



E-BOOK VERSUS PRINTED MATERIALS: UNIVERSITY STUDENT'S PREFERENCES

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ABSTRACT

In a digital world, reading habits, accessing resources and preferences getting changing rapidly. University students, as digital natives, are accessing countless resources, from lecture notes to research papers electronically. The change of reading habits with a great scale has led to differentiation on accessibility of resources, archiving them and usage of related technologies.

A questionnaire was developed within the scope of the study. Questionnaire consists of three parts: Printed book reading habits, e-book reading habits (methods of obtain, aim of usage etc.) and technological knowledge (e-book related tools and file formats etc.). The purpose of the study is to examine the e-book usage preferences versus printed material and reading habits in a context of different variables. Additionally, in the study, the uses of e-books have been dealt with according to the faculties.

INTRODUCTION

In this age that we witness the replacement of printed resources with electronic resources the habits related to newspaper, magazine, course material and book reading have also undergone changes. Amongst modern-age college students in particular that were born digital-native to the 21st century, these habits demonstrate even further variance. The most noteworthy concept that emerged within this context has been e-book. A common definition of e-book was made by Armstrong, Edwards, Lonsdale (2002) as: [...] any piece of electronic text regardless of size or composition (a digital object), but excluding journal publications, made available electronically (or optically) for any device (handheld or desk-bound) that includes a screen.

During the last 10 years e-book releases of publishers, e-book catalogues prepared by university libraries, easy internet access to resources have all together contributed to the spread of e-book use. Despite the fact that reading from a screen appears to be disadvantageous at first sight, the counter-part advantages such as mobility, saving physical space, convenience, saving time & money, ease-of-use are the primary motivations in preferring e-books (Rosso, 2009). The effect of this transformation from printed material to e-books over our reading habits is also a subject worthy of deeper analysis. The aim of this research is to analyze within faculty variable the distributions relevant of reading habits of university students' e-book preferences (the aspects they deem advantageous, related purposes, methods of access, the most frequently used e-book environment and file formats).

LITERATURE REVIEW

We witness that in relevant literature there has been a rise in e-book related researches during the recent years. A vast majority of studies have focused on university students. This is a foregone conclusion considering that e-books became widespread at first in academic libraries. In those researches the main discussion topics have been user selections in e-books, the ratio of preference in comparison to printed materials and perceptions related to the advantages of e-books.

As manifested by a large-scale survey in UK with the participation of 120 universities (Nicholas, Rowlands, Clark, Huntington, Jamali, Olle', 2008) acceptance of e-book use among students is by the ratio of 61,8%. In a different large-scale survey (N=1547) covering the acceptance and use of e-book it has been detected that 57% of students use e-books. The remainder of students who provided a negative answer on e-book use have been basically the ones not knowing the availability of this service at university library (Shelburne, 2009). The research has also demonstrated that students view easy-access advantage of e-book as its primary benefit. A different research (N=1450) in support of these surveys (Zhang, Beckman, 2011) has likewise presented that the use of e-book is rather common with a ratio of 53% amongst university students.

Another research (Annand, 2008) probing into the preference of e-books over printed resources and its effect on learning (N=109) has unraveled that students generally prefer printed materials and as regards learning there is no significant differences between two formats. A different study (Woody, Daniel, Baker, 2010) parallel to the findings of previous research has also provided the conclusion that as course material, students prefer printed textbook rather than e-book (N= 91). In a study which demonstrated the ratio of e-book use as 37,1 % (Letchumanan, Tarmizi, 2010) it has been detected that use is basically dependent on access and the students who have no previous familiarity with this technology have no tendency to use e-books either.

METHOD

In the research a questionnaire has been developed as data gathering tool. This questionnaire integrating university students has collected information on book and e-book reading habits, purposes of using e-book, preference of printed or electronic resources, e-book reading environments and file formats that are used. The questionnaire has been presented online to the attention of university students in Turkey. A certain portion of questionnaire has been distributed in printed format. From 36 different universities, collectively 222 data have been gathered and obtained data have been analyzed via descriptive statistical methods.

