The Impact of Internet use on Study Habits of Higher Secondary Students

Lajwanti [1*] Ashish Paliwal [2]

[1]Associate Professor, Faculty of Education, Dayalbagh Educational Institute (Deemed University), Agra, India.

[2]Research Fellow, Faculty of Education, Dayalbagh Educational Institute (Deemed University), Agra, India.

* E-mail of the corresponding author: dei.lajwanti@gmail.com

Abstract

In the present study an attempt has been made to know impact of internet use on study habits of higher secondary students. The sample consisted 480 (240 boys and 240 girls) studying in various secondary schools of Agra city in India were selected by using purposive sampling method. Self developed S.H.I.C.S. was used to know the study habits of higher secondary students. Through this tool study habits of students from eight areas are studied: Comprehension, Concentration, Task-Orientation and Sets, Interaction, Drilling, Writing, Supports and Recording. For the analysis and interpretation of the data, descriptive and inferential modes of treatments were adopted. CR-test and 3-way ANOVA were applied for testing the significance of Hypotheses. The results revealed that study habits of internet users and non-users differ significantly and users are found better. While Interaction effect of sex, stream of education and internet use/non-use on study habits was found insignificant i.e. these variables have no combined effect on study habits of higher secondary students.

Keywords: Study habits, internet use, secondary students.

1. Introduction

The present scenario is the age of science and technology. It is hard to imagine offices, school, colleges etc. without computers and internet. The use of internet among adolescents in India has led to a vast change in their life styles and study habits Information can be transferred in seconds from one to another. The advent of internet in this rat-race to quench the thirst of knowledge has become more aggressive. This has divided the world into two halves; computer literate and computer illiterate. People having no knowledge of computer and information technology are feeling incapable to keep pace with the society.

The Internet and computer are providing many facilities at home and work place. For instance- e-banking, e-tickets, e-books, e-mails are the most general facilities of internet. One can share his experiences and thoughts with the entire world through blogs, Wikis and web-sites. Besides job hunting and hiring employees it is also possible through public portals like naukri.com, UPSC portal, menster.com, latest vacancy, sarkari naukri etc.(Edwards & Bruce, 2002). It is a general observation that the use of internet can lead to improve student's performance in thinking logically, formation of concepts, problem solving procedure and understanding relationships (Temple and Gavillet, 1990). For example- Computer programming allows students to improve those skills by participating in classroom exercises that closely stimulate real world experiences. Such instructional stimulations are particularly useful in situations where first hand experiences are not available and are not appropriate.

On the contrary, too much use of internet has some adverse effects also. Eliot, proclaiming the commencement of the modern age said that the man has become an isle in itself. Resultantly personality disorders like isolationism, suicidal ideation, and emotional imbalance are progressively spreading in the society. Children avoid outdoor games and sports. Consequently, this attitude brings forth adverse impact on their social, physical, and mental well-being. Lack of concentration, poor memory and weak logical ability can also be observed in our school students. The teenagers remain unfamiliar with the surroundings, social-culture life. These habits are manifested through personality disorders like maladjustment, alienation, truant behavior, disobedience, escapism etc. (Scott Sleek & Monitor Staff, 2006). They do not make notes any longer. They believe in cut-paste technology. They make no reference to library materials. This shows that use of internet leads to serious consequences because it may mar the study habits of children (Wang et al.2003).

It can further be seen that internet use not only affects physiological and psychological variables but also educational and study habits of students. Success of students in their education is very necessary for good health of our society and nation but success in study depends not only on ability and hard work but also on effective method of study and study habits. Nowadays, students have no keen interest in traditional styles of study. It shows that current study habits of adolescents are much revolutionized by internet. Since adolescents

are the future of our bright civilization, it has therefore become necessary to find out the impact of internet on the study habits of higher secondary students.

As a result, numerous views arise in mind of the researcher as follows:

1. Despite numerous doubts and criticism raised against internet surfing, the impact of internet use needs to be studied on the students of higher secondary level, as they are considered as most sensitive age group.

2. Students are the future of our nation, it becomes utmost significant that we, being educated and responsible citizens of India, see to it that the study habits of our future generation is channelized in a proper direction.

In this paper, the researchers will try to find out the answer of the various specific questions through their research: -

- Whether internet use affects the study habits of students of higher secondary or not.

- Whether the impact of internet use on the study habits of students of higher secondary is negative or positive.

Operational Definition of Study Habits

In this study, study habits are defined on the basis of habits of concentration, task-orientation, comprehension, sets, interaction, drilling, supports, recording, and language.

2. Objectives of the Present Study

1. To investigate the study habits of higher secondary students using and not using internet.
2. To compare the study habits of higher secondary students using and not using internet.
3. To study the interaction effect of sex, stream and internet use on study habits of higher secondary students.

