



PERCEPTION AND AWARENESS OF STUDENTS TOWARDS USAGE OF E-BOOKS DURING LOCKDOWN: A CASE STUDY OF BHUBANESWAR, ODISHA, INDIA

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ABSTRACT

In the era of digitalization, e-books play a decisive role for the students as well as for the faculty members. It is also helpful for any readers interested in studying books. Electronic books differ from traditional print books in terms of physical existence. This article aims at understanding the perception of students towards usage of e-books especially during the lockdown period that arises due to the outbreak of covid-19. Demographic and other relevant data have been collected through a structured e-questionnaire and the chi-square test has been applied for analysis. From the analysis, it is observed that most of the students prefer e-books for the completion of assignments/project work during the lockdown. They state that 24x7 accessibility is the topmost advantage of e-books and agrees that poor internet connectivity is the foremost cause of not choosing e-books.

KEYWORDS: E-books, Print Books, Students' perception, Digitalisation, Physical Existence.

INTRODUCTION

An electronic book (e-book) could be a digital publication that can comprise content, pictures or a combination of both. An electronic book can be studied on an exclusive computerized device (an e-reader) or on a computer, which needs a special program (Techopedia, 2011). eBooks are accessible in a few distinctive record designs. Some of the e-books are compatible with several electronic gadgets. Whereas, others are exclusively meant and seen on a particular gadget.

Commercially reachable supplies often include a few kinds of "Digital Rights Administration (DRM)" that evade the element from being seen on prohibited devices. For case, several e-books are accessible over "Amazon's Kindle Store" and "Apple's iBook store" are copy-protected using "DRM" safety (Techterms, 2013). In the late 1990s, the e-book business developed as a conventional business model. The "Peanut press companies" commenced marketing of e-book content on "Personal Digital Assistances (PDAs)". Later on, the "Sony corporation" provided an "e-reading device" in 2006 and the "Kindle" released by "Amazon.com" in 2007 (Attwell, 2019).

E-books are portable as a user can carry several books with his/her without making any effort. It may be retrieved from any place at anytime as per the convenience of the user. Users can change the size of the content of the e-book as per their requirements. E-books are very cost-effective as compared to printed books and easily downloadable within a minute.

LITERATURE REVIEW

The library of Southwest Baptist University (SBU) surveyed in 2006 for understanding the perceptions of students, faculties, and staff towards utilization of e-books and found that most of the informant preferred e-books for conducting research; some were using it as a textbook and others for relaxation purpose (Walton, 2007). Makwanya & Oni (2019) explored in their cross-sectional study that students preferred both "print books" and "e-books". In addition, they revealed that "e-books" are as great as "print books" due to their easy accessibility. Hence, e-books are used by students to meet their educational needs. Lim & Hew (2014) suggested that next-generation e-books are helpful for the promotion of student learning through expression and sharing capabilities. They also indicated the future direction in respect to the utilize of e-books. Majid et al., (2019) investigated the students' perception towards e-books and the design of their client behaviour and found that majority of the students' preference was for print books for their regular studies. However, in split response, they found that the maximum number of students utilize e-books for recreation studying and research purposes. Khalid et al., (2017) conducted a study on students of Sultan Qaboos University to reveal their perception of the usage of e-books and found that they did not prefer e-books over print books. They conclude that e-books are in the evolutionary stage and, students will go for only when they understand the



importance of it and, it could take some time. In a study, Oyaid & Alshaya (2019) used their e-book titled "Education Technology: Foundations and Applications" as the research device and appraises the "perceptions, feelings, and views of students" in Saudi University. They established the positive response of students towards using e-books and intention for future use.

A descriptive survey was planned to get data from understudies within the university library in the southwest of Nigeria by collecting data through the questionnaire method. From the finding of this survey, it is clear that e-books are getting popular among users of the University Library in Southwest for many purposes like finding materials, research study, etc (Ofua,2017). Similarly, textbook publishers and faculty members of graduate and undergraduate colleges use a survey to know students' preferences regarding paper textbooks and e-books by conducting questionnaire methods and demographic indicators. From the survey, they conclude that most of the students are using textbooks rather than e-books (McGowan,2009). In another study (Alkawaz et.al.,2020) on undergraduate students' access to "e-books" and "print books" based on their requirements. They revealed IT students preferred e-books as compared to others but the use is very limited only. Musawi & ElAdl, (2020) conducted a study to understand the students' attitude towards e-book by adopting a "descriptive correlational approach" using their "attitudes, academic motivation, and self-efficiency scales developed by the researchers". The findings of the survey show a positive degree of substantial relationship between students' attitudes and usage of e-books.

