

SCRUTINIZING STUDENTS' PREFERENCE FOR THE MEDIUM OF ACADEMIC READING TEXTS

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Abstract

The prime purpose of this research article is to scrutinize the Bachelor of Business Management (BBM) students' preference regarding print and electronic medium of reading texts for their examinations. This article is based on the cross sectional survey carried out at Makawanpur Multiple Campus, Nepal across the Second, Fourth, Sixth and Eighth Semester Bachelor of Business Management students in 2019. The researcher adopted simple random sample to select 151 students from the population of 156 students. The researcher used a questionnaire regarding the students' preference and reasons for using their medium of reading texts. The percentage of students who preferred print medium of reading texts (68.2%) and that of electronic medium of reading texts (31.8%) show that more students in the research study preferred the print medium of reading texts than the electronic medium. The chi-square test of independence of gender and preferred medium $\chi^2 (1) = 0.061$, critical value = 3.841 and $p > .05$; and that of semester and preferred medium $\chi^2 (3) = 1.059$, critical value = 7.815 and $p > .05$ show that there was no statistically significant association between gender and preferred medium, and no statistically significant association between semester and preferred medium of reading texts.

Keywords: *Chi-square test, electronic text, print texts, reading.*

1. INTRODUCTION

Reading, a sign of a civilized society, is one of the ways of gaining information and knowledge about a situation, an event or an issue. It plays a vital role in the process of learning. It is one way of transferring ideas from the writer to the reader through a written text that can be print or electronic. Without reading, an individual probably won't be able to identify what is happening in the world and can't keep up with the development in his or her surroundings and expertise areas. Reading is one of the distinctive qualities of human beings, where not only students, but general people crave for reading and studying things. People had to read print reading materials such as books,

newspapers, magazines, notice etc. in the ancient times, but nowadays, we have been bestowed with options that we can read print reading texts or electronic reading materials or both because of development of science and technology. In the modern era, both teachers and students can widen the horizon of their knowledge about anything through the use of print texts and electronic reading materials, but the reading tendency of students, in general, seems to move from print texts to electronic reading materials in the developed countries. Students are still using print texts in developing countries, like Nepal, where modern facilities are unavailable in remote rural areas. Even several students residing in urban areas are deprived of having electronic reading materials because of poverty, ignorance, lack of governmental policies and electricity.

The researcher carried out this research study involving the Bachelor of Business Management students of four semesters studying at Makawanpur Multiple Campus to investigate their preference for print or electronic medium of reading texts.

Makawanpur District, where this campus is situated, includes students of rural areas, urban areas, and semi-urban areas. Students from diverse financial levels, political dogmas, religious beliefs and family backgrounds study at this campus. This is not only a leading campus, but also the only campus in the District to have been conducting the BBM Program.

This article can be useful to the campus administrators, researchers, educationists, and curriculum designers for developing reading materials, print or electronic, in order to fulfil the demands of students from this area.

1.1. Objectives of the Study

The key objectives of the research study are:

- 1.1.1 To scrutinize the Bachelor of Business Management students' preference for the print and electronic medium of reading texts.
- 1.1.2 To examine the association between gender and the preferred medium of reading texts.
- 1.1.3 To explore the reasons for students' preference for the print and electronic medium of reading texts.
- 1.1.4 To evaluate the association between semester and the preferred medium of reading texts.

1.2 Null Hypotheses

The null hypotheses of the study are:

- 1.2.1 There is no statistically significant association between gender and the preferred reading medium.
- 1.2.2 There is no statistically significant association between semester and the preferred medium of reading texts.

1.3 Delimitations of the Study

The research study was carried out under the following delimitations:

- 1.3.1 The study included only 151 students as the respondents.
- 1.3.2 Only four semesters' students were involved in the study.
- 1.3.3 The study was delimited to only one campus.
- 1.3.4 The questionnaire consisted of objective questions with only four options in each question.

2. LITERATURE REVIEW

Literature review involves concept of reading, electronic or digital reading materials and print reading materials and studies in reading materials.