RESULTS

Research findings have been examined under 3 headlines which are respectively book reading habits, e-book reading habits and the most frequently used e-book medium and file formats.

1) Book reading habits with respect to faculties

- a) *With respect to faculties what is the distribution of book types read by university students?*



Table 1. Book types by faculties

	Faculty of Education	Faculty of Economics and Administrative Sciences	Faculty of Arts and Sciences	Faculty of Engineering and Architecture	Faculty of Medicine and Health Sciences	Total
Novel-Story	85,5%	96,7%	78,3%	88,9%	85,0%	87,3%
Psychology-Philosophy	39,5%	26,7%	73,9%	34,7%	50,0%	40,7%
Article-Essay	40,8%	36,7%	52,2%	36,1%	60,0%	41,6%
Poem-Memoir	34,2%	30,0%	47,8%	18,1%	45,0%	30,8%
Course book	46,1%	56,7%	69,6%	40,3%	65,0%	49,8%
I don't read book	5,3%	3,3%	0,0%	6,9%	0,0%	4,5%
Total (N)	76	30	23	72	20	221

Table 1 manifests that university students read mostly Novel-Story types of books. This ratio is the highest amongst the students in Faculty of Economics and Administrative Sciences with a ratio of 96,7 %. "I read no books" is the least frequently selected option. There has been no single student from Faculty of Arts and Sciences and Faculty of Medicine and Health Sciences that stated to read no books ever

b) What is the distribution of book reading frequency amongst university students with respect to faculties?

Table 2. Frequency of reading book by faculties

	Faculty of Education	Faculty of Economics and Administrative Sciences	Faculty of Arts and Sciences	Faculty of Engineering and Architecture	Faculty of Medicine and Health Sciences	Total
In a week	60,5%	73,3%	78,3%	73,6%	60,0%	68,3%
In a month	26,3%	16,7%	13,0%	12,5%	35,0%	19,9%
In 6 months	10,5%	6,7%	4,3%	8,3%	0,0%	7,7%
In a year	2,6%	0,0%	4,3%	4,2%	0,0%	2,7%
Longer than a year	0,0%	3,3%	0,0%	1,4%	5,0%	1,4%
Total (N)	76	30	23	72	20	221

As Table 2 illustrating book reading frequency of students is analyzed it surfaces that the total average of students having stated to finish one book within one week is 68,3 %. This ratio is the highest amongst the students in Faculty of Arts and Sciences with a ratio of 78,3 %. The students from Faculty of Medicine and Health Sciences have been the least frequent book readers "longer than a year" with a ratio of 5,0 %.

c) Is there a significant correlation between book reading frequency of university students and book reading habits of their social environment?

Table 3. Correlation between environment and book reading frequency

Frequency of reading book	Most people around me who reads books											
	Mother		Father		Sister/Brother		Friend		Teacher		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
In a week	66	29,7	35	15,8	17	7,7	24	10,8	9	4,1	151	68,0
In a month	15	6,8	6	2,7	6	2,7	8	3,6	9	4,1	44	19,8
In 6 months	5	2,3	5	2,3	3	1,4	0	0,0	4	1,8	17	7,7
In a year	4	1,8	3	1,4	0	0,0	0	0,0	0	0,0	7	3,2
Longer than a year	1	0,5	0	0,0	1	0,5	1	0,5	0	0,0	3	1,4
Total	91	41,0	49	22,1	27	12,2	33	14,9	22	9,9	222	100

$\chi^2 = 21,51; sd=16; p < .05$



According to Table 3 there is a significant correlation between book reading frequency of university students and book reading habits of their social environment. Accordingly it can be argued that students who observe book reading habits mostly in their mothers develop higher frequency of reading habits.

