

THE EMERGING CULTURE OF MOBILE PHONE USAGE AMONG SECONDARY SCHOOL STUDENTS: A SURVEY-BASED STUDY

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1. ABSTRACT

Background : The evolution of mobile phones from a mere tool for basic communication to the device facilitating group communications with the introduction of smartphones has resulted in the acceptance of technology in various sections of the society. The fast penetration of this technology in different spheres of life has widely encroached the educational sectors and the lives of secondary school students. In this context, the present study was conducted with an objective to examine the patterns and extent of mobile phone usage among secondary school students.

Materials and methods: The researcher employed a self-designed inventory to carry out a descriptive survey method on 210 secondary school students (101 females and 109 males) studying in Tehri district of Uttarakhand.

Results: The findings revealed that i) a large majority of students use mobile phones for academic purposes ii) females in comparison to male students preferred using their mobile phones more rather than indulging in outdoor activities iii) greater proportion of female students believed that excessive mobile phone usage negatively affects their critical thinking abilities iv) female students demonstrated higher awareness regarding cybercrime v) percentage of females experiencing headaches by long hour use of mobile phones is far greater than male students vi) percentage of females facing difficulty in socializing is greater than that of male students vii) male students used google drive more frequently than females.

Conclusion: The study highlights the growing significance of mobile phones in students' academic and personal lives and emphasizes the need for responsible and balanced usage. The findings may help educators, parents, and policy makers develop strategies to maximize the educational benefits of mobile phones while minimizing potential negative effects.

Keywords: Mobile phone usage, Secondary school students, Educational technology

INTRODUCTION

Mobile phones have become an integral part of everyday life and are among the most widely used technological devices by adolescents. With the rapid growth of digital technology, secondary school students increasingly rely on mobile phones for communication, learning, entertainment, and information access. The availability of smartphones and internet connectivity has transformed the way students study, interact, and manage

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their academic tasks. Educational applications, online learning platforms, digital libraries, and instant access to educational resources have made mobile phones a valuable tool for learning. At the same time, excessive or inappropriate use of mobile phones may affect students' academic performance, concentration, social relationships, physical health, and overall well-being. The increasing dependence on mobile phones among school-going adolescents has raised concerns among parents, teachers, and researchers regarding their impact on students' educational and personal development. Understanding how students use mobile phones and their purposes for which they are utilized has therefore become an important area of educational research. In this context, the present paper tries to study the patterns and extent of mobile phone usage among secondary school students. It provides insights into the digital habits and the role of mobile technology in the daily academic and social lives of the adolescent students.

REVIEW OF RELATED LITERATURE

Rabiu et al. (2016) investigated the impact of mobile phone usage on the academic performance of secondary school students in Nigeria. The sample of the study included 300 students selected through stratified sampling process. The researchers opted for survey method and collected the data on mobile phone usage with the help of a questionnaire which was then analysed through descriptive and inferential statistics. The findings prominently revealed that students' academic performance was significantly influenced by mobile phone usage. However, demographic variables such as gender, age, and socioeconomic status did not significantly affect this relationship.

Cha and Seo (2018) examined smartphone usage patterns and addiction among middle school students in South Korea. The responses from 1,824 students of this study revealed that nearly one-third of the respondents were at risk of smartphone addiction. Gaming, messaging, social networking, and internet browsing were seen as most common activities done by students on their mobile phones. Significant behavioural differences were also observed between students at risk of addiction and those in the normal group.

Gangadharan, Borle, and Basu (2022) investigated mobile phone addiction and its associated factors among adolescents belonging to low income urban communities of Delhi. The findings indicated that nearly one-third of the respondents showed the signs of mobile phone addiction. The addiction levels were found high among boys and adolescents coming from nuclear families, larger households, and those who started using mobile phones at a later age. Excessive screen time showed a strong association with the addiction.

Mahalakshmi et al. (2023) explored the health implications of smartphone use among Indian adolescents. The findings of the study revealed that the students spent more than three hours daily on their smartphones which led to various health issues like short-term memory, and sleep disturbances. An educational intervention showed a significant improvement in students' awareness of the adverse effects associated with excessive smartphone use.

