

Study on Smartphone Usage on Academics and its impact Among College Students in Coimbatore City

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ABSTRACT

In this context, the study attempts to examine the smartphone usage on academics and its impact among college going students. This survey was administered among 107 college going students in Coimbatore city. Two criteria were taken into consideration while choosing the participants for the survey. The participants are college going students and using smartphone for academics. Each of the survey responses were entered in SPSS and analyzed using ANOVA. From ANOVA

Results it is clear that the frequency of smartphone usage have association with positive and negative impact factors on academics.

Keywords: Smartphone, Academics, Impact, College students.

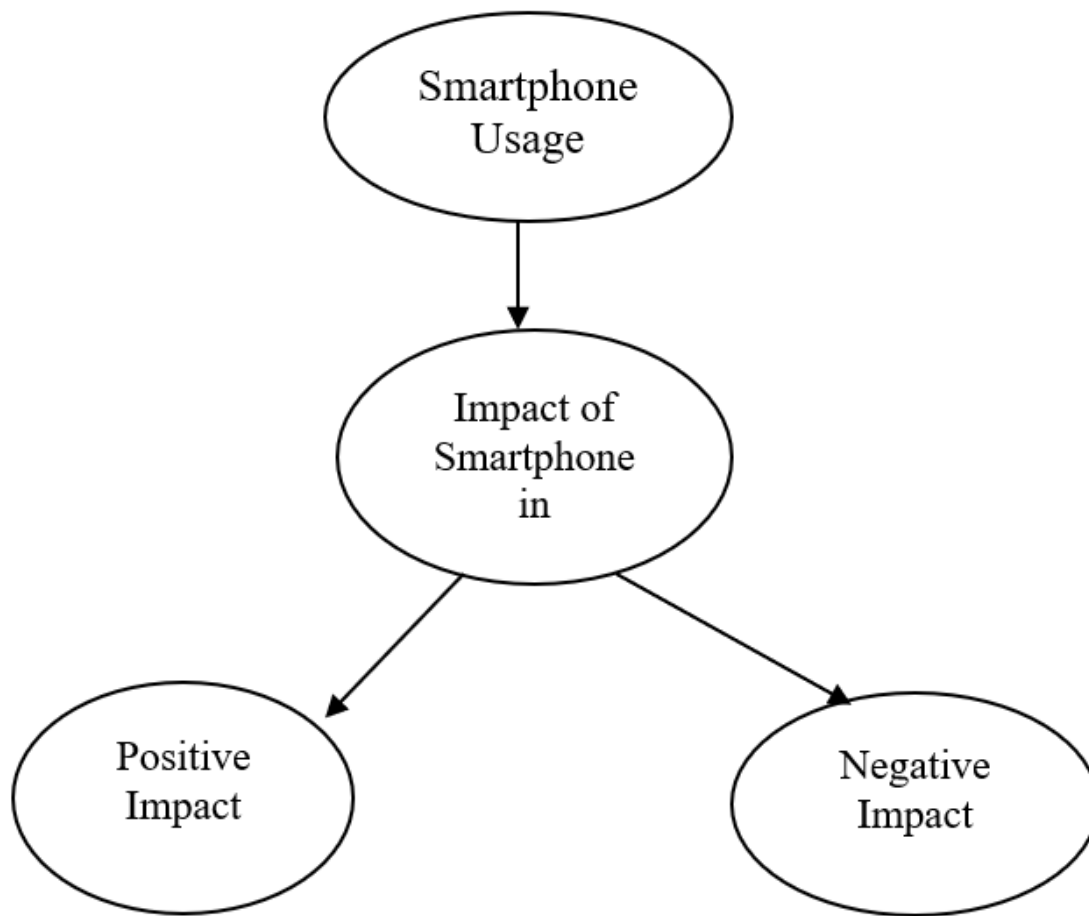
INTRODUCTION

Smartphones have become an integral part of students' lives and play a significant role in the modern educational environment. With the rapid development of mobile technology and widespread internet access, smartphones are increasingly being used for academic purposes such as accessing study materials, attending online classes, conducting research, communicating with teachers and classmates, and utilizing educational applications. These devices provide students with instant access to information and learning resources, making education more flexible, interactive, and convenient. The use of smartphones in academics promotes self-learning, collaboration, and effective time management, thereby enhancing the overall learning experience. However, along with these benefits, excessive smartphone usage may also lead to distractions caused by social media, gaming, and other non-academic activities, which can negatively affect students' concentration, study habits, and academic performance. In a technologically advancing city like Coimbatore, where students increasingly rely on digital tools for learning, it is important to examine how smartphones are being utilized for academic purposes and their impact on educational outcomes. Therefore, this study seeks to analyze the pattern of smartphone use among students in Coimbatore City and evaluate its influence on their academic performance, learning effectiveness, and study behavior, thereby providing valuable insights into the role of smartphones in contemporary education.