2) E-Book reading habits with respect to faculties

a) *With respect to faculties what is the distribution of e-book reading habits amongst university students?*

Table 4. E-book reading by faculties

	Faculty of Education	Faculty of Economics and Administrative Sciences	Faculty of Arts and Sciences	Faculty of Engineering and Architecture	Faculty of Medicine and Health Sciences	Total
I read e-book	61,8 %	69,6 %	52,2 %	70,83 %	60,0 %	62,4 %
I don't read e-book	38,2 %	30,4 %	47,8 %	29,17 %	40,0 %	37,6 %
Total (N)	76	30	23	72	20	221

The findings of Table 4 reveal that 62,4 % of university students are e-book readers which is a substantial ratio indicating the prevalence of e-book technology.

b) *What is the distribution of e-book reading objectives amongst university students with respect to faculties?*

Table 5. Purpose of e-book reading by faculties

	Faculty of Education	Faculty of Economics and Administrative Sciences	Faculty of Arts and Sciences	Faculty of Engineering and Architecture	Faculty of Medicine and Health Sciences	Total
To work on course material	74,5 %	75,0 %	66,7 %	74,5 %	83,3 %	74,6 %
Research	89,4 %	93,8 %	83,3 %	70,6 %	75,0 %	81,2 %
To read story/novel/poetry books	42,6 %	43,8 %	41,7 %	29,4 %	16,7 %	35,5 %
Total (N)	47	16	12	51	12	N= 138

As illustrated in Table 5, university students read e-books with a ratio of 81,2 % mostly for Research objectives. On the basis of faculties, in the Faculty of Economics and Administrative Sciences this ratio goes as high as 93,8 %. The least use of e-book is for reading story-novel-poetry books.

c) *What is the distribution of e-book search formats amongst university students with respect to faculties?*

Table 6. Accessing e-books by faculties

	Faculty of Education	Faculty of Economics and Administrative Sciences	Faculty of Arts and Sciences	Faculty of Engineering and Architecture	Faculty of Medicine and Health Sciences	Total
University library	38,3 %	31,2 %	50,0 %	31,4 %	8,3 %	33,3 %
Internet search engine (Google book etc.)	66,0 %	62,5 %	58,3 %	66,7 %	75,0 %	65,9 %
Publisher's websites	23,4 %	18,8 %	41,7 %	19,6 %	8,3 %	21,7 %
Social media	12,8 %	18,8 %	25,0 %	9,8 %	8,3 %	13,0 %
Total (N)	47	16	12	51	12	N= 138

Table 6 unravels that access to e-book is by 65,9 % through search engines. With respect to faculties this ratio is the highest amongst the students in Faculty of Medicine and Health Sciences with a ratio of 75%. It has also been uncovered that the least frequently used method in e-book search is social media with a ratio of 13,0 %.

d) *What is the distribution of e-book reading formats amongst university students with respect to faculties?*

e)

Table 7. Types of reading e-books by faculties

	Faculty of Education	Faculty of Economics and Administrative Sciences	Faculty of Arts and Sciences	Faculty of Engineering and Architecture	Faculty of Medicine and Health Sciences	Total
Online reading	31,9 %	18,8 %	25,0 %	19,6 %	25,0 %	24,6 %
Download and screen reading	80,9 %	50,0 %	91,7 %	72,5 %	66,7 %	73,9 %



Downloadandprintout	27,7 %	18,8 %	25,0 %	33,3 %	16,7 %	27,5 %
Total (N)	47	16	12	51	12	N= 138

Table 7 shows that with a ratio of 73,9 % e-book is mostly downloaded from its original source. Students from Faculty of Arts and Sciences are the most frequent downloaders with a ratio of 91,7 %. The least preferred method is online reading with a ratio of 24,6 %. It is not actually plausible to name the downloaded then printed book as e-book reading yet there is a substantial high level of students(27,5 %) favoring such reading format.

f) *What aspects do university students deem to be advantageous in e-books over printed resources?*

