DIFFERENCE OF INTERNET USES AMONG THE YOUTH STUDYING IN VARIOUS SUBJECT STREAMS IN WEST BENGAL

Bikram Maiti*; Dr. Sarita Anand**

*Research Scholar,
Department of Education,
Vinaya Bhavana, Visva Bharati,
Santiniketan, INDIA
Email id: bmaiti2@gmail.com

**Assistant Professor,
Department of Education,
Vinaya Bhavana, Visva Bharati,
Santiniketan, INDIA
Email id: saritanand.edu@gmail.com

ABSTRACT

Present study is an effort to find out the difference of internet uses among the youth studying in Arts, Science and Commerce streams in different colleges of West Bengal. Intending to investigate the fact meticulously investigator divided internet use into four categories- Educational use, Communicational use, Recreational use and Other Beneficial use. To proceed in this study the investigator formulated some null hypotheses and administered an internet usage questionnaire on 850 undergraduate students selected randomly from various colleges of southern part of West Bengal. The investigator applied ANOVA and Kruskal–Wallis test on the 802 usable responses for testing the hypotheses. By the end of the study it was seen that youth studying in Arts, Science and Commerce streams in different colleges of West Bengal were significantly different from each other according to their Academic, Communicational, Recreational and Other Beneficial use of internet.

KEYWORDS: *Educational use, Communicational use, Recreational use, Other Beneficial use, Stream.*

INTRODUCTION

Undoubtedly Internet is one of the most important inventions of all time. The Internet started its journey as ARPAnet which was developed by United State's defense department in the 1960s as the government weapon in the Cold War to promote research that would ensure that the USA outdo the USSR in any technological race (Cohen-Almagor, 2011). At that time it was beyond imagination that one day it will become such a mammoth network and every module of our life will be engulfed by it. The Internet and its architecture have grown evolutionarily from modest beginnings, rather than from a grand plan (Carpenter, 1996) and rest its step ubiquitously in the world. According to the report of International Telecommunication Union (2020), at the end of 2019, just over half of the world population was using the Internet, but this proportion increases to over 69 percent among youth who are aged between 15 to 24 years.

The advancement of Internet technology has metamorphosed the pattern of social, cultural, educational, economical as well as political interfaces. Internet seeps into everywhere; from

education to communication, from ministry to industry, from medication to publication, from investment to enjoyment, from space to marketplace, from politics to aesthetics, from combating to broadcasting. In a nutshell, the Internet is the jack of all trades, from menial to most exalt of services.

BACKGROUND:

Although the benefits of the internet in every spectrum of our life are undeniable, but how the culture of internet usage has been cultivated has also been detrimental to several core social and psychological values. Different studies in this regard have enlightened us with the consequences of excessive internet usage. Young (1998) in her book indicated towards a perilous future of the teenagers and the college students. She pointed out that when the youths got hooked and stayed up late every night on-line, they used to lose sleep, fail to school, withdraw socially, and lie to their parents about what's happening. Anand (2007) and Skoric et. al (2009) in their study showed that the amount of time a student spent playing video games had a negative correlation with students' scholastic achievement.

On the contrary, Macho (2007) opined that those who had internet access at home were at an advantage versus those who did not have internet access, because, internet use did not help the students only; it also assisted the parents as directors of their children's learning. Pew Research Center, USA in a recent study (2019) revealed that maximum people from emerging and developing countries across four global regions of the world felt the internet had a positive influence on education, morality, politics, physical health, local culture, civility and the economy.

SIGNIFICANCE OF THE STUDY:

It is clear from the above discussion that the use of internet has its good and ill impacts upon the youth. But it is undeniable that keeping youth far behind from the internet in this digital age is impossible. As they can do online classes or get study materials from different online platforms; so, they can keep in touch with others through social networks. Even, for both their amusements and important routine works internet is a piece of cake. These revelations are applicable for all the youth studying in various subject streams. But there may be differences among the subject streams regarding their internet use. Current study is an effort to find out the difference in internet use among the youth who are pursuing their bachelor degree in various subject streams from different undergraduate colleges in West Bengal.

Internet use is divided into four categories in order to measure the difference meticulously.

1. **Academic use:** When internet is used for seeking matters of education, viz., searching for topic someone interested in, search for topic from their syllabus, using online libraries, etc.

2. **Communicational use:** When internet is used to communicate with others, it is communicational use. Examples- e-mailing, chatting, social networking.

