



## **A STUDY ON EFFECTIVENESS OF SMART PHONES TOWARDS ACADEMIC PERFORMANCE WITH REFERENCE TO CHENNAI CITY COLLEGE STUDENTS**

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### **Abstract**

*The role of smart phone is significant towards academic performance and achievements and its one among the main base for digital India. The people can save cost and time by using ICT in an effective manner. Now a day's smart phones are very important for human beings and unavoidable also. Most of the educational institutions are providing login id and password for the students for solving of the education related queries. During Covid-19 period the students and teachers are able to use the smart phone for their academic works. The effectiveness of smart phone is entirely based on the way in which they are using the smart phones for academic purposes. This paper measures the effectiveness of smart phones towards academic performance with reference to Chennai City college students.*

**Keywords:** *Smart phones, Academic achievements, Internet, ICT.*

### **I. Introduction of the study**

The advent of the Fourth Industrial Revolution has stimulated interest in educational reforms for the integration of information and communication technology (ICT) into instruction. Smartphones have become immensely popular ICT devices. In 2019, approximately 96.8% of the global population had access to mobile devices with the coverage rate reaching 100% in various developed countries. Given their versatile functions, smart phones have been rapidly integrated into communication and learning, among other domains and have become an inseparable part of daily life for many. Smartphones are perceived as convenient, easy to use tools that promote interaction, multitasking, facilitate both formal and informal learning. Online courses have distinct impacts on students and their families requiring adequate technological literacy and the formulation of learning strategies.

### **II. Need for the study**

The study is based on the dependence of college students and their usage of smart phones towards academic performance. This study will help to understand the effectiveness of smart phones towards academic performance and achievements. There is an increase in demand for smart phones due to education related works, communication, mobile banking, sharing of information and knowledge with each other etc., Hence, it is essential to study the effectiveness of smart phones towards academic performance with reference to Chennai City College Students.

### **III. Review of Literature:**

**Mutendwahote Walter Lumadi(2018)** study examined the impact of e-learning on the academic performance of the students. The researcher conducted an experiment to find out whether students taught using the method of e-learning perform better than students taught using the traditional method of teaching and learning.

**Mohammed Alawamleh, Lana Mohannad Al-Twait (2020)** paper aims to highlight whether online learning has an effect on communication between instructors and students in a negative way, whether

online learning affects student's productivity levels, to evaluate and suggest ways of improving effective online communication between instructors and students.

**Nadeen Hamzeh (2021)** study found out that practices that foster student's mental and emotional well-being, quality relationships among students and staff and safe and inclusive climates through online platforms, especially during times of crisis such as during the COVID-19 pandemic.

#### IV. Objectives of the Study

1. To analyze the demographic profile of Chennai city college students that impacts usage of smart phones towards academic performance.
2. To know the level of effectiveness of smart phones towards academic performance and achievements.
3. To associate the profile of college students (Gender & Age) and usage of smart phones towards academic performance.

#### V. Research design

The study includes both primary and secondary data were used for this study to have a better focus on the objectives framed. Primary data was collected from the college students (Arts & Science) of Chennai city. Chennai is a cosmopolitan city where students from diverse backgrounds study. The research carried out is descriptive in nature and the data has been collected by way of convenience sampling method with a sample size 116 through a self-administered questionnaire. In order to focus the theoretical background of college student's usage of smart phones towards academic performance, secondary sources of information were collected from journals, magazines, books and various websites.

#### V. Results & Discussions

The below table explains the data relating to frequency of College students and their effectiveness of smart phones towards academic performance. Now a day's smart phone is very important for the human beings because of sharing communication and knowledge with each other. Generally human beings are mainly depending with smart phones for fulfilling various works and activities. The demographic profile of the College Students shows through percentage analysis and relationship between variable is measured through chi-square tests.

**Table No. 1.1 Demographic Profile of College Students**

Variables	Particulars	No. of Respondents	% of Respondents
<b>Gender</b>	Male	71	61
	Female	45	39
<b>Age Group</b>	Below 18 Years	48	41
	19 – 20 Years	51	44
	21 – 22 Years	10	09
	Above 22 Years	07	06
<b>Education background</b>	UG	101	87
	PG	15	13
<b>Family Monthly Income</b>	Less than Rs.25,000	27	23
	Rs.25,001-50,000	65	56
	Rs.50,001-75,000	12	10

	Rs.75,001-100,000	07	06
	More than Rs.1,00,000	05	05
<b>Time of Smart phone usage for Academic purpose ( Per day)</b>	Less than 1 Hour	12	10
	1 – 2 Hours	33	28
	2 – 3 Hours	61	53
	More than 3 Hours	10	09

