

A STUDY ON USAGE OF LAP TOPS AMONG THE FIRST YEAR COLLEGE STUDENTS

S. Venkataraman & S. Manivannan

Assistant Professor, Department of Education, Annamalai University, Annamalainagar, Tamil Nadu, India

Received: 25 Nov 2018

Accepted: 07 Dec 2018

Published: 13 Dec 2018

ABSTRACT

This paper presents the results of the Study on Usage of Lap tops among the First Year College Students. The Lap top usage Inventory developed and validated by Nor Bradhouse (2015) was used with 200 randomly selected First year College Students. The findings of the study shows that the First year College Students have high level of Lap top usage. Further, there is significant difference between Male and Female, rural and urban students with respect to their Lap top usage. There is significant difference in the Lap top usage of First year College Students with respect to Government & Private and Aided & Private type of Management of Colleges and there is no significant difference between students of Government & Aided type. It is also recorded that here is no significant difference in the Lap top usage of First year College Students with respect to the Group of Study (Arts/Science/Vocational), with respect to Community and Parental Occupation with respect to their Lap top usage.

KEYWORDS: *Community and Parental Occupation, Investigator Decided, Inventory Developed and Validated*

INTRODUCTION

A laptop is a small, portable personal computer commonly used in a variety of settings, such as at work, in education, in playing games, Internet surfing, for personal use. Laptops combines the components and capabilities of a desktop computer, as a single unit. Most modern laptops feature integrated webcams and built-in microphones, while many also have touch screens. Hardware specifications, such as the processor speed and memory capacity, significantly vary between different types, makes, models and price points.

Benefits of Lap Tops

Laptops are fully functional computers that are designed for portability and convenience. When compared to a desktop computer, laptops are smaller, weigh less, have fewer components and consume less power. This makes them a great choice for College Students and busy professionals who travel often. On the other hand, a desktop computer is often enclosed in a large, bulky shell, making its portability severely limited. Its availability among the students now days become common. Since, the state government started issuing free Lap tops, almost all the students at college level are having one of their own or at least having chances to access at any time. But, to what extent they are used by the students is questionable. Hence, the investigator decided to take up this study.

REVIEW OF RELATED LITERATURE

Shin, Hyekyoung (2010) explained that laptop computers are widely used by college students for academic and leisure activities. Ghousia Rahman (2011) explained that the process of implementing a total computer based information

system to improve the delivery of curricula, clinical teaching and administration. Ming-der Wu and Ssu-Tsen Yeh (2012) s indicated that most students agreed that library electronic resources were important to their studies, but they did not use the resources frequently. Gender, subject field, internet use are factors that correlate with competence variations. This study also found that students were not confident about their capabilities in using library electronic resources. Low correlation was found between students' levels of computer competences and their frequency, familiarity, and perceived importance of electronic resources. Houle, Philip A. et al., (2013) examined the reasons why students choose to take laptop computers into college classes. The study found that most students choose to bring computers to class for sound educational reasons.

Falah A. and Ahmad A. (2013) investigated the effectiveness of the use of laptops in enhancing learning at the undergraduate level. Kumar, C. Ashok (2015) found out whether there was a significant difference in the attitude and opinion towards using Computer Technology in teaching among B.Ed., trainees. The major findings were there were significant differences in Attitude towards Computer Technology in teaching. Richard W. Patterson and Robert M. Patterson (2016) presented quasi-experimental evidence of the impact of laptop use in college classrooms on academic performance. Found that students who are required to bring laptops to classes on a certain day are significantly more likely to use than students who are not required to bring laptops to classes. King, L., et al., (2017) results showed that many students wanted to use their own technology in the classroom but that a majority of their professors did not allow them to do this. Jimenez, Joel R. (2017) took a co relational study at the relationship among Internet usage, social support, and examined how students described these variables along with how student' self-reports were able to predict their willingness to continue enrolment at their current college into their third year. There was a correlation between Internet usage and students desire to continue enrolment suggesting that as Internet usage rises, a student is less likely to desire to continue enrolment in college. Richard W.Patterson et al., (2017) evaluated the effect of classroom computer use on academic performance, which exploits institutional policies that generate plausibly random variation in laptop use within the classroom. Further added that the negative effects of computer use are concentrated among males and low-performing students and more prominent in quantitative courses.

OBJECTIVES OF THIS STUDY

The present study has the following objectives:-

- To find out the First year College Students' level of Lap top usage.
- To find out whether there is any significant difference between Male and Female students in their Lap top usage.
- To find out whether there is any significant difference in the Lap top usage of First year College Students with respect to the Group of Study (Arts/Science/Vocational).
- To find out whether there is any significant difference between rural and urban located students in their Lap top usage.
- To find out whether there is any significant difference in the Lap top usage of First year College Students with respect to the type of Management of their Colleges (Government/Aided /Private).
- To find out whether there is any significant difference in the Lap top usage of First year College Students with respect to their Community (OC/BC/MBC/SC/ST).

