

Internet Usage and Academic Performance: An Empirical Study of Secondary School Students in Kashmir

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Abstract---The present investigation was carried out to study the academic achievement of secondary school students with respect to gender and type of school. A sample of 240 secondary school students (120 male and 120 female) was drawn randomly from two districts (Anantnag and Kupwara) of Kashmir (J&K), India. Self-constructed Information Blank was used to locate the Internet-user secondary school students. The subjects' previous academic marks secured in their final examination conducted by J&K BOSE have been taken a major yard-stick to assess the academic performance. The data was subjected to statistical analysis by applying mean, standard deviation and t-test. A significant difference between male Internet-user and female Internet-user secondary school students was confirmed. The results further highlighted a significant difference on academic performance of internet users with respect to their type of school.

Keywords---Internet Usage, Academic Achievement, Secondary School Students

I. INTRODUCTION

Information and communication technology has been proven one of the greatest innovations in teaching and learning. ICT has received momentum due to growing explosion of the Internet. The Internet creates a medium for the millions of the people to come together and engage, thereby, to help in the creation and exchange of knowledge (Rose & Fernlund, 1997)[1]. Internet has shrunked the world into a global village. By searching a word on internet one can access to the information from around fifty million different websites (Tella, 2007)[2]. The Internet provides huge information on real time basis. It is the easiest and the chief source of information among students. The use of the internet saves time and enhances the academic performance of students (Judd & Kennedy, 2010)[3].

The number of internet users is continuously on the rise and it touched 3.8 billion in March 2017 as per the report of World Internet Users and Population Stats, 2017. Students show high percentage of internet users as compared to general public. According to Jones (2011)[4] there are 86% of the internet users among students as compared to 56% among general population in USA. Internet users in India were about 10% in 2011 which raised to 26 % in 2015. The percentage is expected to increase due to the Digital India Campaign launched by the government of India in 2015 with

the initiative to increase the internet connectivity throughout India. The term academic performance denotes the scholastic achievement of a student in a particular time frame. It refers to how an individual is able to determine his or her intellectual abilities and is usually measured in marks or grades. High academic performance impacts positively on the personal life of the students and low academic performance impacts negatively. The poor performance of students is a matter of great concern due to the negative impact of it on personal life of students.

There are a number of studies on the Internet usage among male and female students. Park & Choi, (2007)[5] found that male students use more internet than female students. Despite the gender equality and constitutional safe guards of the females, the males dominated the internet usage in India. In India 71% of the internet users are males and only 29% are females which is also a cause of concern and needs to be researched on the priority basis. In the present age of information most of the students are bent towards e-learning so it becomes inevitable to conduct a research aimed at studying the impact of internet on the educational performance of the students. Very few research studies have been conducted so far in this area, some studies reveal positive impact of Internet usage on academic performance

(Park & Choi, 2009[6]; Ni, *et al.*, 2009[7]) and few studies highlight the negative impact of internet on students as well (Nalwa & Anand 2003[8]; Kheirkhah, *et al.*, 2010[9]). The present study is intended to study the impact of internet on the academic performance of secondary school students of Kashmir.

II. RELATED WORK

Austin & Michael (2011)[10] studied academic performance and internet usage among high school students in Lafayette USA. The major objective was to study the negative influence of Internet on academic performance of students. The relevant data has been collected from National Survey on Drug Use and Health, 2005. Results indicate that excessive Internet use lowers the probability of earning top grades while more moderate use has a positive impact on the academic performance.

Siraj (2015)[11] studied internet usage and academic performance in a Malaysian Public University. This was a cross sectional study conducted in a Malaysian Public University among medical students. It used the Internet Addiction Diagnostic Questionnaire for data collection. Results reported that students with high internet usage are associated with higher academic performance.

Carlos & Díaz, (2016)[12] conducted a research on internet use and academic success among university students of North America. A random sample of 4,697 was chosen. Statistical treatments such factor analysis and cluster analysis were employed for data analysis. Results revealed that use of Internet as an entertainment tool during teaching learning process produces a positive impact on academic achievement. Students who download audio and video songs for entertainment purpose show better academic performance than students who don't use the Internet. A gender difference was also been found in terms of predicting the influence of internet usage and academic performance.

