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## Study Habits on Online and Offline Learning Resources Among Undergraduate

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### ABSTRACT

The present study is focusing on what types of learning resources have been adopted/used by the undergraduate students of Assam and to what extent do the activities of those learning resources have benefitted the students in their academic study or learning. The study was carried out on 240 fourth semester undergraduate students from four colleges of Assam, who were continuing their studies in the session 2016-17. For the collection of the data a self-developed Study Habits Scale was deployed. The Scale consisted of the six dimensions viz – Memory, Concentration, Understanding, Interest, Reading, and Writing on Online Learning Resources and Offline Learning Resources. The analysis of the data was done by using the chi-square test of the statistical technique.

### 1. Introduction

With the advancement of sophisticated technology, a drastic change is observed in every field of style with no exception in the education sector. This new trend of technologies has urged students to move from traditional to advance modern learning. The invention of modern Information Technology has changed the needs of the hours and urge for skilled-oriented or skilled-laboured suited in today's technical styles of teaching and learning. The art of teaching and learning process has changed with the development of internet technology. It has started its information revolution and has changed the nature of information access and retrieval. The internet has emerged as a powerful educational tool for instant access to information. It has become the biggest

global digital information library and made a tremendous impact on the academic activities of the teachers and students.

A significant transition has been seen in the academic communities' approaches and way of seeking information and the methods employed in the teaching and learning activities. This has become possible as the internet provides a wealth of current information and delivers text, graphics, images, audio, and videos at the same time. It acts as a powerful supplement to the traditional ways of studying and learning (*Sujatha, 2011*). The way of information access and retrieval has turned its way towards the digital specified path. The evolution of electronic technologies has driven the students into digital learners making them free agent approach to learning. Modern sophisticated electronic gadgets like smartphones, iPhones, computers, laptops, Tablets with its high-intensity features (web-based or internet-based) have enabled the students in the acquisition of information, knowledge, learning materials, study tools, etc. related to their formal academic practices. Students are now self-reliant, self-tutor, self-learner, self-approach along with the traditional means like – printed materials, textbooks, and supplementary materials for their learning purpose. ICT based electronic resources have become the best gift ever to humankind. It enables students to generate any kind of information anytime and anywhere. Teachers and students have already marked the change, shifting from the traditional way of teaching and learning to the modern sophisticated way of teaching and learning.

Therefore, in this conjuncture, it is evident that before the inception and arrival of internet technology, the learning resources or materials dwelled mostly in the traditional printed form. With the arrival and proliferation of internet technology, technologies have influenced and changed the way of knowledge and information access and retrieval process. It has ignited new horizons on the use and effect of online and offline learning resources. Now, the traditional printed version/s is vehemently also available in the form of an electronic version/s. Therefore, all the curriculum-based materials can be accessed both in the printed and electronic form. Owing to these dichotomy nature of the traditional printed and modern electronic resources it has arisen issues and concerns concerning the familiarity, awareness, attitude, perception, preferences, use, effect, and performance of online and offline learning resources. Relatively some of the previous studies had focused on the use, perceptions, attitudes, and preferences of online and offline resources by the students of higher education. The studies conducted by–*Liu 2004, Ismail and Zainab 2005, Spencer, C. 2006, Mucnjak, Abdullah and Gibb 2008, Woody and et al. 2010, Wu and Chen 2011, Cumaoglu and et al 2013, Kanzanci, Z. 2015, etc.* are highly concerned with the preferences, perceptions, attitudes, and use of the printed and electronic materials by the students.

### **What is Online and Offline Learning Resources?**

Online Learning Resources is those resources, which you can achieve by the connection of the internet and can access from a computer, Smartphone, laptop, tablet, etc with a web-browser that is completely screen-based learning. The Online Learning Resources is the modernized added tools or type of

learning resources and materials, to assist the students to meet with the expected domain of learning tasks or the pre-determined learning objectives digitally. Sometimes, Online Learning Resources have also been regarded as the extension of the framework of traditional learning resources for the effective outcome/s.