2.1 Concept of Reading

Reading is a receptive language skill. It is a complex cognitive process of decoding symbols and signs in order to derive or construct meaning. It is a receptive process. Everybody retains different understanding levels and can grasp or

create different meanings from the same literary text. According to Rubin, reading is "a process in which information from the text and the knowledge possessed by the readers act together to produce meaning" (RUBIN, 2003).

Reading, which is a complex interaction between the text and the reader, is shaped by the reader's prior knowledge, experiences, attitude, and language community which is culturally and socially situated. The reading process requires continuous practice, development, and refinement. Cooper et al. define comprehension as "a process of constructing meaning from clues in the text and information in the readers' background of experience" (COOPER et al., 1988). Reading is normally an individual activity, although a person tends to read out loud for the benefit of other listeners. Reading aloud for one's own use, for better comprehension, is a form of intrapersonal communication.

2.2 Concept of Digital Reading Material

Wikipedia, the free encyclopedia (2019) defines digital medium as "the medium that are encoded in machine-readable formats. Digital medium can be created, viewed, distributed, modified and preserved on digital electronics devices". The medium can be pictures, sound, motion video, animation, and/or text items combined in a product whose purpose is to deliver information. Digital medium includes software, digital images, digital video, video game, web pages and websites, including social medium, data and databases, digital audio, such as MP3 and electronic books. Digital medium often contrasts with print medium, such as print books, newspapers and magazines, and other traditional medium, such as images, movies or audio tapes. In short, digital reading materials can be explained as reading materials that are presented in digital / electronic form using devices.

2.3 Concept of Print Reading Material

Print medium includes all types of magazines, newspapers, books, newsletters, banners, graphics, posters and other print artifacts. The flourishing of the new medium with all its adjunct services seems to mark the beginning of the end of conventional reading. The term conventional means traditional and ordinary. In

this study, conventional reading materials refer to reading materials that are in the conventional form using the print medium. The print medium is one of the oldest and basic forms of communication. The contribution of print medium in providing information and transfer of knowledge is remarkable. Even after the advent of electronic medium, the print medium has not lost its charm or relevance. In this study, print reading texts refer to the conventional reading materials that are provided for the readers using print paper such as print text books, newspapers, books, etc.

2.4 Research Studies in Reading Materials

Spencer carried out a study on the preferences of university students for their reading on-line course-related materials. Her results showed that many learners prefer the paper version of course materials and even those who prefer reading from the screen indicated their desire to have the option of the print version due to its portability, reliability, annotation, highlighting and ergonomic features (SPENCER, 2006). Another research on university students was done by Liu in order to investigate their perception, preferences and use of print or electronic resources (LIU, 2006). As a result of this study, he concluded that "digital libraries and traditional libraries have their unique advantages and limitations". Buzzetto-More et al. studied the awareness of university students about e-books (BUZZETTO-MORE, et al., 2007). They found out that, although university students were very comfortable about reading from the screen, they hardly had any interaction with e-books. In another study with university students in the UAE conducted by Alghazo, it was concluded that "web-enhanced instruction is positively viewed by students and it seems to enrich the conventional face-to-face classroom environment" (ALGHAZO, 2006).

Kazanci carried out the research by involving 792 randomly selected students from eight different departments from the Faculty of Education at Çukurova University in Turkey (KAZANCI, 2015). Her study showed that the majority of the students preferred traditional print paper instead of digital screen for their

reading activities. Davy discovered that e-textbooks had several good qualities over their traditional print copy counterparts. He found they were ubiquitous items, interactive, provided multi-medium, enabled printing on demand, thus saving paper, and could cater to individual learning styles (DAVY, 2007). Woody, et al. (2010) found e-textbooks to offer greater flexibility and accessibility than print copies, and e-textbooks proved increased visual appeal (WOODY et al., 2010). Neither of these researchers cited any disadvantages of e-textbooks.