Pardhasaradhi & Goel (2015)[13] studied the influence of access use of internet on academic performance of adolescents. The sample comprised of 300 adolescents. Their responses to the "Internet Usage Scale" and GPA for the previous year were collected and analyzed. The results suggested that excess use of internet is negatively correlated with academic performance of adolescent students. Results also suggested gender difference in excess usage of internet. Male adolescents had higher user of internet than female adolescent students.

III. OBJECTIVES

1. To compare the academic achievement of male internet-user and female internet-user secondary school students.
2. To compare the academic achievement of government internet-user and private internet-user secondary school students.

IV. HYPOTHESES

1. There is a significant difference between male internet user and female internet user secondary school students on academic achievement.
2. There is no significant difference between government internet-user and private internet-user secondary school students on academic achievement.

V. METHODOLOGY AND PROCEDURE

Sample

The sample for the present investigation is comprised of 240 secondary school students (120 male and 120 female) drawn from 12 secondary schools. Simple random sampling technique was followed to choose the sample.

Tools Used

1. **Information Blank:** Information Blank was constructed by investigator to locate the Internet user. For the present study, Internet-user secondary school students are those students who are enrolled in IXth and Xth class in a secondary school, have direct access to the worldwide network, have skill to use the Internet and have at least one year experience of Internet usage.
2. **Academic Achievement:** For the present investigation, academic achievement is the aggregate academic marks obtained by secondary school students in their previous final examination conducted by JKBOSE.

VI. ANALYSIS AND INTERPRETATION

Table 1.00: Showing the Significance of Mean Differences between Male Internet-User and Female Internet-User Secondary School Students on Academic Achievement (N=120 each)

Academic Achievement	MIUSSS		FIUSSS		t-value
	Mean	SD	Mean	SD	
	304.93	90.69	339.88	90.98	2.10

*Acronyms: GIUSSS= Government Internet-User Secondary School Students; PIUSSS= Private Internet-User Secondary School Students

Table 2.00: Showing the Significance of Mean Differences between Government Internet User and Private Internet User Secondary School Students on Academic Achievement (N=120 each)

Academic Achievement	GIUSSS		PIUSSS		t-value
	Mean	SD	Mean	SD	
		287.02	82.5	345.57	83.30

*Acronyms: MIUSSS= Male Internet User Secondary School Students; FIUSSS= Female Internet User Secondary School Students

VII. DISCUSSION AND CONCLUSION

The presentation of table 1.00 depicts that there is a significant mean difference between male Internet-user and female Internet-user secondary school students on academic achievement. The table value of 2.10 is found to be significant at 0.05 level of significance. Therefore, it is interpreted that female Internet-user secondary school students have outscored the male Internet-user secondary school students on academic achievement. On the basis of the above evidence it is clear that hypothesis no. 1, which reads as, "There is a significant difference between male internet-user and female internet-user secondary school students on academic achievement" **stands accepted**. Mean difference has favoured the female Internet user secondary school students. The present finding is supported by Liu & Huang (2008)[14]; Harold & von-Eye (2008)[15]. The reason for the present finding is justified on the fact that male Internet-user secondary school students are using the Internet for entertainment and relaxation more than female Internet-user secondary school students. They spend their time on social networking web sites such as face-book, twitter, whatsapp and instagam for messaging and purchasing activities more than their female counterparts. Contrary to this, female Internet-user secondary school students are using Internet for communication and educational purposes more than their male counterparts (Cheng & Peng, 2008)[16].

The presentation of table 2.00 reveals that there is a significant difference between government and private Internet user secondary school students on academic achievement. The table value of 3.86 is significant at 0.01 level of significance. On the basis of the above evidence it is clear that hypothesis no. 2, which reads as, "There is no significant difference between government and private secondary school students on academic achievement" **stands rejected**. However, mean difference favours the private secondary school students. The availability of

computer labs and Internet facilities at private secondary schools enable private students to access and communicate vital academic information to others, to broaden and expose the academic activities related to their coursework within the academic blogs. Students who make use of e-journals, e-books, and online databases on daily basis have excelled the students who don't make use of it (Cheung & Huang, 2005[17]; Zhao, 2006[18]; Turner & Farmer, 2008[19]; Shahin, et al., 2010[20]).

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