The Offline Learning Resources constitute those learning resources, which can avail in the form of handouts materials or printed materials. They are purely paper and ink-based printed materials. These resources are the traditional way of resources without the connection of internet technology and are opposite to the screen learning having a connection with the www (or web-based). This form of learning resource consists of textbooks, magazines, resource books, news items, journals, newspapers, theses, dissertations, modules, pamphlets, and anything that comes across as printed or hard media.

## 2. Aims of the study

To study the efficiency of online and offline learning resources on the study habits of undergraduate learners in Assam. The study intends to know the study habits on online and offline learning resources among the undergraduate learners of Assam and if there existed any significant difference among the students on the use of online and offline learning resources in their study habits.

## 3. Method of the Study

The participants of the study constituted the 240 fourth semester undergraduate students from four colleges of Assam, who were continuing their studies in the session 2016-17. For the collection of the data a self-developed Study Habits Scale was deployed. The Scale consisted of the six dimensions viz – Concentration, Memory, Understanding, Interest, Reading, and Writing concerning Online Learning Resources and Offline Learning Resources. The analysis of the data was done by using the chi-square test of the statistical technique.

## 4. Results of the Study

**Table – 1: The Summary of the Chi-Square ( $\chi^2$ ) Calculated for the Dimensional Responses on Study Habits of the Overall Undergraduate Students on the Use of Online and Offline Learning Resource**

Dimensions	N	df	Computed $\chi^2$ Value	Critical $\chi^2$ Value	Remarks
1. Concentration	240	2	8.97	5.991	P>0.05 Significant
2. Memory	240	2	6.9	5.991	P>0.05 Significant
3. Understanding	240	2	5.32	5.991	P< 0.05 Not Significant
4. Interest	240	2	6.01	5.991	P>0.05 Significant
5. Reading Speed	240	2	10.72	5.991	P>0.05

					Significant
<b>6.Writing</b>	240	2	17.44	5.991	P>0.05 Significant

### Interpretation

Table (1) shows that the computed  $\chi^2$ -value for 2 df for the dimensional components like – ‘Understanding’ came out to be (5.32) respectively at 0.05 level of confidence which is significantly smaller than the criterion  $\chi^2$ -value (5.991). Since the computed  $\chi^2$ -value has fallen behind the criterion  $\chi^2$ -value (5.991) at 0.05 level, therefore, it is to be understood that the undergraduate students did not differ significantly in the dimensional component of online and offline learning resources like – ‘Understanding’.

Furthermore, table (1) also shows that the computed  $\chi^2$ -values for 2 df in the dimensional components like – ‘Concentration’, ‘Memory’, ‘Interest’, ‘Reading’, ‘Writing’, came out to be (8.97), (6.9), (6.01), (10.72), (17.44) respectively at 0.05 level of confidence which are significantly greater than the criterion  $\chi^2$ -value (5.991). Since the computed  $\chi^2$ -values (8.97), (6.9), (6.01), (10.72), (17.44) exceeded the criterion  $\chi^2$ -value (5.991) at 0.05 level, therefore, it has understood that the undergraduate students differed significantly in the dimensional components like – ‘Concentration’, ‘Memory’, ‘Interest’, ‘Reading Speed’, ‘Writing’ respectively.

**Table – 2: The Summary of the Chi-Square ( $\chi^2$ ) Calculated for the Dimensional Responses on Study Habits of the Male and Female Undergraduate Students of Assam on the Use of the Online and Offline Learning Resources**

<b>Male undergraduate students on the effectiveness of learning on Online and Offline Learning Resources</b>					
<b>Dimensions</b>	<b>N</b>	<b>df</b>	<b>Computed <math>\chi^2</math> Value</b>	<b>Critical <math>\chi^2</math> Value</b>	<b>Remarks</b>
1.Concentration			2.92		P< 0.05 Not Significant
2.Memory			3.02		P< 0.05 Not Significant
3.Understanding			2.84		P< 0.05 Not Significant
4.Interest			2.9		P< 0.05 Not Significant
5. Reading Speed			6.52		P>0.05 Significant
6.Writing			9.64		P>0.05 Significant
<b>Female undergraduate students on the effectiveness of learning on Online and Offline Learning Resources</b>					
1.Concentration			6.68		P>0.05 Significant
2.Memory			3.26		P< 0.05 Not Significant
3.Understanding			2.09		P< 0.05 Not