2.1 Hypotheses

The study adopted a descriptive survey method to investigate study habits of higher secondary students using and not-using internet.

3. Research Methodology Used

The study adopted a descriptive survey method to investigate study habits of higher secondary students using and not-using internet.

3.1 Sample

In the study, 240 boys and 240 girls studying in various secondary schools of Agra city were selected by using purposive sampling method.

3.2 Tools

Self developed "STUDY HABITS INVENTORY FOR COLLEGE STUDENTS (S.H.I.C.S.)". S.H.I.C.S. was developed to know the study habits of higher secondary students. Through this tools study habits of students from eight areas can be studied: Comprehension, Concentration, Task-Orientation and Sets, Interaction, Drilling, Writing, Supports and Recording.

3.3 Analysis of Data

The quantitative collected data were analyzed by using statistical techniques like Mean, Standard deviation and CR were used for analysis of the data and their interpretation.

3.3.1 Study of Study Habits of Internet Users and Non-Users

To study of the study habits scores of internet users and non-users have been calculated in the following dimensions:

- **Study of Study Habits Scores of Internet Users and Non-Users In Relation To Different Dimensions of Study Habits**

To know about the study habits of internet users and non-users, researcher has analyzed the data in different dimensions of study habits separately, whose statistical measures are shown in Table – 1.

Above table shows that internet users are good in comprehension and supports dimension whereas average in concentration, Task-orientation and sets, interaction, drilling, writing and recording dimension. And internet non-users have average level of concentration, interaction, drilling, writing and recording while they are poor in comprehension, Task-orientation and supports dimensions. It shows that they have to improve in their approach to comprehend learning material.

- **Study of Study Habits Scores of Internet Users and Non-Users in relation to Sex**

For this purpose the mean, S.D. and CR of study habits scores have been calculated for the internet users and non-users, which are represented in Tables 2 and 3:

TABLE- 1 Statistical Value of Different Dimensions of Study Habits of Internet Users and Non-Users

The mean values shown in above Tables 2 and 3 indicate that female students(for both internet users and non-users group) have better study habits than male students in their respective group and difference is significant at .01 level. Thus null hypothesis for internet user group i.e. "*There is no significant difference among the study habits of male and female higher secondary students who are using internet*", is rejected. And the null hypothesis for internet non-user group *"There is no significant difference between the study habits scores of non-users male and female higher secondary students"* is rejected.

- **Study of Study Habits of Internet Users and Non-Users According To Stream**

To study the study habits of science and arts students using and non-using internet, the mean, S.D. and CR have been computed and shown in Tables 4 and 5.

The mean values shown in Tables 4 and 5 indicate that the students of science stream have good study habits while arts students are average in their study habits and they have much scope of developing their study habits, and the value of CR confirms the view that science students are better than arts students because calculated CR value is higher than table CR value at .01 level. Thus the null hypothesis-"*There is no significant difference between the study habits of science and arts students using internet*" has been rejected at .01 level of significance. And the null hypothesis of internet non-users "*There is no significant difference in study habits of science and arts stream students who are not using internet*" has been rejected at .01 level of significance.

Comparison of Study Habits Scores of Users and Non-Users of Internet

Comparison of the study habits scores of internet users and non-users has been done in the following headings:

- **Comparison of Study Habits Scores of Internet Users And Non-Users In Relation To Different Dimensions of Study Habits**

For this purpose the mean and S.D. have been computed dimension wise and total for all those students who are using internet and not using internet, as given in the Table 6.

The Table - 6 shows that there is difference in the mean of the different dimensions of study habits of internet users and non-users and this difference is statistically significant excepting concentration and reading aspect. In concentration dimension, there is significant difference at 0.05 level of significance between users and non-users while in reading dimension, there is no significant difference between users and non-users. So with 95% of confidence it can be said that Internet user students are superior in comprehension, concentration, task-orientation and sets, interaction, drilling, writing and support dimensions of study habits than of internet not using students. Only in recording dimension, users and non-users of internet have no significant difference.

The mean values for total (all the dimensions) of study habits scores of internet users and non-users show that internet users have higher mean than that of non-users. The table also confirms this statistically as CR is significant at .01 level of significance. It indicates that the mean of study habits scores of internet users and non-users differ significantly. Thus the above table proves that the students who are using internet have better study habits than the students who are not-using internet. Then the null hypothesis that "*There is no significant impact of use and not use of internet on the study habits of higher secondary student*" is rejected.

- **Comparison of Study Habits Scores of Users and Non-Users of Internet In Relation To Sex**

In order to compare, sex wise, study habits of internet users and non-users, the mean, S.D., and CR have been computed as given in the Table-7.