Research Gap

Several studies have been conducted to study the students' perception in respect of usage of e-books across the globe and in different parts of India but sufficient research has not been conducted in Odisha especially in Bhubaneswar. So, this research paper aims at studying the perception of students towards using e-books in the context of Bhubaneswar city, Odisha, India.

Statement of the Problem

Usually, students purchase printed books or borrow from the library for their academic study or leisure purposes. Sometimes, they access e-books available on the internet. However, in the lockdown situation, they can't use print books. Therefore, they prefer to use e-books for their study and other purposes. Hence, this paper aims at understanding their perception and preference for e-books in one of the educational hubs of Odisha i.e., Bhubaneswar.

OBJECTIVE OF THE STUDY

The primary objective of the study is to study the perception of students towards the usage of e-books. Accordingly, the following sub-objectives are laid down for achieving the primary aim:

- To observe the frequency of using e-books by students during the lockdown.
- To examine the purpose of using e-books by students during the lockdown.
- To identify the advantages and disadvantages of using e-books.

RESEARCH METHODOLOGY

This study is based on primary as well as secondary data. The convenience sampling technique is used for determining sample size and 124 numbers responses are collected through google forms from the students of Bhubaneswar during the 1st phase of lockdown arisen due to the outbreak of the coronavirus. For analysis, descriptive statistics and chi-square test is applied. The geographical scope of this study is limited to Bhubaneswar, Odisha, India.

DATA ANALYSIS

Table-1(Gender)				
Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	59	47.6	47.6	47.6
Female	65	52.4	52.4	100.0
Total	124	100.0	100.0	

From the above table it is clear that, out of the total respondents, male respondent is 59 i.e., 47.6% and female respondent is 65 i.e., 52.4%.



Table-2(Age)				
Age (in years)	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 18	9	7.3	7.3	7.3
19-25	49	39.5	39.5	46.8
26-35	44	35.5	35.5	82.3
36-45	22	17.7	17.7	100.0
Total	124	100.0	100.0	

The above table shows that, the age group of less than 18 years is 7.3%, 19-25 is 39.5%, 26-35 is 35.5%, and 36-45 is 17.7%. Here the highest respondent is from the age group of 19-25 years, and the lowest respondent from the age group of less than 18 years.

Table-3 (Discipline of Study)				
Discipline	Frequency	Percent	Valid Percent	Cumulative Percent
Humanities and Social Science	26	21.0	21.0	21.0
Management Science	31	25.0	25.0	46.0
General Science	31	25.0	25.0	71.0
Engineering	29	23.4	23.4	94.4
Others	7	5.6	5.6	100.0
Total	124	100.0	100.0	

The above table depicts that 21 % respondents from Humanities and Social Science, 25% from Management Science, 25% from General Science, 23.4% from Engineering and 5.6% from others. The maximum respondents are from Management Science and General Science and minimum from other discipline.

Table-4 (Present Course)				
Course	Frequency	Percent	Valid Percent	Cumulative Percent
Under Graduate	51	41.1	41.1	41.1
Graduate	52	41.9	41.9	83.1
Post Graduate	20	16.1	16.1	99.2
Doctorate	1	.8	.8	100.0
Total	124	100.0	100.0	

The above table displays that, out of the total respondents, 41.1% pursuing Under Graduate, 41.9% in their Graduation, 16.1% pursuing Post Graduate and 0.08% pursuing their doctoral degree. The respondents are studying graduation course and lowest respondent pursuing doctoral degree.

Table-5 (Frequency of Using E-books)				
Frequency	Frequency	Percent	Valid Percent	Cumulative Percent
Rarely	52	41.9	41.9	41.9
Occasionally	40	32.3	32.3	74.2
Frequently	26	21.0	21.0	95.2
Most Frequently	6	4.8	4.8	100.0
Total	124	100.0	100.0	

The above table shows that 41.9% respondents rarely use e-books, 32.3% respondents occasionally use e-books, 21% respondents frequently use e-books and 4.8% uses e-books most frequently for their purpose. Most of the respondents rarely use e-books and a negligible respondent use e-book most frequently.

**Table-6 (Purpose of e-Books)**

Purpose	Frequency	Percent	Valid Percent	Cumulative Percent
For completion of Research Work	24	19.4	19.4	19.4
For Revision of Course	30	24.2	24.2	43.5
For completion of Assignment Work	41	33.1	33.1	76.6
To update existing knowledge	29	23.4	23.4	100.0
Total	124	100.0	100.0	

The above table depicts that 19.4% respondents use e-books for completion of research work, 24.2% for revision of course, 33.1% for completion of assignment work and 23.4% to update existing knowledge. Here the highest numbers of respondents i.e., 33.1% use e-books for completion of assignment work and lowest number of respondents i.e., 19.4% for completion of research work.