In an examination of college student's preferences, Rowlands, et al. found out that students believed e-textbooks were up-to-date, space savers, accessible around the clock, convenient, and they perceived e-textbooks to make it easier to create copies of the text. However, contrary to these advantages, students also believed that e-textbooks were difficult to read, annotate, and bookmark a page/place in the book (ROWLANDS et al., 2007). Anuradha and Usha, similar to Davy, found that multi-medium, portability, and flexibility in searching/browsing were advantages of e-textbooks, in addition to full-text searching and reference linking (ANURADHA & USHA, 2006). The disadvantages were that the technology may still be somewhat in its infancy and there may also be a lack of awareness of the software/hardware that is available for e-textbooks. Rao found electronic reading texts to be convenient, less expensive than print copies, portable, and instantly available (RAO, 2001).

These previous research studies reveal the students' mixed preference for electronic and print medium of reading texts. It is obvious that both reading medium retain some merits and some demerits.

3. METHODOLOGY

Methodology involves research design, population, sampling design, sample size, variables, nature, validity of instrument, nature and sources of data and analysis and interpretation of data.

3.1 Research Design

A cross-sectional survey design was used to carry out the study. The researcher collected the primary data from the questionnaire to investigate the Bachelor of Business Management students' preference for print and electronic medium of reading texts.

3.2 Population / Universe

The population of the study consisted of 156 Bachelor of Business Management Second, Fourth, Sixth and Eighth Semester students studying at Makawanpur Multiple Campus, Nepal in the Academic Year 2019.

3.3 Sampling Design

The researcher followed the simple random sampling design, especially the lottery method to select 151 students from the campuses according to the sample size determination calculator by maintaining 95% confidence level and 1.5% margin of error.

3.4 Sample Size by Gender

The sample size of the research study consisted of 67 boys and 84 girls studying at the campus.

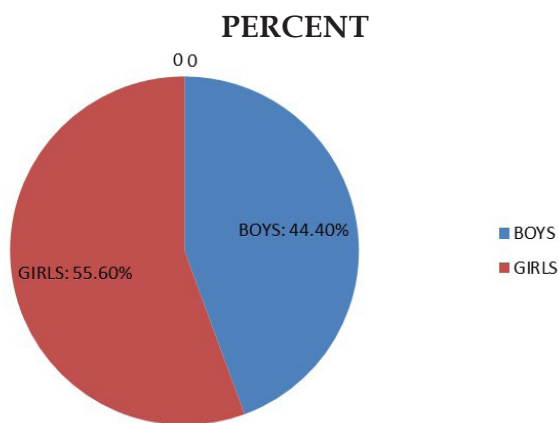


Fig. 1. Percent of Students by Gender

This figure shows that the percent of boys was a bit smaller than that of the girls.

3.5 Religions of the Students

147 students belonged to Hinduism, 3 students belonged to Buddhism, 1 student belonged to Christianity.

Number of Students by Religion

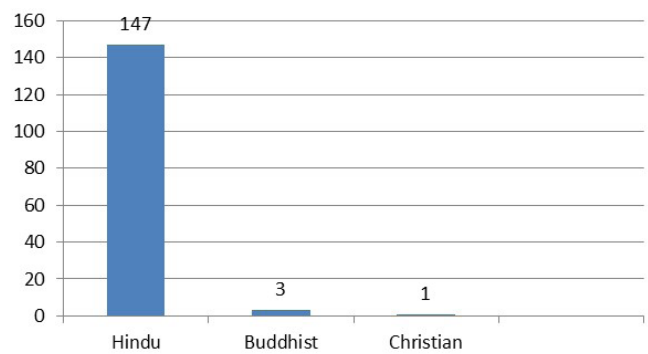


Fig. 2. Number of Students Belonging to Different Religions in the Study

This figure shows that highest number of the students in the study belonged to Hinduism.

3.6 Variables in the Study

In this cross-sectional survey research design, the researcher took Gender, Preferred Medium (Print and Electronic) of reading Text, Semester and reasons for preference of particular medium as major variables.