It is found from the Table No. 1.1, 61% of the respondents are male students and 39% of the respondents are female students. According to gender classification, students are using smart phone for their academic works. According to Age group classification, 44% of the respondents are in the Age group of 19 -20 years; 41% of the respondents are in the Age group of Below 18 years; 9% of the respondents are in the group of 21-22 years and rest them are above 22 years. Majority of the respondents are below 20 years of age and they very well with handling of smart phones also. According to Educational background, 87% of the respondents are under graduates; 13% of the respondents are post graduates; Majority of the respondents are UG Degree holders and their smart phone usage and method of handling is very high than PG students. According to Family monthly income classification, 56% of the respondents families monthly income level of Rs.25,001-Rs.50,000; 23% of the respondents are in the level of Less than Rs.25,000; 10% of the respondents are in the level of Rs.50,001 - Rs.75,000; 6% of the respondents are in the level of Rs.75,001 - Rs.1,00,000 and rest them level is more than Rs.1,00,000. The highlight of the study is that 79% of the respondents' family monthly income is Below Rs.50, 000. The respondents' family monthly income and their usage of smart phone are differing with recharge price of mobile data package. According to time of smart phone usage, 53% of the respondents are using smart phone 2-3 hours each day for academic purposes; 28% of the respondents using minimum 1-2 hours every day; 10% of the respondents usage is less than 1 hour per day and rest them are using more than 3 hours each day. Generally all the respondents are using smart phones for academic improvement like notes preparation, reference of text books, attending various online courses, watching Education news related websites and channels etc.

Association between Gender and usage of smart phone for Academic performance and their frequency classification are shown in Table No.1.2.

**Table No. 1.2 Association between Gender and Usage of smart phone**

Gender		Usage of Smart Phone				Total
		Less than 1 Hour	1 – 2 Hours	2 – 3 Hours	More than 3 Hours	
1	Male	02	16	27	03	48
		4%	33%	56%	7%	100.0%
2	Female	10	18	12	05	45
		22%	40%	27%	11%	100.0%
Total		12	33	61	10	116
		10%	28%	53%	9%	100.0%

It could be seen from Table No. 1.2 that 56% of the Male respondents are using smart phones daily 2-3 hours for the purpose of academic works; 40% of the female respondents are using the smart phones 1-2 hours daily for the academic improvement. The following chi-square table indicates the nature of the association.

**Table No. 1.3 Chi-Square results on the Association between Gender and Usage of Smart phone**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.396(a)	3	.000
Likelihood Ratio	24.291	3	.000
N of Valid Cases	<b>116</b>		

a.2 cells ( 25.0%) have expected count less than 5. The minimum expected count is 3.88.

From the Table No.1.3, it reveals that the Pearson’s Chi-square value 23.396, P value = 0.000 are statistically significant at the 5% level. Therefore it can be concluded that there is an association between Gender and usage of smart phone for academic performance. It shows that Gender is a deciding factor to use the smart phone for academic related works.

**Table No. 1.4 Association between Age group and Usage of smart phone**

Age Group		Usage of Smart Phone				Total
		Less than 1 Hour	1 – 2 Hours	2 – 3 Hours	More than 3 Hours	
1	Below 18 years	02	16	27	03	48
		4%	33%	56%	7%	100.0%
2	19-20 years	05	14	30	02	51
		10%	27%	59%	4%	100.0%
3	21-22 years	03	02	02	03	10
		30%	20%	20%	30%	100.0%
4	Above 22 years	02	01	02	02	07
		29%	14%	29%	28%	100.0%
Total		12	33	61	10	116
		10%	28%	53%	9%	100.0%

It reveals that from Table No. 1.4 that 59% of the respondents are in the age group of 19-20 years and they are using smart phones 2-3 hours every day for the purpose of academic related works; 59% of the respondents are in the age group of 19-20 years and they are using the smart phones daily 2-3 hours for the academic improvement. The following chi-square table indicates the nature of the association.

**Table No. 1.5 Chi-Square results on the Association between Age group and Usage of Smart phone**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.373(a)	9	.008
Likelihood Ratio	18.812	9	.027
N of Valid Cases	<b>116</b>		

a.10 cells ( 62.5%) have expected count less than 5. The minimum expected count is 60.

From the Table No.1.5, it is found that the Pearson’s Chi-square value 22.373, P value = 0.008 are statistically significant at the 5% level. Therefore it can be concluded that there is an association between Age group and usage of smart phone for academic performance. It shows that Age group is a deciding factor to use the smart phone for academic related works.

## VI. Conclusion

Present scenario smart phone awareness is very high amongst the students and they are very well in method of handling also. Smart phones played a vital role in the human beings daily life and it's unavoidable also. It helped lot for the progression of digital India and Economic development also. It may be concluded that all the students are using the smart phones for their academic improvement but usage is vary with each other. Both variables like gender and age group have associated with the usage of smart phone for academic purposes. Therefore the students are happy with the usage of smart phones especially in academic performance and achievements.

## VII. Suggestions

1. The mobile network companies may give concession for the student's especially recharge of mobile data package.
2. All the Educational institutions may provide free Wi-Fi facility in the campus for welfare of the students.
3. The Government may give advice to all the Universities / Educational institutions to provide free online courses (including sim card) for the students to improve their skills and knowledge

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