Akshay et al. (2024) conducted a mixed – methods study on mobile phone dependency among late adolescents in South India. The findings indicated that one – fourth of the participants demonstrated problematic mobile phone usage patterns. The results also highlighted that there is limited awareness among adolescents regarding the potential health and behavioural risks associated with excessive use of mobile phones.

Prakash, Thangavel, and Kumar (2024) compared smartphone addiction among high school students across different localities and school types in Madurai District. The results depicted that addiction levels were slightly higher in rural students as compare to the urban but it was also noticed that difference was not statistically significant. However, significant difference was found among boys, girls and co-education schools with respect to the nature of the institution. The study suggested that smartphone addiction is a major concern across diverse geographical and educational settings.

OBJECTIVES

1. To study the mobile phone usage pattern by the male and female students of secondary classes (XI and XII).
2. To examine the impact of mobile phone usage on academic activities, health, and outdoor participation among male and female students of secondary classes (XI and XII).

MATERIALS AND METHODS

The researcher conducted a descriptive survey method on 210 secondary school students (109 males and 101 females) for the pilot study. The sample was randomly selected from government and government- aided schools located in rural and urban areas of Tehri district of Uttarakhand state of India. Mobile phone usage was assessed using a self- developed inventory designed with the help of a previous literature search and guided by experts. The answers of the questions were to be given in a Yes or No pattern. For the collection of data, the investigator took permission from the concerned authorities and then visited schools, where she interacted with the school authorities and the students. The inventory was administered to the students, and proper instructions were given before filling out the questionnaire. Further, the sheets were collected from the students, and the scores were calculated as per the scoring key. The collected data were then analyzed using the percentage and frequency distribution method.

ANALYSIS AND INTERPRETATION

This is an important step of any research that is done on the data collected from the sample (respondents) of the study. The tables and figures below represent the output of the study.

1. DO YOU USE YOUR MOBILE PHONE FOR COMPLETING SCHOOL ASSIGNMENTS/ PROJECT/ HOMEWORK?

Table-1

GENDER	TOTAL RESPONSES (%)	YES (%)	NO (%)
MALE	109 (51.90)	97 (89.00%)	12 (11.00%)
FEMALE	101 (48.10)	91 (90.10%)	10 (9.90%)

Note:- All figures in parenthesis represent percentage

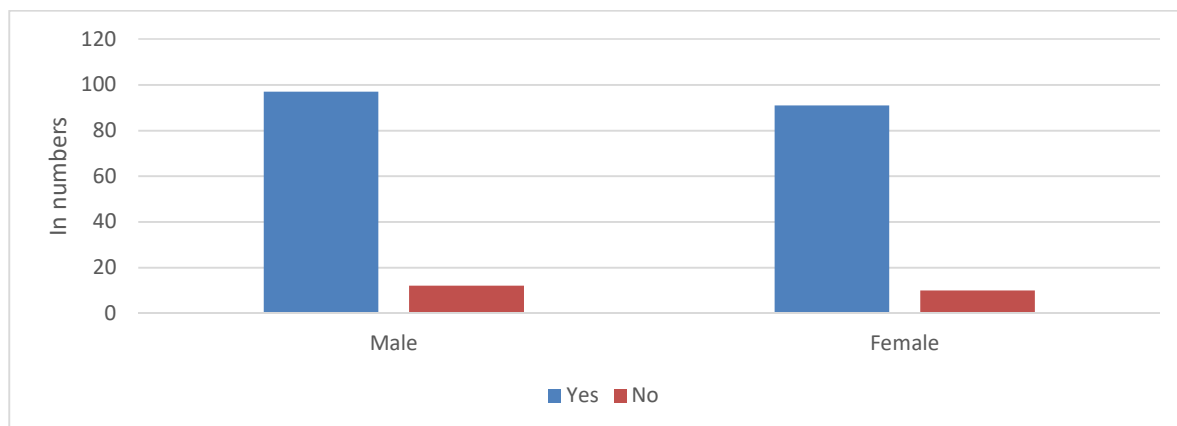
Figure -1

Table-1 shows that 89.00% of the total male students and 90.10% of the total female students take the help of their mobile phones for completing the school assignments/ project or homework. The remaining 11.00% of the male students and 9.90% of the female students are not dependent on mobile phones for doing their school assignments, project or homework.