Table-7 (Advantage of E-books)

Advantages	Frequency	Percent	Valid Percent	Cumulative Percent
Eco-friendly	27	21.8	21.8	21.8
Quick & Easy Access	32	25.8	25.8	47.6
24x7 availability	34	27.4	27.4	75.0
Cost Effective	31	25.0	25.0	100.0
Total	124	100.0	100.0	

From the above table it is clear that 21.8% say that the advantage of e-books is that it is eco-friendly, 25.8% opines that these are quick & easy to access, 27.4% prefer due to 24x7 availability and 25% for its cost effective. Most of the respondents prefer e-books for 24x7 availability and least respondents for eco-friendly.

Table-8 (Disadvantage of e-books)

Disadvantages	Frequency	Percent	Valid Percent	Cumulative Percent
Difficult to read	41	33.1	33.1	33.1
Poor internet connectivity	42	33.9	33.9	66.9
Requirement of PC/ Laptop	28	22.6	22.6	89.5
High Subscription charges	13	10.5	10.5	100.0
Total	124	100.0	100.0	

The above table shows that, 33.1% do not prefer e-books due to difficulty in reading, 33.9% say poor internet connectivity is one of the major disadvantages, 22.6% opines without PC/ Laptop e-books are not easy to study & 10.5% do not prefer due to high subscription charges.



TEST OF HYPOTHESIS

H₀₁-Gender and frequency of usage of e-books are independent of each other.

Table-9

Gender * frequencyofusinge-books Crosstabulation						
Count						
		Frequency of using e-books				Total
		Rarely	Occasionally	Frequently	Most Frequently	
Gender	Male	38	6	10	5	59
	Female	14	34	16	1	65
Total		52	40	26	6	124

Table-10(Chi-Square Tests)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34.519 ^a	3	.000
Likelihood Ratio	37.161	3	.000
Linear-by-Linear Association	5.092	1	.024
N of Valid Cases	124		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 2.85.

As *p* value is less than 0.05, so the null hypothesis (H₀₁) is rejected. Hence, gender and frequency of using e-books are dependent of each other.

H₀₂-Age and frequency of usage of e-books are independent of each other.

Table-11

Age * frequencyofusinge-books Crosstabulation						
Count						
		Frequencyofusinge-books				Total
		Rarely	Occasionally	Frequently	Most Frequently	
Age	Less than 18	8	1	0	0	9
	19-25	24	15	8	2	49
	26-35	15	15	13	1	44
	36-45	5	9	5	3	22
Total		52	40	26	6	124

Table-12(Chi-Square Tests)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.316 ^a	9	.032
Likelihood Ratio	19.110	9	.024
Linear-by-Linear Association	11.298	1	.001
N of Valid Cases	124		

a. 8 cells (50.0%) have expected count less than 5. The minimum expected count is .44.

As *p* value is greater than 0.05, so the null hypothesis (H₀₂) is not rejected. Hence, age and frequency of using e-books are independent of each other.



H₀₃-Discipline of study area and frequency of using e-books are independent of each other.

Table-13

Discipline of study area * frequency of using e-books Crosstabulation						
Count						
		Frequency of using e-books				Total
		Rarely	Occasionally	Frequently	Most Frequently	
Discipline of research area	Humanities and Social Science	13	7	6	0	26
	Management Science	12	10	8	1	31
	General Science	10	13	6	2	31
	Engineering	14	7	6	2	29
	Others	3	3	0	1	7
Total		52	40	26	6	124

Table-14 (Chi-Square Tests)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.463 ^a	12	.748
Likelihood Ratio	10.687	12	.556
Linear-by-Linear Association	.206	1	.650
N of Valid Cases	124		

a. 8 cells (40.0%) have expected count less than 5. The minimum expected count is .34.

As *p* value is greater than 0.05, so the null hypothesis (H₀₃) is not rejected. Hence, discipline of study area and frequency of using e-books are independent of each other.

H₀₄- Qualification and frequency of using e-books are independent of each other.

Table-15

Qualification * frequency of using e-books Crosstabulation						
Count						
		Frequency of using e-books				Total
		Rarely	Occasionally	Frequently	Most Frequently	
Qualification	Under Graduate	23	20	7	1	51
	Graduate	21	14	14	3	52
	Post Graduate	8	6	5	1	20
	Doctorate	0	0	0	1	1
Total		52	40	26	6	124



Table-16(Chi-Square Tests)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24.369 ^a	9	.004
Likelihood Ratio	11.083	9	.270
Linear-by-Linear Association	3.383	1	.066
N of Valid Cases	124		

a. 8 cells (50.0%) have expected count less than 5. The minimum expected count is .05.