Objectives of the Study

- To study smartphone usage for academic purposes and its impact on students in Coimbatore City.

Conceptual Framework



REVIEW OF LITERATURE

B.Yasmeen, Md. Tahmidul Islam, Gazi Salauddin, Lamia Sarker, Ishrat Jahan, R.Akhter (2025)¹ in their study focus on cross-sectional study of smartphone usage among urban girls school students. The data were collected using purposive sampling technique from 275 students who were pursuing Class VIII, IX and X. The collected data were analysed using SPSS. The result of the SD reveals that majority 44% of the students use their smartphone from Class V to VI, majority 78.2% of the respondents use android phone, 86.9% of the use their smartphone after school hours, 10.5% of the respondents brings their smartphone to school, 77.5% of the respondents use smartphones for knowledge and education purpose, 54.2% use it for communicating with relatives and friends, 74.2 of the respondents spends time on YouTube. The study concluded that smartphone has major impact on students that leads to create a networked society.

Ramón Ventura Roque-Hernández, Rolando Salazar-Hernández, Adán López-Mendoza (2024)² in their study they tried to explore how smartphone plays a vital role among Mexican university students. The data is collected among 1089 students of Mexican Public University Students. Structured questionnaire were framed and distributed to collect the data's. Mann-Whitney and Chi-square tests were used to analyse the collected data's. The results shows girls students spend more time on their smartphones for messaging and social networking, they also faced visual problems, musculoskeletal problem by excessive usage of smartphone. Male students use their smartphone in bathroom and while driving. The result of the suggested that various awareness campaigns can be conducted to promote healthy usage of smartphones.

Gabriel Faimau, Kelebogile Tlhowe, Omphile Tlhaolang (2022)³ the purpose of the study is to examine the extent to which gender differences and the experience of a particular environment contributes to the use of smartphones for academic purposes. The data was collected among 503 undergraduate students of University of Botswana. The study focus on how gender and smartphone usage pattern for academic purpose, and the second one is to experience the learning environment, followed by student's performance. The result of the

study concluded that smartphone plays a vital role in academic performances.

N.Gromik, David R.Litz (2021)⁴ in their study they concentrated on how Female undergraduate students on Emirati use their smartphones in classrooms. The study focus on age at which respondents use their smartphone, time spend, and how smartphone helps as a learning tool. Online survey was conducted among 189 students. The study concluded that first year students use their smartphones in positive perception when compared with second and final year students. Smartphone plays an important role in classroom as learning tool.

Vanishree Talapady, K.Shekhawat, P.Dinatius, C.Thasneem, Surayahanim Ali, S.Prasanna, A.Salim (2019)⁵ the objective of the study is determine the usage pattern of smartphone among female students of Dental Institution in North Kerala. The study was conducted among 152 female students. Closed ended, self-administered questionnaire were framed to collect the datas. The result of the study indicates that majority of the respondents spend more that 4-5 hours in their smartphone, Final year students spend more time when compared to other students. 66% of the respondents check their smartphone frequently. 80% of the respondents use smartphone when they are in stress, 61% spend time in smartphone during night time, Whatsapp is highly used social media platform by the students. The study concluded that students are highly addicted to their smartphones. Students should be educated how to use their smartphones in a productive manner.

METHODOLOGY OF THE STUDY

Research Design

Sampling Method and Data Sources

This part presents the design of the study and the approaches adopted for this study, the measurement concept and the statistical procedure employed for the analysis of the data collected. Detailed outline of general research. A research design will typically include how data is to be collected, what instruments will be employed, how the instruments will be used and the intended means for analyzing data collected. The design used in this study is descriptive type of research where the researcher has no control over the variables. Convenient sampling method was used for collecting the data. The primary data were collected directly from the respondents through questionnaire. Secondary data were also collected through various books, journals, Magazines and relevant websites.

Sampling Size

This refers to number of respondents selected in Coimbatore city to constitute a sample. The study is conducted with 107 college going students.

Limitations of the Study

1. The information is highly dependent on the knowledge of the respondents.
2. The sample size is limited to 107 respondents only and hence the results may not be universally applicable.
3. The geographical area of this study is confined to Coimbatore City only.