1- DO YOU PRIORITIZE USING YOUR MOBILE PHONE OVER PLAYING OUTDOOR GAMES?

Table-2

GENDER	TOTAL RESPONSES (%)	YES (%)	NO (%)
MALE	109 (51.90)	79 (72.48%)	30 (27.52%)
FEMALE	101 (48.10)	80 (79.21%)	21 (20.79%)

Note:- All figures in parenthesis represent percentage

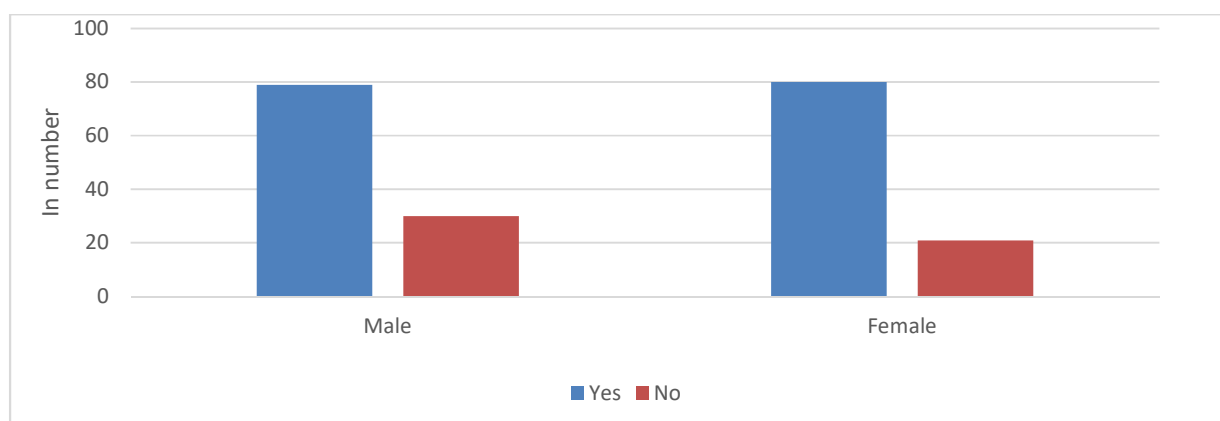
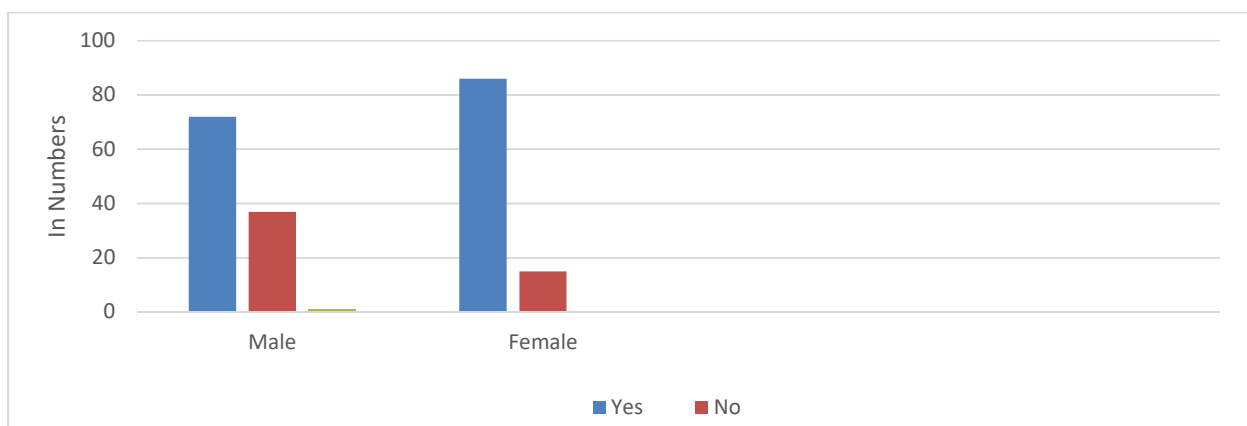
Figure -2

Table- 2 shows that, out of the total male students 72.48% like using their mobile phones than playing outdoor games whereas only 27.52% of the male students prefer to play outdoor games rather being busy with their phones. Similarly, the percentage of female students who like to be busy with their phones (79.21%) is higher than those females who opt for playing outdoor games (20.79%).