The mean values shown in the table 10 of study habits scores of internet users and non-users sex wise indicates that internet using males and females have better study habits than internet non-using males and females. And for both male female students this difference is significant at .01 level. Thus the null hypotheses – *"There is no significant difference between the study habits of male internet users and non-users"* and *"There is no significant difference between study habits of female internet users and non-users"* are rejected.

- **Comparison Of Study Habits Scores Of Users And Non-Users Of Internet In Relation To Stream**

To compare the study habits of users and non-users of internet stream wise, the mean, S.D. and CR has been computed as shown in the following Table 8.

The obtained CR of internet users and non-users of science and arts streams are significant at 0.01 level. Thus the null hypotheses *"There is no significant difference between study habits of internet users and non-users of science stream"* and *There is no significant difference between study habits of internet users and non-users of arts stream"* are rejected.

Study of Interaction Effect of Sex, Stream and Use of Internet on The Study Habit of Higher Secondary Students

Research paradigm of calculated factorial analysis of variance is given in Table – 9.

The Table 10 shows that the F-value for A*B*C (F=0.08 for 1 and df=472) is insignificant at 0.05 level. It indicates that the three factors interaction effect of use/non-use of internet, sex and stream of education (A*B*C) on study habits of higher secondary students is insignificant. Thus, the null hypothesis that *"There is no significant three factor interaction effect of use/non-use on internet, sex and stream of education on study habits of higher secondary students"* is accepted.

4. Conclusion

On the basis of the objectives and findings given above and analysis done in this paper some conclusions are formulated by the researcher that Internet users and non-users showing difference in study habits and they have significant difference. Female students are better than male students in both groups (internet users and non-internet users). Science students are found better than arts students for internet users and non-internet users group. Interaction effect of sex, stream of education and internet use/non-use on study habits was found insignificant i.e. these variables have no combined effect on study habits of higher secondary students (of grade 12 students).

Acknowledgements

References

Best, J.W. (1959): *Research in Education*, New Delhi, Prentice Hall of India Pvt. Ltd.

Bruce Grit: *The Black Nationalist Writings of John Edward Bruce*, Seraile, William (2002) ISBN 1-57233-210-7

Bruner, G. C. & Kumar, A. (2005). Explaining consumer acceptance of handheld Internet devices. *Journal of Business Research, 58*, 553-558.

Charakanta, B. (1997): The computer effect: what education research says? *Psycho Lingua, 2,*10-15.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*, 319-339.

Edwards & Bruce,(2002): Sources of information and other opportunities available via internet

Elisabeth Engelberg, Lennart Sjöberg (2004): Internet Use, Social Skills, and Adjustment Cyber *Psychology & Behavior.* February**, 7(1):** 41-47.

Henry E. Garrett (1926) *Statistics in Psychology and Education*, American Printing House for the Blind, Inc., M.

C. Migel Library

Passi, B.K. (1999): *Computer and Control Learning, Agra*, National Psychological Corporation.

Sah, S.L. (1999): *Information Technology*, New Delhi, Gyan Publishing House.

Scott Sleek & Monitor Staff, 2006 http://www.seekfirst.com/node/237

Singh, K. (2002): *To study the correlation between educational demonstration, study habits of secondary students* Dissertation, Faculty of Education, Dayalbagh Educational Institute, Agra, India.

Srivastava, D.H. (1985); *Statistics in Psychology,* Sahitya Prakashan, Agra, India.

Sleek, Scott & Staff ,Monitor(2006): Isolation increase with internet use.

Temple, L., & Gavillet, M. (1990). The development of computer confidence in seniors: An assessment of changes in computer anxiety and computer literacy. *Activities, Adaptation and Aging, 14*, 63–76.

Wang, Y. S., Wang, Y. M., Lin, H. H., & Tang, T. I. (2003). Determinants of user acceptance of Internet banking: an empirical study. *International Journal of Service Industry Management, 14*, 501-520.

Lajwanti is born in Agra, India. She is working in the Dept. of Pedagogical, Faculty of Education, Dayalbagh Educational Institute, Dayalbagh, Agra, India since last 20 years. Presently, she is associate Professor and working in the area of students' psychology. She published more than 40 research paper in various reputed journals and peer reviewed conferences.   She is Life Member of many societies and body like Psycho-Linguistic Association of India (PLAI), Agra, All India Association for Educational Research (AIAER), System Society of India (SSI), Council of Behavioural Scientists, and Council for Teacher Education (CTE), Delhi.

Ashish Paliwal is student in Dept. of Pedagogical, Faculty of Education, Dayalbagh Educational Institute, Dayalbagh, Agra, India.