3.7 Validity of the Instruments

Validity refers to the state of being valid, authentic or genuine. To measure the validity of the instruments, the researcher received opinions and judgments from subject experts and authorities.

3.8 Nature and Source of Data

The researcher exploited nominal data to carry out the research study. Students' preference for print and electronic medium of reading texts were obtained through the use of objective questions regarding their reading preference and reasons. The primary source of data was the questionnaire. The secondary source of data included books, journal articles, web-sites etc.

4. ANALYSIS AND INTERPRETATION OF DATA

All the data were analyzed using Statistical Package for Social Sciences (SPSS) 20 version.

The researcher designed a series of question items to measure the reading preference of the students. Being the data nominal or categorical, the researcher used the frequency and percent statistics to scrutinize which reading medium is preferred by more students. The chi-square test of independence was employed to assess the hypothesis test or to determine the association

between gender and semester with the preferred medium of reading texts.

4.1 Students' Preference for Medium and Reasons for Preference

The researcher used frequency and percent calculation to scrutinize the students' preference for medium and reasons for preference.

Table 1. Students' Preference for Print and Electronic Medium of Reading Texts

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	PRINT MEDIUM	103	68.2	68.2	68.2
	ELECTRONIC MEDIUM	48	31.8	31.8	100.0
	Total	151	100.0	100.0	

This table shows that most of the students preferred the print medium (68.2%) to the electronic medium (31.8%).

Table 2. Reasons for Preferring the Medium of Reading Texts

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	PRINT: Easy to underline main points	40	26.5	26.5	26.5
	PRINT: Do not cause eye strain.	38	25.2	25.2	51.7
	PRINT: Less distraction in the course of reading.	25	16.6	16.6	68.2
	ELECTRONIC: Interesting to read.	36	23.8	23.8	92.1
	ELECTRONIC: Easy to read	2	1.3	1.3	93.4
	ELECTRONIC: Modern medium for reading	3	2.0	2.0	95.4
	ELECTRONIC: No need to buy separate books	7	4.6	4.6	100.0
	Total	151	100.0	100.0	

This table demonstrates that 40 (26.5%) students preferred the print medium because they found that in the print medium it was easy to underline main points of the text. 38 (25.2%) students preferred the print medium because they realized that the print medium did not cause eye strain; similarly, 25 (16.6%) students found the print medium to cause less distraction in the course of reading.

36 (23.8%) students preferred the electronic medium because they think that it is more interesting to read materials in this way. 2 (1.3

%) students liked the electronic medium because they felt easy while reading on those medium. 3 (2.0%) students used the electronic medium as it represents a modern medium for reading; similarly 7 (4.6%) students used the electronic medium because they did not need to buy books.

4.2. Gender and Preference for Medium of Reading Texts

Frequency and percent calculation were done in order to determine the number of boys and girls who preferred the medium of the reading.

Table 3. Gender of the Students * Preferred Medium of Reading Cross-tabulation

			Preferred Medium of Reading		Total
			Print	Electronic	
Gender of the Students	Male	Count	45	22	67
		% within Gender of the Students	67.2%	32.8%	100.0%
		% within Preferred Medium of Reading	43.7%	45.8%	44.4%
		% of Total	29.8%	14.6%	44.4%
	Female	Count	58	26	84
		% within Gender of the Students	69.0%	31.0%	100.0%
		% within Preferred Medium of Reading	56.3%	54.2%	55.6%
		% of Total	38.4%	17.2%	55.6%
Total	Count	103	48	151	
	% within Gender of the Students	68.2%	31.8%	100.0%	
	% within Preferred Medium of Reading	100.0%	100.0%	100.0%	
	% of Total	68.2%	31.8%	100.0%	

This table shows that both male and female students prefer to use both the print medium and electronic medium in order to read materials. Frequency and percentage statistics show that 45 (67.2%) and 22 (32.8%) boys preferred the print medium and the electronic medium respectively; similarly, 58 (69.0%) and 26 (31.0%) girls preferred the print medium and the electronic medium of reading texts respectively.