3. **Recreational use:** When internet is used for own entertainment, it can be marked as recreational use. Examples of such uses are playing online games, downloading music, videos etc; surfing the web with no set purposes; etc.

4. **Other beneficial use:** When Internet is used for different useful day to day work, it is other beneficial use of Internet. Examples- online shopping, online banking, and online food order, etc.

OBJECTIVES:

1) To find out the difference among youth studying in Arts, Science and Commerce stream in respect to their Academic use of internet.

2) To find out the difference among youth studying in Arts, Science and Commerce stream in respect to their Communicational use of internet.

3) To find out the difference among youth studying in Arts, Science and Commerce stream in respect to their Recreational use of internet.

4) To find out the difference among youth studying in Arts, Science and Commerce stream in respect to their Other Beneficial use of internet.

HYPOTHESES:

$H_0$1. There is no significant difference among youth studying in Arts, Science and Commerce streams with reference to their Academic use of Internet.

$H_0$2. There is no significant difference among youth studying in Arts, Science and Commerce streams with reference to their Communicational use of Internet.

$H_0$3. There is no significant difference among youth studying in Arts, Science and Commerce streams with reference to their Recreational use of Internet.

$H_0$4. There is no significant difference among youth studying in Arts, Science and Commerce streams with reference to their Other Beneficial use of Internet.

DELIMITATIONS:

1) The study was confined into southern part of South Bengal only.

2) Only youths studying in the bachelor degree (Aged between 18-24 years) were chosen for the study.

METHODOLOGY OF THE RESEARCH:

1. Research Approach:

Here in this study the primary aim of the researcher is to explore the existing differences between the youth of various subject streams regarding their internet use. A descriptive research design is adopted by employing a survey technique to serve the purpose methodically.

2. Sample and Sampling Technique:

Three tier sampling techniques were used for this study. Firstly, five districts were selected from the southern part of West Bengal through randomized process. Secondly, twenty two colleges were selected from the said districts by using simple random sampling method. Finally, 850 students were selected randomly from those previously chosen colleges who were in 2nd to 5th semesters of their Bachelor Degree program.

3. Tool Used:

A paper and pencil type 'Internet Use Questionnaire', developed and standardised by the investigator himself with the help of experts, was used to know the different internet use of the youth.

4. Procedure of Data Collection:

The questionnaire was supplied to 850 bachelor degree students who were in different streams and semesters. After getting the responses back researcher scrutinized it thoroughly. From all the responses 802 were found to be usable, among which 412 were studying in Arts (51.4 %), 237 were studying in Science (29.6 %) and 153 were studying in Commerce (19 %).

ANALYSIS AND INTERPRETATION OF DATA:

Questionnaires were collected and scoring was done by using the scoring procedure. Descriptive

statistic, one- way analysis of variance (ANOVA) and Kruskal–Wallis test were used to analysis the data statistically.

TABLE NO. 1 GROUP STATISTICS OF ACADEMIC, COMMUNICATIONAL, RECREATIONAL AND OTHER BENEFICIAL USE OF INTERNET IN RESPECT OF STREAMS

Internet use	Streams	N	Mean	Std. Deviation	Std. Error
Academic use of Internet	Arts	412	9.5267	5.67204	.27944
	Science	237	10.7932	5.29505	.34395
	Commerce	153	9.2222	4.93940	.39933
Communicational use of Internet	Arts	412	4.5194	2.67767	.13192
	Science	237	5.3291	2.61379	.16978
	Commerce	153	5.4771	2.90436	.23480
Recreational use of Internet	Arts	412	9.9466	5.42877	.26746
	Science	237	11.3924	5.22076	.33913
	Commerce	153	12.9477	6.42445	.51939
Other Beneficial use of Internet	Arts	412	6.3252	5.06753	.24966
	Science	237	7.3713	4.86571	.31606
	Commerce	153	8.6601	6.96057	.56273

Hypotheses will be tested respectively.

H$_0$1. There is no significant difference among youth studying in Arts, Science and Commerce streams with reference to their Academic use of Internet.

TABLE NO. 2 HOMOGENEITY OF VARIANCE FOR ACADEMIC USE OF INTERNET

Levene Statistic	df1	df2	Sig.
1.639	2	799	.195

The analysis (Table No. 2) shows that the variances for Academic use of Internet in respect of streams of the students are equal, $F_{(2,799)}$= 1.639, p= 0.195(p> .05).