2- DO YOU BELIEVE THAT OVER RELIANCE ON MOBILE PHONE REDUCES YOUR CRITICAL THINKING?**Table-3**

GENDER	TOTAL RESPONSES (%)	YES (%)	NO (%)
MALE	109 (51.90)	72 (66.06%)	37 (33.94%)
FEMALE	101 (48.10)	86 (85.15%)	15 (14.85%)

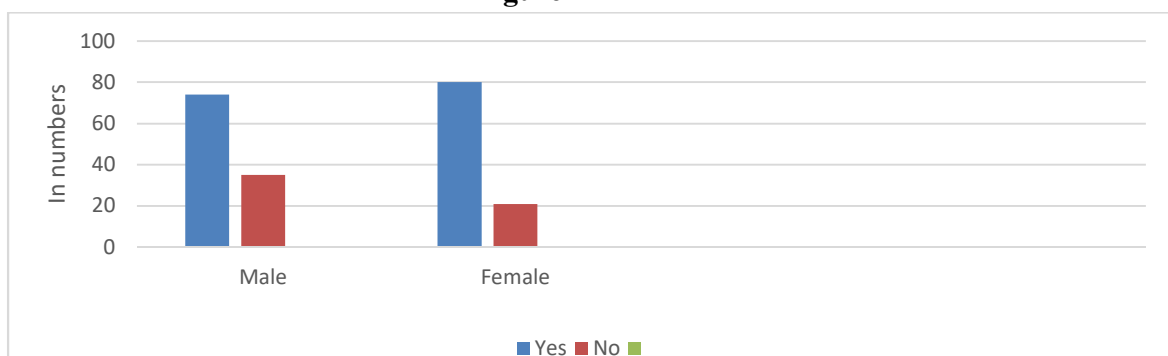
Figure -3

Note:- All figures in parenthesis represent percentage

According to table- 3, 66.06% of the males and 85.15% of the females are of the opinion that using mobile phone excessively degrades our thinking ability. On the other hand only 33.94% of the males and 14.85% of the female students believe that over use of mobile phones do not reduce the critical thinking ability of the students.

3- HAVE YOUR PARENTS EVER TAUGHT YOU ABOUT CYBERCRIME?**Table-4**

GENDER	TOTAL RESPONSES (%)	YES (%)	NO (%)
MALE	109 (51.90)	74 (67.89%)	35 (32.11%)
FEMALE	101 (48.10)	80 (79.21%)	21 (20.79%)

Figure -4

From table- 4, it can be seen that 67.89% of the male students and 79.21% of the female students are aware of the cybercrime related to wrong use of mobile phones. It is also seen that 32.11% of the males and 20.79% of the female students are still unaware of and are not guided by their parents regarding cybercrime.