					Significant
4.Interest			3		P< 0.05 Not Significant
5. Reading Speed			4.18		P< 0.05 Not Significant
6.Writing			7.1		P>0.05 Significant
<b>Male and Female undergraduate students on the effectiveness of learning on Online Learning Resources</b>					
1.Concentration			3.48		P< 0.05 Not Significant
2.Memory			0.42		P< 0.05 Not Significant
3.Understanding			1.18		P< 0.05 Not Significant
4.Interest			0.03		P< 0.05 Not Significant
5. Reading Speed			0.02		P< 0.05 Not Significant
6.Writing			0.40		P< 0.05 Not Significant
<b>Male and Female undergraduate students on the effectiveness of learning on Offline Learning Resources</b>					
1.Concentration			0.60		P< 0.05 Not Significant
2.Memory			0.40		P< 0.05 Not Significant
3.Understanding			0.85		P< 0.05 Not Significant
4.Interest			0.67		P< 0.05 Not Significant
5. Reading Speed			0.81		P< 0.05 Not Significant
6.Writing			0.72		P< 0.05 Not Significant

### Interpretation

- i. An observation into table (2) indicates that the computed  $\chi^2$ -value for 2 df for the dimensional components like – ‘Concentration’, ‘Memory’, ‘Understanding’, ‘Interest’, of *Online and Offline* Learning Resources came out to be (2.92), (3.02), (2.84), (2.9) respectively at 0.05 level of confidence which is significantly lesser than the criterion  $\chi^2$ -value (5.991). Besides, the computed  $\chi^2$ -value for 2 df for the dimensional components i.e. ‘Reading Speed’, and ‘Writing’, came out to be (6.52), (9.64) at 0.05 level of confidence which is significantly greater than the criterion  $\chi^2$ -value (5.991). Therefore, it is interpreted that the *Male Undergraduate Students* did not differ significantly in the dimensional components like - ‘Concentration’, ‘Memory’, ‘Understanding’, ‘Interest’, ‘Time

- Management', of the online and offline learning resources except in the components of 'Reading Speed', and 'Writing'.
- ii. Table (2) also reveals that the computed  $\chi^2$ -values for 2 df for the dimensional components like – 'Memory', 'Understanding', 'Interest', 'Reading Speed' of **Online and Offline** Learning Resources came out to be (3.26), (2.09), (3), (4.18) respectively at 0.05 level of confidence which is significantly lesser than the criterion  $\chi^2$ -value (5.991). Besides, the computed  $\chi^2$ -values for 2 df for the dimensional components i.e. 'Concentration', and 'Writing', came out to be (6.68), and (7.1) at 0.05 level of confidence which is significantly greater than the criterion  $\chi^2$ -value (5.991). Therefore, it is interpreted that the **Female Undergraduate Students** did not differ significantly in the dimensional components like - 'Memory', 'Understanding', 'Interest', 'Reading Speed' of the online and offline learning resources except in the components of 'Concentration', and 'Writing' in the learning effectiveness by the influence of study habits.
  - iii. Likewise, table (2) depicts that the computed  $\chi^2$ -values for 2 df for all the dimensional components like – 'Concentration', 'Memory', 'Understanding', 'Interest', 'Reading Speed', 'Writing', of **Online** Learning Resources came out to be (3.48), (0.42), (1.18), (0.03), (0.02), (0.40) respectively at 0.05 level of confidence which are significantly lesser than the criterion  $\chi^2$ -value (5.991). Since all the computed  $\chi^2$ -values had fallen behind the criterion  $\chi^2$ -value (5.991) at 0.05 level. Thus, it is understood that the **Male and Female Undergraduate Students** did not differ significantly in all the said dimensional components of Online Learning Resources.
  - iv. Further the table (2) reveals that the computed  $\chi^2$ -values for 2 df for all the dimensional components like – 'Concentration', 'Memory', 'Understanding', 'Interest', 'Reading Speed', 'Writing', of **Offline** Learning Resources came out to be (0.60), (0.40), (0.85), (0.67), (0.81), (0.72) respectively at 0.05 level of confidence which are significantly lesser than the criterion  $\chi^2$ -value (5.991). Since all the computed  $\chi^2$ -values had fallen behind the criterion  $\chi^2$ -value (5.991) at 0.05 level, it is interpreted that the **Male and Female Undergraduate Students** did not differ significantly in all the said dimensional components of Offline Learning Resources used among them in the learning effectiveness of study habits.