RESULTS AND DISCUSSIONS

Positive Impact by Using Smartphone for Academics

H₀: The frequency of smartphone usage does not have association with positive impact factors

Table 4.1 Positive Impact on smartphone usage with Age, Educational Qualification and Hours spent for Academic activities-Variance Analysis

Variables	Age			Educational Qualification			Hours Spend for Academic Purpose		
	F	Sig	S/NS	F	Sig	S/NS	F	Sig	S/NS
Improves learning skills	4.998	0.002	S	4.998	0.002	S	0.653	0.004	S
Helps to complete assignments, quiz with specified time	13.201	0.000	S	5.1776	0.005	S	2.490	0.030	S
Creates interest in learning and improves academic performance	13.007	0.000	S	3.395	0.005	S	0.672	0.645	NS
Quick access of information from anywhere any time	4.185	0.015	S	0.579	0.561	NS	3.741	0.002	S
Improves the academic writing skills	0.635	0.530	NS	3.395	0.005	S	1.683	0.136	NS
Improves the academic reading skills	5.764	0.003	S	6.364	0.002	S	2.490	0.030	S

Source: Primary Data

From Table 4.1 indicates that factors such as improve learning skills, helps to complete assignments, improves the academic reading skills had an F-Value significant at the 5% confidence. Therefore the null hypothesis is rejected, explaining all the 3 factors are significant associated .

Negative Impact by Using Smartphone for Academics

Ho: The frequency of smartphone usage does not have association with negative impact factors

Table 4.2 Negative Impact on smartphone usage with Age, Educational Qualification and Hours spent for Academic activities-Variance Analysis

Variables	Age			Educational Qualification			Hours Spend for Academic Purpose		
	F	Sig	S/NS	F	Sig	S/NS	F	Sig	S/NS
Decrease in academic performance by frequent use of smartphone	0.808	0.446	NS	0.793	0.453	NS	0.653	0.004	S
Distraction from studies	1.030	0.357	NS	0.185	0.906	NS	4.021	0.007	S
Lack of concentration in studies	0.018	0.982	NS	2.828	0.060	NS	2.093	0.100	NS
Lack of sleep/disturbed sleep	0.545	0.580	NS	2.037	0.131	NS	0.241	0.868	NS
Frequent call disturbs the class	0.018	0.982	NS	2.828	0.060	NS	2.093	0.101	NS
Lack of motivation	3.878	0.021	S	7.090	0.001	S	4.021	0.007	S
Creates laziness	0.864	0.422	NS	1.652	0.192	NS	1.833	0.140	NS
Lack of creativeness	1.477	0.229	NS	0.597	0.552	NS	1.443	0.229	NS
Internet addiction	0.864	0.422	NS	1.652	0.183	NS	1.833	0.140	NS
Lack of self-control	1.529	0.217	NS	1.395	0.248	NS	0.453	0.715	NS

Source: Primary Data

From Table 4.2 indicates that factors such lack of motivation as had an F-Value significant at the 5% confidence. Therefore the null hypothesis is rejected, explaining all the 3 factors are significant associated.

SUGGESTIONS

For Educational Institutions:

- Students should be encouraged to use smartphones primarily for educational purposes during study hours and limit non-academic activities.

- Educational institutions should organize workshops and awareness programs on effective smartphone use, digital learning, and online safety.
- Colleges and schools should recommend reliable educational apps, e-books, online libraries, and learning platforms that support academic development.
- Educational institutions should provide better internet connectivity and digital resources to facilitate productive smartphone-based learning.

For Parents:

- Parents and educators should provide guidance and monitor smartphone usage patterns to ensure a healthy balance between academic and recreational use.

For Students:

- Students should adopt time-management techniques and use productivity applications to reduce distractions and improve academic performance.
- Students should reduce excessive use of social networking and gaming applications, especially during study periods.
- Students should practice self-discipline by setting daily screen-time limits and maintaining a structured study schedule.
- Students should be educated about the physical and mental health impacts of prolonged smartphone use, including eye strain, poor posture, and sleep-related issues.
- Students should participate in extracurricular activities, sports, and face-to-face interactions to maintain overall well-being alongside smartphone use.

CONCLUSION

The study on smartphone use for academic purposes and its impact among students in Coimbatore indicates that smartphones have become an essential educational tool. Students use smartphones for accessing online learning materials, attending virtual classes, conducting research, communicating with teachers and peers, and completing academic tasks. The findings suggest that smartphones contribute positively to learning by improving access to information, enhancing flexibility in education, and supporting self-directed learning.

However, excessive and uncontrolled smartphone use can also lead to negative consequences such as distraction from studies, reduced concentration, procrastination, sleep disturbances, and dependence on social media and entertainment applications. The overall impact depends largely on how effectively students manage their smartphone usage. Therefore, while smartphones offer significant academic benefits, responsible and balanced usage is necessary to maximize educational outcomes and minimize adverse effects.

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