- To find out whether there is no significant difference in the Lap top usage of students with respect to their Parental Occupation (Govt./Private/Self).

For the execution of this study, Suitable null hypotheses were formulated.

METHOD OF STUDY

In the present study, Normative Survey method is adopted.

Sample of this Study

Random sampling technique is used in the selection of the sample for 200 First year College Students.

Tool Used

The Lap top usage Inventory developed and validated by Nor Bradhouse (2015).

Statistical Techniques Used

The following statistical techniques are used to analyse the data collected from the sample

- Descriptive analysis – Mean and standard Deviation
- Differential analysis – ‘t’ test and ‘F’ test

Descriptive Analysis

In order to find out the Lap top usage of First year College Students, the mean and S.D have been calculated.

Table 1: The Mean and Standard Deviation of Lap Top Usage Scores of First Year College Students

Demographic Variable	Sub Sample	N	Mean	SD
Gender	Male	110	58.42	11.45
	Female	90	54.69	9.65
Group	Arts	100	57.72	10.76
	Science	80	55.17	10.33
	Vocational	20	58.10	12.67
Locality	Rural	90	54.80	10.89
	Urban	110	58.33	10.54
Type of Management	Govt.	66	55.12	10.63
	Aided	51	55.33	11.28
	Private	83	58.89	10.42
Community	OC	29	55.38	8.47
	BC	54	56.37	11.71
	MBC	70	58.43	11.592
	SC/ST	47	55.49	9.784
Parental Occupation	Govt	128	57.28	10.95
	Private	25	55.28	10.90
	Self	47	56.04	10.50
Entire		200	56.74	10.81

Entire Sample

It is evident from the above Table that the calculated mean score of entire sample indicates that the First year College Students have high level of Lap top usage.

Differential Analysis

Null Hypothesis

There is no significant difference between Male and Female students in their Lap top usage.

In order to test the above Null hypothesis 't' value is calculated.

Table 2: Significance of Difference between Male and Female Students with Respect to their Lap Top Usage

Gender	N	Mean	SD	t-Value	Significance at 0.05 Level
Male	110	58.42	11.456	2.45	Significant
Female	90	54.69	9.655		

From the above table, since the 't' value is significant at 0.05 level, the above Null hypothesis is rejected and it is concluded that there is significant difference between Male and Female students with respect to their Lap top usage.

Null Hypothesis

There is no significant difference in the Lap top usage of First year College Students with respect to the Group of Study (Arts/Science/Vocational).

In order to test the above Null hypothesis 'F' value is calculated.

Table 3: Significance of Difference among the Sub-Samples of Type of Management with Respect to their Lap Top Usage

	Sum of Squares	df	Mean Square	F	Significance at 0.05 Level
Between Groups	328.970	2	164.485	1.411	Not Significant
Within Groups	22961.510	197	116.556		
Total	23290.480	199			

From the above table, since the 'F' value is not significant at 0.05 level, the above Null hypothesis is accepted and it is concluded that there is no significant difference in the Lap top usage of First year College Students with respect to the Group of Study (Arts/Science/Vocational).

Null Hypothesis

There is no significant difference between rural and urban located students in their Lap top usage.

In order to test the above Null hypothesis 't' value is calculated.

Table 4: Significance of Difference between Rural and Urban First Year College Students with Respect to their Lap Top Usage

Locality	N	Mean	SD	t-Value	Significance at 0.05 Level
Rural	90	54.80	10.896	2.31	Significant
Urban	110	58.33	10.540		

From the above table, since the 't' value is significant at 0.05 level, the above Null hypothesis is rejected and it is concluded that there is significant difference between rural and urban students with respect to their Lap top usage.

There is no significant difference in the Lap top usage of First year College Students with respect to the type of Management of their Colleges (Government/Aided/Private).

In order to test the above Hypothesis 'F' value is calculated.

Table 5: Significance of Difference among the Sub-Samples of Type of Management with Respect to their Lap Top Usage

	Sum of Squares	df	Mean Square	F	Significance at 0.05 Level
Between Groups	658.092	2	329.046	2.864	Significant
Within Groups	22632.388	197	114.885		
Total	23290.480	199			

From the above table, since the 'F' value is significant at 0.05 level, 't' value is calculated for the mean scores of Government & Aided, Government & Private, Aided & Private First year College Students' Lap top usage.

Table 6: Significance of Difference between Government and Aided First Year College Students with Respect to their Lap Top Usage

Type of Management	N	Mean	SD	t-Value	Significance at 0.05 Level
Government	66	55.12	10.636	0.101	Not significant
Aided	51	55.33	11.283		

Table 7: Significance of Difference between Government and Private First Year College Students with Respect to their Lap Top Usage

Type of Management	N	Mean	SD	t-Value	Significance at 0.05 Level
Government	66	55.12	10.636	2.168	Significant
Private	83	58.89	10.426		

Table 8: Significance of Difference between Aided and Private First Year College Students with Respect to their Lap Top Usage

Type of Management	N	Mean	SD	t-Value	Significance at 0.05 Level
Aided	51	55.33	11.283	1984	Significant
Private	83	58.89	10.426		

From the above tables, since the 't' value is not significant at 0.05 level, for the mean scores of Government & Aided a First year College Students and significant for Government & Private and Aided & Private First year College Students, with respect to their Lap top usage, the above Null hypothesis, is partially accepted and it is concluded that there is significant difference in the Lap top usage of First year College Students with respect to Government & Private and Aided & Private type of Management of Colleges and there is no significant difference between students of Government & Aided type.