TABLE NO. 3 ANOVA TABLE FOR ACADEMIC USE OF INTERNET IN RESPECT OF STREAMS

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	314.185	2	157.092	5.330*	.005
Within Groups	23548.020	799	29.472		
Total	23862.204	801			

significant at 0.05 level of significance

Table No.3 shows that computed value $F_{(2,799)}$= 5.330 p= .005 which is lesser than 0.05 (p< .05). Hence, it should be taken as significant at 0.05% level of significance. Thus, the null hypothesis **H$_0$1 is rejected.**

From the result so far, we come to know that there is statically significant difference among the youth of Arts, Science Commerce streams in reference to their Academic use of Internet. But to know the group difference Post Hoc analysis was done.

TABLE NO. 4 PAIR WISE COMPARISON OF ACADEMIC USE OF INTERNET

Dependent Variable: Academic use of Internet

(I) Stream	(J) Stream	Mean Difference (I-J)	Std. Error	Sig.
ARTS	SCIENCE	-1.26655*	.44259	.004
	COMMERCE	.30448	.51397	.554
SCIENCE	ARTS	1.26655*	.44259	.004
	COMMERCE	1.57103*	.56301	.005
COMMERCE	ARTS	-.30448	.51397	.554
	SCIENCE	-1.57103*	.56301	.005

*. The mean difference is significant at the 0.05 level.

Table No. 4 reveals that mean difference between Arts and Science students is 1.26655. The p value is .004 ($p< 0.05$) which is significant at 0.05 level. Table also reveals the significant difference between Science and Commerce students, $p=.005$ ($p< 0.05$). But there is no significant difference between Arts and Commerce students, p=.554 ($p> 0.05$) in respect to their Academic use of internet.

H₀2. There is no significant difference among youth studying in Arts, Science and Commerce streams with reference to their Communicational use of Internet.

TABLE NO. 5 HOMOGENEITY OF VARIANCE FOR COMMUNICATIONAL USE OF INTERNET

Levene Statistic	df1	df2	Sig.
1.232	2	799	.292

The analysis (Table No. 5) shows that the variance for Communicational use of Internet in respect of streams of the students are equal, $F_{(2,799)}= 1.232$, $p= 0.292$ ($p> .05$).

Table No. 6 ANOVA table for Communicational use of Internet in respect of Streams

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	152.902	2	76.451	10.457*	.000
Within Groups	5841.344	799	7.311		
Total	5994.246	801			

significant at 0.05 level of significance

Table No. 6 shows that computed value of $F_{(2,799)}= 10.457$, $p= .000$ which is lesser than 0.05 ($p< 0.05$). Hence, it should be taken as significant. Thus, hypothesis **H₀2 is rejected.**

From the results so far, we come to know that there is statistically significant difference among the youth of Arts, Science and Commerce in respect to their Communicational use of internet. But to know the group differences Post Hoc analysis was done.

TABLE NO. 7 PAIR WISE COMPARISON OF COMMUNICATIONAL USE OF INTERNET

Dependent Variable: Communicational use of Internet

(I) Stream	(J) Stream	Mean Difference (I-J)	Std. Error	Sig.
ARTS	SCIENCE	-.80970*	.22044	.000
	COMMERCE	-.95771*	.25598	.000
SCIENCE	ARTS	.80970*	.22044	.000
	COMMERCE	-.14801	.28041	.598
COMMERCE	ARTS	.95771*	.25598	.000
	SCIENCE	.14801	.28041	.598

*. The mean difference is significant at the 0.05 level.

Table No.7 reveals that the means difference between Arts and Science student is .80970. The p value is .000 ($p < 0.05$) which is significant at 0.05 level. Table also reveals the significant difference between Arts and Commerce students, $p = .000$ ($p < 0.05$). But there is no significant difference between Science and Commerce students ($p = .598$) in respect to their communicational use of Internet.

H$_0$3. There is no significant difference among youth studying in Arts, Science and Commerce streams with reference to their Recreational use of Internet.

TABLE NO. 8 HOMOGENEITY OF VARIANCE FOR RECREATIONAL USE OF INTERNET

Levene Statistic	df1	df2	Sig.
5.244	2	799	.005

The analysis (Table No. 8) shows that the variance for recreational use of Internet in respect of streams of the students are not equal, $F_{(2,799)} = 5.244$, $p = .005$ ($p < .05$). So, researcher conducted Kruskal-Wallis test for testing the hypothesis.

