faculty and students really think about e-books? Aslib Proceedings 59(6), 489-511.

Skaggs DL, Early SD, D'Ambra P, Tolo VT and Kay RM (2006). "Back pain and backpacks in school children." *Journal of Pediatric Orthopaedics*.26(3): PP 358-363.

Snowhill L (2001). E-books and their future in academic libraries. *D-Lib Magazine*. 7(7/8). <http://www.dlib.org/dlib/july01/snowhill/07snowhill.html> (Accessed on 25March 2013).

Wall Street Journal (January 5, 2013) <http://online.wsj.com/article/SB10001424127887323874204578219563353697002.html> (Accessed on 25 March 2013).

Wouter van der V and Olaf E (2009). "The future of eBooks? Will print disappear? An end-user perspective", *Library Hi Tech*, Vol. 27 Issue: 4, pp.570 – 583.

BIOGRAPHY OF THE AUTHOR



Author is a lecturer in the Department of Medical Laboratory Sciences at the Faculty of Allied Health Sciences, General Sir John Kotelawala Defence University, Sri Lanka.