As *p* value is less than 0.05, so the null hypothesis (H_{04}) is rejected. Hence, qualification and frequency of using e-books are dependent of each other.

H_{05} -Age and purpose of usage of e-books are independent of each other.

Table-17

Age * purposeofusageofe-books Crosstabulation						
Count		Purposeofusageofe-books				Total
		For completion of Research Work	For Revision of Course	For completion of Assignment Work	To update existing knowledge	
Age	Less than 18	8	0	1	0	9
	19-25	4	23	16	6	49
	26-35	9	5	24	6	44
	36-45	3	2	0	17	22
Total		24	30	41	29	124

Table-18(Chi-Square Tests)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	92.314 ^a	9	.000
Likelihood Ratio	83.236	9	.000
Linear-by-Linear Association	23.253	1	.000
N of Valid Cases	124		

a. 5 cells (31.2%) have expected count less than 5. The minimum expected count is 1.74.

As *p* value is less than 0.05, so the null hypothesis (H_{05}) is rejected. Hence, age and purpose of using e-books are dependent of each other.

H_{06} -Discipline of study and purpose of usage of e-books are independent of each other.

Table-19

Disciplineofstudy area * purposeofusageofe-books Crosstabulation						
Count		Purposeof usageofe-books				Total
		For completion of Research Work	For Revision of Course	For completion of Assignment Work	To update existing knowledge	
Disciplineofstudy area	Humanities and Social Science	4	8	7	7	26
	Management Science	5	11	9	6	31
	General Science	13	4	8	6	31



	Engineering	2	5	13	9	29
	Others	0	2	4	1	7
Total		24	30	41	29	124

Table-20(Chi-Square Tests)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.519 ^a	12	.043
Likelihood Ratio	21.480	12	.044
Linear-by-Linear Association	1.169	1	.280
N of Valid Cases	124		

a. 4 cells (20.0%) have expected count less than 5. The minimum expected count is 1.35.

As p value is less than 0.05, so the null hypothesis (H_{06}) is rejected. Hence, discipline of study area and purpose of usage of e-books are dependent of each other.

H_{07} -Qualification and purpose of usage of e-books are independent of each other.

Table-21

Qualification * purposeofusageofe- books Crosstabulation						
Count		Purposeofusageofe-books				Total
		For completion of Research Work	For Revision of Course	For completion of Assignment Work	To update existing knowledge	
Qualification	Under Graduate	3	11	26	11	51
	Graduate	16	11	12	13	52
	Post Graduate	5	8	3	4	20
	Doctorate	0	0	0	1	1
Total		24	30	41	29	124

Table-22(Chi-Square Tests)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.019 ^a	9	.006
Likelihood Ratio	23.561	9	.005
Linear-by-Linear Association	4.052	1	.044
N of Valid Cases	124		

a. 7 cells (43.8%) have expected count less than 5. The minimum expected count is .19.

As p value is less than 0.05, so the null hypothesis (H_{07}) is rejected. Hence, qualification and purpose of usage of e- books are dependent of each other.

RESULTS & FINDINGS

The result and findings of this study are as below:

- The majority of the respondents are female in terms of gender.
- If we consider age, the highest number of respondents are from the age group of 19-25 years.
- The highest numbers of respondents in terms of the discipline of study are jointly from management science and general science.
- In terms of educational qualification (present course), the highest respondents are pursuing graduation and 2nd highest is under-graduate course.
- Maximum numbers of students agreed that they use e-books rarely whereas, only 4.8% of respondents agreed that they use e-books most frequently.



- The majority of the students use e-books for the completion of assignment work during the lockdown.
- The majority of the respondents prefer e-books as these are available 24X7 over the internet.
- The main reason for not opting for e-books is poor internet connectivity as mentioned by the respondents.

CONCLUSION

It is found that most of the respondents use e-books for their assignment work during this period. Some respondents state that e-books have a unique features like availability over the internet around the clock. However, they also face problems like poor internet connectivity, and subscription charges while accessing e-books. From the discussion and testing the hypothesis, it is concluded that gender and frequency of using e-books are dependent on each other. Whereas, age and frequency of using e-books are independent of each other. Similarly, the discipline of the study area and frequency of using e-books are independent of each other. On the other hand, the qualification and frequency of using e-books are dependent on each other. Likewise, the age and purpose of using e-books are dependent on each other. Also, the discipline of study area and purpose of usage of e-books are dependent on each other. Again, the qualification and purpose of usage of e-books are dependent on each other. Overall, we can conclude that, in the modern era, e-books play a crucial role especially during the lockdown time when all the educational institutions were closed.

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