#### **Major findings and Conclusion of the Study**

Table (1) shows that undergraduate students differed significantly in the dimensional component of concentration. This implies that the undergraduate students' could not have the same level of concentration while learning through the printed and electronic form. The table also indicates the undergraduate students differed significantly in the dimensional component of memory. This means students' memory or recalls power is not the same in both the learning resources (online and offline) and it is found that students can retain longer in printed form. Table (1) reveals that the undergraduate students did not differ significantly in the dimensional component of understanding. It means that undergraduate students do not vary in their understanding/comprehension level while reading through online and offline resources. Though understanding level does not vary in both the mode/style of learning still majority of the students (both the e-book users and non-users) indicated preferring to read

printed in the electronic textbook *Ismail and Zainab (2005)*. On the other hand, *Evans, C. (2007)* found that many students believed that they were more receptive to the material delivered as podcasts than either textbooks or traditional revision lectures. Likewise, the table also depicts that the undergraduate students differed significantly in the dimensional component of interest. This implies that undergraduate students differ in perception and interest over the use of online and offline resources in their study habits. *Liu, Z. (2004)* reported that the majority of respondents expressed the need to continue looking for more information from traditional libraries and the need to supplement print resources. *Mawindo, D.M. (2005)* also revealed that undergraduate students use both print media and electronic media. However, the print version of resources has been more heavily used than the electronic one. *Woody et al. (2010)* found that undergraduate students who were e-book users still prefer print texts for learning. Again the table also presents that the undergraduate students differed significantly in the dimensional component of reading. *Ismail and Zainab (2005)* also found that both the e-book users and non-users prefer to read printed in the electronic textbook. *Spencer, C. (2006)* revealed that learners prefer the paper/printed materials, and learners who prefer to read on the screen indicated their desire to have the option for printed materials. On the other hand, *Sung Wook Ji et al. (2014)* found the majority of the undergraduate students overall preferred electronically accessed overprinted readings. Furthermore, the table also shows that undergraduate students differed significantly in the dimensional component of writing. *Ismail and Zainab (2005)* found a majority of the students used an e-book for writing assignments/research project.

Again, the findings of the study habits related to the gender of this present study it has also revealed that the male and female students did not differ in the use of online and offline learning resources for academic purposes. It is supported by the findings of *Kanzanci (2015)* who noted that male and female students do not differ in the choices of preference for online and offline learning resources. Whereas, *Palsdottir and Einarsdottir (2016)* have noted the contrast result.

The invention of modern IT has dominated every field and in this 21<sup>st</sup> century, the students have welcomed and accepted IT-based electronic resources for their academic purposes. But still, some categories of learners merely depend on the traditional way of learning as they found interest basically in the use of library resources/ handouts/ supplementary, etc. So online and offline learning resources is one of the emerging environment among the students.