Table8.Advantages of e-booksbyfaculties

	Faculty of Education	Faculty of Economics and Administrative Sciences	Faculty of Arts and Sciences	Faculty of Engineering and Architecture	Faculty of Medicine and Health Sciences	Total
Ease of access	68,1 %	62,5 %	58,3 %	76,5 %	50,0 %	68,1 %
Ease archive	57,4 %	50,0 %	75,0 %	56,9 %	58,3 %	58,0 %
Ease of use	48,9 %	12,5 %	50,0 %	19,6 %	16,7 %	31,2 %
Ease of read	38,3 %	12,5 %	41,7 %	39,2 %	25,0 %	34,8 %
Uptodateness	25,5 %	6,2 %	41,7 %	9,8 %	25,0 %	18,8 %
No advantage	4,3 %	0,0 %	25,0 %	2,0 %	25,0 %	6,5 %
Total (N)	47	16	12	51	12	N= 138

Research findings have manifested that the biggest advantage of e-book over printed resources is easy access (68,1 %). The ratio of students who claim to have detected no advantage has been as low as 6,5 %. With respect to faculties, students from Faculty of Education, Faculty of Economics and Administrative Sciences, Faculty of Engineering and Architecture have stated the biggest advantage of e-book as its easy access while students from Faculty of Arts and Sciences and Faculty of Medicine and Health Sciences pointed to the easy archiving.

3) The Most Frequently Used E-Book Medium and File Formats

a) *What is the distribution of e-book medium and file formats used frequently amongst university students?*

Table9.Usage of E-bookmediumand file types

Portable Document Format ".pdf"		Plain text files ".txt"		EPUB (IDPF) ".epub"		Kindle ".azw"		Microsoft Reader ".lit"		E-Reader		PDA		Smart Phone		Cell Phone		Tablet Computer		E-Pad		Computer	
f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
100	73	39	28	54	44	43	33	17	12	19	14	54	44	24	17	26	19	16	12	64	44	83	60
TOTAL																						138	

Amongst university students the most frequently used file format has been detected as Portable Document Format (.pdf) with a ratio of 73 % and the least frequently used format has been found to be Kindle (.azw). The most frequently used e-book medium has been computer environment with a ratio of 60% and the least frequently used medium has been E-pad and PDA with a ratio of 4%.

CONCLUSION

A general outlook on the research findings reveals that university students are inclined to prefer electronic resources and e-books in lieu of printed resources. Parallel to this detection an earlier research conducted in 2009 manifested that students preferred e-book with a ratio of 11%, printed resources with a ratio of 26 % and both resources with a ratio of 56% (Shelburne, 2009). In another research following 3 years afterwards in 2011 (Zhang, Backman, 2011) it has been designated that amongst university students the ratio of electronic resource users is 53% while the ratio of printed resource users is 47%.

According to findings of current study students read mostly novels etc. as printed books and as e-books they place research books to the first rank and course materials to the second rank. This finding may be bound to the fact that a vast majority of e-book format books are research or course texts. The fact that students deem easy access of e-book as its biggest advantage is also supportive of the prevalence of e-book format research books. It can further be asserted that the fact that course materials are more accessible in electronic environment is also an influential factor. Shelburne, (2009)'s research has similarly echoed the finding that students deem easy access of e-book as its greatest advantage.

Another salient finding underlines that students have regular book reader parents which draws attention to the fact that a great majority of students have failed to identify their friends as the regular book readers. From the perspective of social learning it is an acknowledged that students spend most of their times with friends and learn through mutual interaction with each other. Taking this detection into consideration, the role-models of students in book reading habits and factors influential on their book reading frequencies



stands before us as a topic that deserves further analysis. Aside from all above mentioned factors, in comparative analyses with respect to faculties the quantity of e-book resources in relevant fields should also be taken into account. It is no surprise that use of e-book is scarce in any subject with limited electronic resources. It would be even further beneficial if faculty- based findings of present research are evaluated with respect to accessible subject-focus e-book quantity.

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