Group	Internet Users			Internet Non-Users		
	Mean	**S.D.**	**Level**	**Mean**	**S.D.**	**Level**
Comprehension	19.41	4.46	Good	16.45	4.94	Poor
Concentration	14.37	3.95	Average	13.39	4.28	Average
Task-Orientation and Sets	18.29	4.40	Average	16.37	5.27	Poor
Interaction	15.30	3.92	Average	13.78	3.99	Average
Drilling	15.41	3.59	Average	14.12	4.32	Average
Writing	14.97	3.54	Average	14.08	3.55	Average
Supports	19.03	4.37	Good	15.60	4.46	Poor
Recording	5.03	1.66	Average	5.18	1.80	Average
Total	121.80	21.20	Average	108.97	23.53	Average

TABLE-2 Sex wise statistical values of study habits scores of internet users

	Group	N	Mean	S.D.	CR	Significance level
Internet users	**Male**	120	111.52	17.17	8.57	0.01
	Female	120	132.08	19.86		

Table -3 Sex wise statistical values of study habits scores of internet non-users

	Group	N	Mean	S.D.	CR	Significance level
Internet non-users	**Male**	120	100.83	22.80	5.69	0.01
	Female	120	117.10	21.41		

TABLE-4 Statistical value of study habits of internet users stream wise

Group	Stream	N	Mean	S.D.	CR	Significance level
Internet users	**Science**	120	134.02	17.29	10.91	0.01
	Arts	120	109.58	17.39		

TABLE-5 Statistical value of study habits of internet non-users stream wise

Group	Stream	N	Mean	S.D.	CR	Significance level
Internet Non-users	Science	120	125.23	16.59	14.79	0.01
	Arts	120	92.70	17.41		

TABLE- 6 Dimension wise and separately Mean, S.D. and CR of study habits scores of Internet users and non-users

Group	Stats.	Users N=240	Non-Users N=240	CR	Significance Level
Comprehension	Mean	19.41	16.45	6.88	0.01
	SD	4.46	4.94		
Concentration	Mean	14.37	13.39	2.58	0.05
	SD	3.96	4.28		
Task-Orientation and Sets	Mean	18.29	16.38	4.34	0.01
	SD	4.40	5.27		
Interaction	Mean	15.30	13.78	4.22	0.01
	SD	3.92	3.99		
Drilling	Mean	15.41	14.12	3.58	0.01
	SD	3.59	4.32		
Writing	Mean	14.97	14.08	2.78	0.01
	SD	3.54	3.55		
Supports	Mean	19.03	15.60	8.58	0.01
	SD	4.37	4.46		
Recording	Mean	5.03	5.19	1.00	Insignificant
	SD	1.66	1.80		
Total	Mean	121.80	108.97	6.29	0.01
	SD	21.20	23.53		

TABLE-7 Showing sex wise mean, S.D. and CR of study habits scores of internet users and non-users

Group	Male		Female	
Subgroup	Users N=120	Non-users N=120	Users N=120	Non-users N=120
Mean	111.52	100.83	132.08	117.10
S.D.	17.17	22.80	19.86	21.41
CR	4.10		5.61	
Significance Level	0.01		0.01	

TABLE-8 Stream wise Mean, S.D. and CR of study habits scores of internet users and non-users

Group	Science		Arts	
Subgroup	Users N=120	Non-users N=120	Users N=120	Non-users N=120
Mean	134.02	125.23	109.58	92.7
S.D.	17.29	16.59	17.39	17.41
CR	4.01		7.50	
Significance level	0.01		0.01	

TABLE-9 2x2x2 Factorial paradigm: Mean values of study habits scores for different cells

Group	Science(C_1)		Arts (C_2)	
	Male(B_1)	Female(B_2)	Male (B_1)	Female (B_2)
Users (A$_1$)	M =122.9	145.13	100.13	119.03
	N =60	60	60	60
Non-users (A$_2$)	116.63	133.83	85.03	100.37
	60	60	60	60

Three Factor Interaction Effects of Use/Non-Use of Internet, Sex And Stream of Education (A*B*C) on Study Habits of Higher Secondary Students

TABLE-10 Summary of 2x2x2 factorial design with ANOVA for study habits scores

Source of Variance	Sum of Squares	df	Mean Square	F	Sig.
Internet Use	19763.333	1	19763.333	94.310	.000
Sex	40700.833	1	40700.833	194.222	.000
Stream	97356.033	1	97356.033	464.578	.000
Internet Use * Sex	554.700	1	554.700	2.647	.104
Internet Use * Stream	1968.300	1	1968.300	9.393	.002
Sex * Stream	202.800	1	202.800	.968	.326
Internet Use * Sex * Stream	16.133	1	16.133	.077	.782
Error	98911.333	472	209.558		
Total	6649864.000	480			