On the whole, 103 (68.2%) students preferred print medium, whereas 48 (31.8%) students preferred the electronic medium.

4.3 Chi-Square Test of Independence

Chi-square test of independence was computed to examine the association between gender and the preferred medium of reading texts.

Table 4. Chi-Square Test of Independence (Gender and Preferred Medium)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.061 ^a	1	.805
Continuity Correction	.005	1	.943
Likelihood Ratio	.061	1	.805
Fisher's Exact Test			
Linear-by-Linear Association	.061	1	.806
N of Valid Cases	151		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 21.30.

b. Computed only for a 2x2 table

"Pearson Chi-Square" value $\chi^2(1) = 0.061$, which is smaller than the critical value 3.841 and $p = .805$, which was greater than .05. This tells us that there was no statistically significant association between Gender and the Preferred Medium of reading. It means that both male students and female students almost equally preferred print medium of reading texts. The result of the Chi-Square test of independence accepted the null hypothesis that there was no statistically significant association between gender and the preferred medium of reading in the study.

4.4 Cramer's V Test

The researcher employed Cramer's V test to measure the strength of association between gender and the medium.

Table 5. Symmetric Measures

		Value	Approx. Sig.
	Cramer's V	.020	.805
N of Valid Cases		151	

- a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.

Cramer's V test computes the strength of association. We can see that the strength of association between the two variables was very weak (.020).

4.5 Semester and Preference for Medium of Reading Texts

Frequency and percentage calculation were done to determine the students of four semesters and their preferred medium of the reading.

Table 6. Semester * Preferred Medium of Reading Cross - Tabulation

			PREFERRED_MEDIUM		Total
			PRINT	ELECTRONIC	
SEMESTER	SECOND	Count	27	13	40
		% within SEMESTER	67.5%	32.5%	100.0%
		% within PREFERRED_MEDIUM	26.2%	27.1%	26.5%
		% of Total	17.9%	8.6%	26.5%
	FOURTH	Count	22	9	31
		% within SEMESTER	71.0%	29.0%	100.0%
		% within PREFERRED_MEDIUM	21.4%	18.8%	20.5%
		% of Total	14.6%	6.0%	20.5%
	SIXTH	Count	29	11	40
		% within SEMESTER	72.5%	27.5%	100.0%
		% within PREFERRED_MEDIUM	28.2%	22.9%	26.5%
		% of Total	19.2%	7.3%	26.5%
	EIGHTH	Count	25	15	40
		% within SEMESTER	62.5%	37.5%	100.0%
		% within PREFERRED_MEDIUM	24.3%	31.2%	26.5%
		% of Total	16.6%	9.9%	26.5%
Total	Count	103	48	151	
	% within SEMESTER	68.2%	31.8%	100.0%	
	% within PREFERRED_MEDIUM	100.0%	100.0%	100.0%	
	% of Total	68.2%	31.8%	100.0%	

This table shows that the number or percentage of students who preferred to use the print medium was greater than that of the students who preferred to use the electronic medium of reading texts in each semester.

4.6 Chi-Square Test of Independence

Chi-square test of independence was computed to examine the association between semester and the preferred medium of reading texts.

Table 7. Chi-square Tests (Semester and Preferred Medium)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.059 ^a	3	.787
Likelihood Ratio	1.053	3	.789
Linear-by-Linear Association	.153	1	.696
N of Valid Cases	151		

0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.85.

"Pearson Chi-Square" value $\chi^2(3) = 1.059$, which is smaller than the critical value 7.815 and $p = .787$, which was greater than .05. This tells us that there was no statistically significant association between Semester and Preferred Medium of reading. It means that students of the four semesters almost equally preferred print medium of reading texts. The result of the Chi-Square test of independence accepted the null hypothesis that there was no statistically significant association between semester and the preferred medium of reading in the study.

4.7 Cramer's V Test

The researcher employed Cramer's V test to measure the strength of association between semester and the medium.