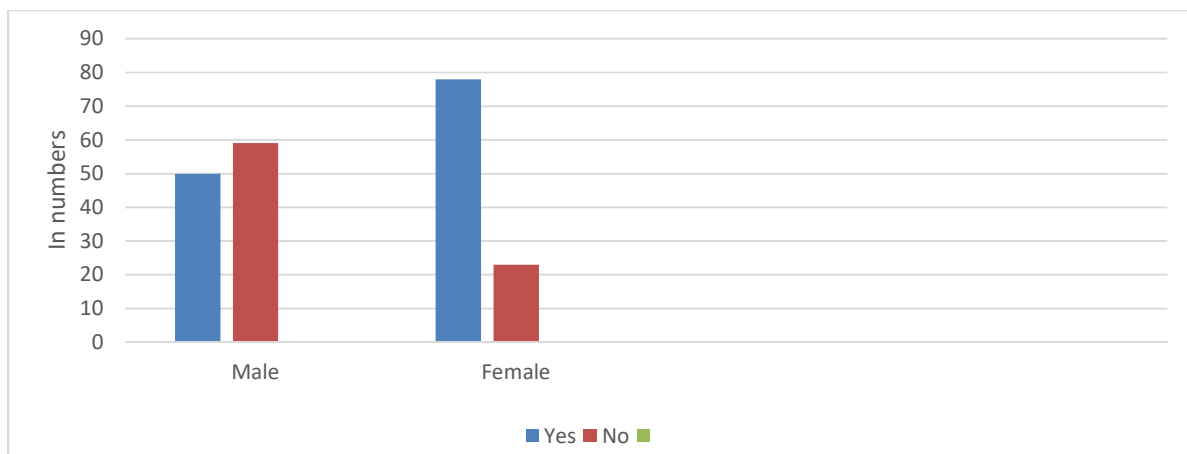
4- DO YOU EXPERIENCE HEADACHES WHEN USING YOUR PHONE FOR LONG HOURS?

Table-5

GENDER	TOTAL RESPONSES (%)	YES (%)	NO (%)
MALE	109 (51.90)	50 (45.87%)	59 (54.13%)
FEMALE	101 (48.10)	78 (77.23%)	23 (22.77%)

Note-: All figures in parenthesis represent percentage

Figure -5



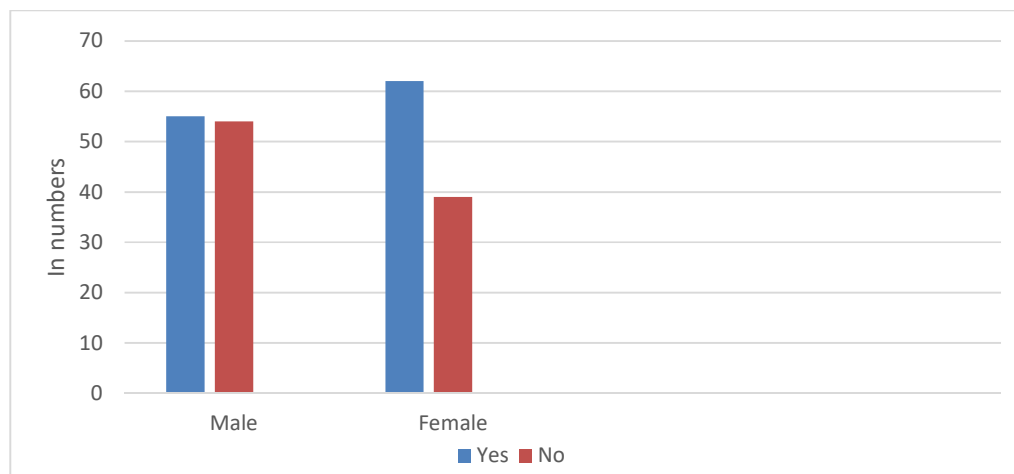
According to the table 5, 45.87% of the male students and 77.23% of the female students experienced headache while using their mobile phones for long hours, whereas 54.13% males and 22.77% females never felt any kind of uneasiness in their health while using the mobile phones for long duration.

5- DO YOU BELIEVE THAT EXCESSIVE USE OF PHONES FOR COMMUNICATION LEADS TO DIFFICULTY IN DEVELOPING SOCIAL SKILLS?

Table-6

GENDER	TOTAL RESPONSES (%)	YES (%)	NO (%)
MALE	109 (51.90)	55 (50.46%)	54 (49.54%)
FEMALE	101 (48.10)	62 (61.39%)	39 (38.61%)