TABLE NO. 9 KRUSKAL-WALLIS TEST TABLE FOR RECREATIONAL USE OF INTERNET IN RESPECT OF STREAMS

	Recreational use of Internet
Chi-Square	33.774*
df	2
Asymp. Sig.	.000

Significant at 0 .05 level of significance

From Table No. 9 it is seen that Kruskal-Wallis test yields chi-square is 33.774 which is significant at 0.05 level as $p < 0.001$ ($p = .000$). Hence, null hypothesis **H$_0$3 is rejected**.

From the results so far, we come to know that there is statistically significant difference among the youth of Arts, Science and Commerce in respect of their Recreational use of Internet. But to know the group differences Post Hoc analysis was done.

TABLE NO. 10 PAIR WISE COMPARISON OF RECREATIONAL USE OF INTERNET

Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
Arts-Science	-72.257	18.851	-3.833	.000	.000
Arts-Commerce	-117.161	21.891	-5.352	.000	.000
Science-Commerce	-44.905	23.980	-1.873	.061	.183

Each row tests the null hypothesis that the Sample1 and Sample2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed. The significance level is .05

Table No.10 reveals that the difference between Arts and Science students in respect to their Recreational use of Internet is significant, $p=.000$ ($p< 0.05$). Table also reveals the significant difference between Arts and Commerce students, $p=.000$ ($p< 0.05$).But there is no significant difference between Science and Commerce students ($p=.061$) in respect to their Recreational use of Internet.

H_0**4.** There is no significant difference among youth studying in Arts, Science and Commerce streams with reference to their Other Beneficial use of Internet.

TABLE NO. 11 HOMOGENEITY OF VARIANCE FOR OTHER BENEFICIAL USE OF INTERNET

Levene Statistic	df1	df2	Sig.
7.960	2	799	.000

The analysis (Table No. 11) shows that the variance for Other Beneficial use of Internet in respect of streams of the students are not equal, $F_{(2,799)}=7.960$, $p= .000$ ($p< .05$). So, researcher had done Kruskal-Wallis test for testing the hypothesis.

TABLE NO. 12 KRUSKAL-WALLIS TEST TABLE FOR OTHER BENEFICIAL USE OF INTERNET IN RESPECT OF STREAMS

	Other Beneficial use of Internet
Chi-Square	21.506*
df	2
Asymp. Sig.	.000

Significant at 0 .05 level of significance

From Table No. 12 it is seen that Kruskal-Wallis test yields chi-square is 21.506 which is significant at 0.05 level as $p< 0.001$ ($p=.000$). Hence, null hypothesis H_0**4 is rejected**.

From the results so far, we come to know that there is statistically significant difference among the youth of arts, science and commerce in respect of their other beneficial use of Internet. But to know the group differences Post Hoc analysis was done.

TABLE NO. 13 PAIR WISE COMPARISON OF OTHER BENEFICIAL USE OF INTERNET

Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
Arts-Science	-63.312	18.821	-3.364	.001	.002
Arts-Commerce	-89.350	21.856	-4.088	.000	.000
Science-Commerce	-26.038	23.942	-1.088	.277	.830

Each row tests the null hypothesis that the Sample1 and Sample2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed. The significance level is .05

Table No. 13 reveals that the difference between Arts and Science students in respect to their other beneficial use of Internet is significant, $p=.001$ (p< 0.05). Table also reveals the significant difference between Arts and Commerce students, $p=.000$ ($p<$ 0.05).But there is no significant difference between Science and Commerce students ($p=.277$) in respect to their Other Beneficial use of Internet.

CONCLUSION:

It was observed from this study that youth studying in Arts, Science and Commerce streams in different colleges of West Bengal were significantly different from each other according to their Academic, Communicational, Recreational and Other Beneficial use of internet. These outcomes somehow supported the findings of the study of Devi & Kour (2021), where a significant difference between Arts and Science stream according to their internet use was also found. The finding of the present study was also in agreement with earlier study conducted by Hossain & Rahman (2017), where they showed students from Business Studies, Science and Arts disciplines were different from each other according to their internet use. But the results differ from the findings of the study of Maheswari & Aravind (2021), where they revealed that undergraduate Commerce and Science students did not differ significantly according to their usage of Electronic resources.

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