Table 8. Symmetric Measures

	Value	Approx. Sig.
Cramer's V	.084	.787
N of Valid Cases	151	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis

Cramer's V test measures the strength of association. We can see that the strength of association between the two variables was weak (.084).

5. RESULTS AND DISCUSSION

Frequency and percentage statistics (the number and percentage of students who preferred print medium of reading texts: 103 or 68.2%) & the number and percentage of students who preferred electronic reading texts: 48 or 31.8%) show that more students in the research study preferred print medium to electronic medium of reading texts. 67.2% of the boys and 69.0% of the girls preferred to use print medium and electronic medium of reading materials. Similarly, 67.5% of the second semester students, 71.0% of the fourth semester students, 72.5% of the sixth semester students and 62.5% of the eighth semester students also preferred the print medium. The results indicate that the majority of students preferred print the medium because it was easy to underline the main points, such medium did not cause eye strain while reading and there was less distraction in the course of reading documents.

The chi-square test of independence $\chi^2(1) = 0.061$, which was smaller than the critical value 3.841 and $p = .805$, which was greater than .05 showed that there was no statistically significant association between gender and preferred medium of reading. Similarly, the chi-square test of independence $\chi^2(3) = 1.059$, which was smaller than the critical value 7.815 and $p = .787$, which was greater than .05 showed that there was no statistically significant association between semester and the preferred medium of reading. Cramer's V- Tests show that the strength of association between gender and the preferred medium (.020) and that of the semester and the preferred medium (.084) was poor.

6. CONCLUSIONS

In spite of the advancement of science and technology in reading and writing activities, most of the Nepalese students still prefer the print

medium of reading texts for their academic purposes. Reading medium is independent of gender and semester. This research article is assumed to be significant in the field of teaching-learning activities that involve the students' preference for the medium of academic reading texts.

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References

- ALGHAZO, I. M. (2006) Student attitudes toward web-enhanced instruction in an educational technology course. *College Student Journal*, 40(3), pp. 620-630.
- ANURADHA, K. & USHA, H. (2006) Use of e-books in an academic and research environment: A case study from the Indian Institute of Science. *Program Electronic Library and Information Systems*, 40(1), pp. 48-62.
- BUZZETTO-MORE, N., RETTA, G. & MUNA, E. (2007) Reading in a digital age: E-books are students ready for this learning object?" *Interdisciplinary Journal of E-Learning and Learning Objects*, 3(1), pp. 239-250.
- COOPER, D.J., EDNA, W. W., & DOROTHY, A. S. (1988) *The what and how of reading instructions*. Columbus: Merrill Publishing Company.
- DAVY, T. (2007) E-textbooks: Opportunities, innovations, distractions, and dilemmas. *Serials*, 20(2), pp. 98-102.
- KAZANCI, Z. (2015). University students' preferences of reading from a print paper or a digital screen: A longitudinal study. *International Journal of Culture and History*, 1(1), pp. 50-53.
- LIU, Z. (2006) Print vs. electronic resources: A study of user perceptions, preferences, and use. *Information Processing & Management*, 42(2), pp. 583-592.
- RAO, S. (2001). Familiarization of electronic books. *The Electronic Library*, 19(4), pp. 247-256.
- ROWLANDS, I., NICHOLAS, D., JAMALI, H. & HUNTINGTON, P. (2007) What do faculty and students really think about e-books? *Aslib Proceedings: New Information Perspectives*, 59(6), pp. 489-511.
- RUBIN, D. (2003) *K.U.A.S.A.I. Lebihcepat: Bukupintar accelerated learning*. Translated by F. Syahrani. Bandung: Kaifa.
- SPENCER, C. (2006) Research on learners' preferences for reading from a printtext or from a computer screen, *Journal of Distance Education*, 21(1), pp. 33-50.
- WOODY, W., DANIEL, D., & BAKER, C. (2010) E-books or textbooks: Students prefer textbooks. *Computers and Education*, 55(3), pp.1-13.