Null Hypothesis

There is no significant difference in the Lap top usage of First year College Students with respect to their Community (OC/BC/MBC/SC/ST).

In order to test the above Null hypothesis 'F' value is calculated.

Table 9: Significance of Difference among the Sub-Samples of Community with Respect to their Lap Top Usage

	Sum of Squares	df	Mean Square	F	Significance at 0.05 Level
Between Groups	334.172	3	111.391	0.951	Not significant
Within Groups	22956.308	196	117.124		
Total	23290.480	199			

From the above table, since the 'F' value is not significant at 0.05 level. Hence the Null Hypothesis is accepted and concluded that there is no significance difference among the sub-samples of Community with respect to their Lap top usage.

Null Hypothesis

There is no significant difference in the Lap top usage of students with respect to their Parental Occupation (Govt./Private/Self).

In order to test the above Null hypothesis 'F' value is calculated.

Table 10: Significance of Difference among the Sub-Samples of Parental Occupation with Respect to their Lap Top Usage

	Sum of Squares	df	Mean Square	F	Significance at 0.05 Level
Between Groups	113.650	2	56.825	0.483	Not significant
Within Groups	23176.830	197	117.649		
Total	23290.480	199			

From the above table, since the 'F' value is not significant at 0.05 level. Hence the Null Hypothesis is accepted and concluded that there is no significance difference among the sub-samples of Parental Occupation with respect to their Lap top usage.

RECOMMENDATIONS

On the basis of this study the following recommendations are made:

- Except Group of study, Community and Parental occupation all other demographic variables shows differences in Lap top usage. Hence efforts are to taken to decrease the difference among the sub samples.
- Special programmes on Lap top usage should be conducted or the First year College Students.
- Teachers should give training on Lap top usage to the students along with teaching.
- Permanent Computer training cells should be set up for the First year College Students in the Colleges.

CONCLUSIONS

This study was conducted to see how Lap top usage differs. Based on the findings of this study, further research is needed to determine which aspect of demographic factors influence Lap top usage. These studies recommend that all higher education institution should have basic computer training centres to assist students till they graduated.

REFERENCES

1. Falah A. and Ahmad A. (2013) *Effectiveness of Laptop usage in UAE University Undergraduate Teaching*, *Turkish Online Journal of Educational Technology*, 12, 2, 77-88.
2. Ghousia Rahman (2011) *Use of computers among students of dental college in Saudi Arabia*, *J Educ Ethics Dent*, 1:12-7, <http://www.jeed.in/text.asp?2011/1/1/12/93413>
3. Houle, Philip A. et al., (2013) *Using Laptop Computers in Class: A Student Motivation Perspective*, *Journal of Learning in Higher Education*, 9, 2, 83-92.
4. Jimenez, Joel R. (2017) *The Influence of Internet Usage, Social Support, Life Satisfaction, and Depression in the Second Year of College on Student's Intention to Continue Enrollment*, ProQuest LLC, Ed.D. Dissertation, St. John's University (New York), School of Education and Human Services.
5. King, L., et al., (2017) *Student and professor perspectives on exemplary practices in the use of information and communication technologies (ICTs) and e-learning in colleges*, <https://eduq.info/xmlui/bitstream/handle/11515/35243/king-et-al-student-professor-perspectives-exemplary-practices-ict-elearning-colleges-adaptech-2017.pdf>
6. Kumar, C. Ashok (2015) *A Study on Attitude and Opinion towards Using Computer Technology in Teaching among B.Ed. Trainees in Tiruchirappalli District*, *Journal of Educational Technology*, 12, 1, 36-51.
7. Ming-der Wu and Ssu-Tsen Yeh (2012) *Effects of Undergraduate Student Computer Competence on Usage of Library Electronic Collections*, *Journal of Library and Information Studies*, 10, 1, 1-17.
8. Richard W. Patterson and Robert M. Patterson (2016) *The Impact of Laptop Use in the College Classroom*, <https://www.ilr.cornell.edu/sites/ilr.cornell.edu/files/CHERI%20WP173.pdf>
9. Richard W. Patterson et al., (2017) *Computers and productivity: Evidence from laptop use in the college classroom* *Economics of Education Review*, 57, 66-79.
10. Shin, Hyekyoung (2010) *Musculoskeletal Symptoms and Laptop Computer use among College Students*. Doctoral Dissertation, University of Pittsburgh, <http://d-scholarship.pitt.edu/10166/>