Note-: All figures in parenthesis represent percentage

Figure -6

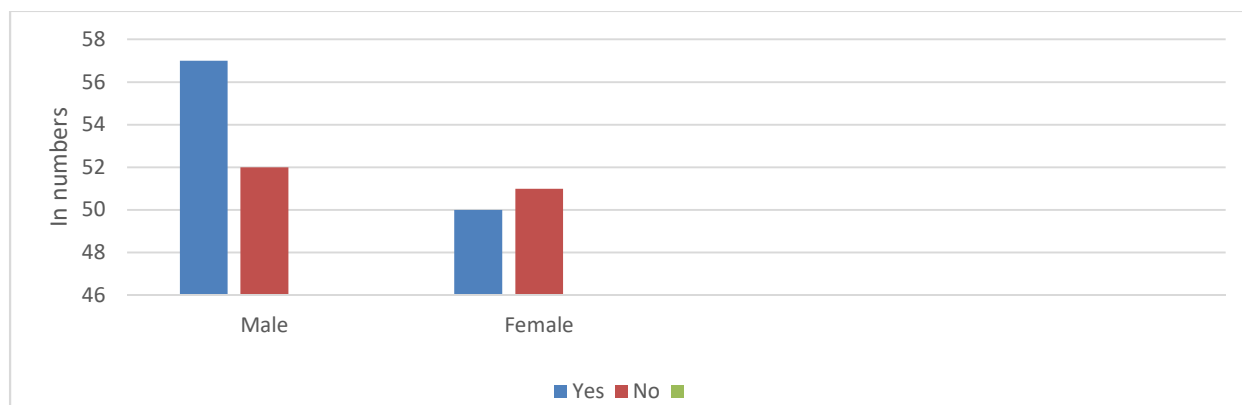
From table- 6, it can be seen that out of the total male students, 50.46% believed that using mobile phones beyond a limit creates hurdles in socializing whereas 49.54% of the male students did not believe in this fact. In case of female students, 61.39% confirmed that using mobile phones excessively hinder their socializing skills whereas only 38.61% of the females denied this opinion.

6. DO YOU USE GOOGLE DRIVE FOR EDUCATIONAL PURPOSES SUCH AS STORING ASSIGNMENTS AND PRESENTATIONS?

Table-7

GENDER	TOTAL RESPONSES (%)	YES (%)	NO (%)
MALE	109 (51.90)	57 (52.30%)	52 (47.7%)
FEMALE	101 (48.10)	50 (49.50%)	51 (50.50%)

Note-: All figures in parenthesis represent percentage

Figure -7

From table - 7, it is evident that 52.30% of the male students and 49.50% of female students use google drive for storing the educational assignments and presentations. The percentage of male and female students who do not opt for this application on mobile phones are 47.70% and 50.50% respectively.

RESULTS AND DISCUSSION

The findings of this study reveal that mobile phones have become an important asset in the lives of secondary school students. A large majority of the students, both male and female reported the use of mobile phones to complete their school assignments, projects, and homework, which somehow indicates the increasing demand of digital devices for educational purposes. At the same time, a considerable proportion of students, particularly females showed their interest in using mobile phones rather than involving in outdoor games, which hints the shift towards digital engagement.

Most of the students were aware of the negative aspects of using excessive use of mobile phone. Awareness regarding cybercrime was also found to be relatively high, although a notable percentage of students still lacked adequate guidance on safe use of mobile phones. Further, the study also highlights the social and health concerns associated with prolonged exposure of mobile phones like headaches and reduced social interactions. Additionally, the use of applications such as google drive for educational purpose supports the role of mobile technology in the academic organization.

CONCLUSION

The study concludes that mobile phones play a dual role in the lives of secondary school students. On one hand, they serve a valuable educational tools that facilitate learning and storage of academic resources, on the other hand the prolonged use of digital device leads to health issues, reduced participation in outdoor activities, and challenges in social interaction. The findings also indicate that although students are aware of cybercrime and other risk associated with excessive use of mobiles still proper guidance is required. Therefore, students should be encouraged to use mobile phones responsibly and in balanced manner so that the educational benefits of technology can be maximized while minimizing its adverse effects on physical, social and cognitive well-being.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORS CONTRIBUTION

Conceptualization- Krishna Chauhan

Writing- Original Draft Preparation and Review- Krishna Chauhan

Data collection- Krishna Chauhan

Writing- Editing- Prof. Sunita Godiyal

Supervision- Prof. Sunita Godiyal

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