### References

- Ayub et al.(2014) Use of the Internet for Academic Purposes among Students in Malaysian Institutions of Higher Education. The Turkish Online Journal of Educational Technology (TOJET) January 2014, Vol-13 Issue-1.Retrieved from <http://www.tojet.net/articles/v13i1/13122.pdf> on 20th March 2015 at 10:15 am.
- Cumaoglu and et.al (2013) E-Book versus Printed Materials: Preferences of University Students. Published in Contemporary Educational

- Technology, 2013, 4 (2), pp-121-135. Retrieved from [cedtech.net/articles/42/423.pdf](http://cedtech.net/articles/42/423.pdf) on 16/8/2016 at 12:20 pm.
- Dundar and Akcayir (2012): Tablet Vs. Paper: The Effect on Learner's Reading Performance. Published in *International Electronic Journal of Elementary Education*, 2012, 4(3), pp-441-450. Retrieved from – <https://www.pegem.net/dosyalar/dokuman/138562-201401089247-2.pdf> on 17 August 2016 at 11:50 AM.
- Garrett, H.E. (1986), *Statistics in Psychology and Education*. Allied Practice Private Ltd, Bombay.
- Jagga, V. (2008) A Study of Internet Usage Behaviour of Students in Relation to Gender, Grade and Site. *Journal of Educational Research and Extension* April-June 2008, Vol.45(2), Coimbatore-641020.
- Khan, S.A. et al. (2011) Internet Access, Use, and Gratification among University Students: A case study of the Islamia University of Bahawalpur, Pakistan. *Chinese Librarianship: an International Electronic Journal*. Retrieved from <http://www.white-clouds.com/iclc/cliej/c132KKB.pdf> on 10th February 2016 at 12:28 pm.
- Maniar, A.(2002) A Study on Internet Usage for Educational Purposes by the Female Post-Graduate Students of the Maharaja Sayajirao University. *Journal of Educational Research and Extension*.Vol.39(4), Oct-Dec 2002. Coimbatore 641020.
- Spencer, C (2006) Research on Learners' Preferences for Reading From a Printed Text or a Computer Screen *JOURNAL OF DISTANCE EDUCATION REVUE DE L'ÉDUCATION À DISTANCE SPRING/PRINTEMPS 2006 VOL. 21, No 1, 33-50*. Retrieved on 14 October 2018 at 10.03 AM from - <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.819.7681&rep=rep1&type=pdf>
- Tella (2007), University of Botswana Undergraduates Uses of the Internet: Implications on Academic Performance. *Journal of Educational Media & Library Sciences* 45:2 (winter 2007): 161-185. Retrieved from <https://unilorin.edu.ng/publications/tella/161-186.pdf> on 20th March.2015 at 11:30 AM.
- Thanuskodi, S, and Amsan. E (2013), Effective Use of E-Resource Materials among Students of JJ College of Engineering and Technology: A Study.*International Journal of Digital Library Services*. Vol.3, April – June 2013, Issue-2 (ISSN: 2250-1142). Retrieved from [www.ijodls.in/uploads/3/6/0/3/3603729/29-45.pdf](http://www.ijodls.in/uploads/3/6/0/3/3603729/29-45.pdf) on 20th March 2015 at 9:10 AM.
- Vashishtha, K.C., and et.al (2015), Digitalised World of Higher Education in India: Issues and Strategies. *University News, A Weekly Journal of Higher Education*. Association of Indian Universities. Vol.53. No.09, ISSN – 0566-2257, March 02-08, 2015, pp. 8-15.
- Woody and et.al (2010): E-books or Textbooks: Student's Prefer Textbooks. Published in *Computers & Education*, 55 (2010), pp- 945-948. Retrieved from- [clintlalonde.net/wp-content/uploads/2013/08/Woody-](http://clintlalonde.net/wp-content/uploads/2013/08/Woody-)



et-al.-2010-E-books-or-textbooks-students-prefer-textbooks.pdf on 17 August 2016 at 11:30 am

Wu and Chen (2011): Graduate Students' Usage of and Attitudes towards e-books: Experiences from Taiwan. Published in Emerald Group Publishing Limited, Electronic Library, and Information Systems. Vol-45 no 3, 2011, pp- 294-307. Retrieved from – [bogliolo.eci.ufmg.br/downloads/TGI061WUGraduate\\_students\\_taiwan\\_2011.pdf](http://bogliolo.eci.ufmg.br/downloads/TGI061WUGraduate_students_taiwan_2011.pdf) on 17/8/2016 at 12:20 PM.