



**“A Project on Prevalence of Mobile Phone Dependence in
Secondary School Adolescents”.**

ABSTRACT

Mobile phones have become an essential commodity. The rate of usage of mobile phones and the addiction towards it among the adolescent age group has spiked up to a great extent after the launch of smartphones in the market. . The trend of using mobile phones among students is increasing. The prevalence of mobile phone dependence among secondary school adolescents has become a subject of growing concern in recent years. With the widespread adoption of smartphones and increased access to mobile technology, adolescents are becoming increasingly connected to the digital world. Research indicates that excessive use of mobile phones among adolescents can have adverse effects on their physical and mental well-being. The study was intended to explore student perception about mobile phone and what they think about the necessity of mobile phone and to determine the prevalence of mobile phone dependence among secondary school adolescents. The quantitative method was applied while collecting data for conducting the study. The primary data were collected from 10 October 2023 to 25 October 2023. The gathered data were presented in the Google Excel Sheet and Sigma plot 11. Students who studies in class 8th, 9th 10th and has internet access were approached for participating in the study. One hundred and eleven valid surveys were obtained, where 29 read in class eight (26.1%) 48 read in class nine (43.2%) and 34 read in class ten (30.6%). According to the project that majority number of students using mobile phone first at primary level (24.3%) followed by class eight (18.9%) ,class seven (14.4%), class six (10.8%), class nine (9%) and the least number of mobile at first use in class ten (6.3%). The maximum number of student using smart phone as their first choice (78.4%), and 8.1% student using featured phone. Maximum number of student using Wi-Fi as their first internet choice. It almost 58 (52.3%) number of student. 31 (27.9%) number of student are using mobile data and 26 (23.4%) number of student are not using any kind of data. 62.2% number of students using mobile phone for their educational purpose. Whereas 32.4% student using mobile phone for their communication, 33.3% students using for social media, 41.4% for listening music, 22.5% for gaming, 11.7% for free caller and 22.5% number of students using mobile phone for various others purpose. The use of mobile phones among teenagers has both positive and negative health impacts. Majority number of students (62.2%) do not find any kind of technological hazard when using mobile phone. Only 37.8% students considered mobile phone as a technological hazard. The students do not consider mobile phones as technological hazards it could be because mobile phones are often seen as essential tools rather than hazards. Excessive use, social media pressure, and exposure to certain content can contribute to mental health issues, including anxiety, depression, and low self-esteem. Set clear and consistent rules regarding mobile phone usage, including screen time limits, designated non-screen periods (e.g., during meals, before bedtime), and appropriate content

Key words: Smart phone, Teenagers, Addiction, Technology, Internet, Adolescent.

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CHAPTER: 1

INTRODUCTION

Mobile phones have become an important part of modern human life. They have many attributes which makes them very attractive to both old and young. The trend of using mobile phones among students is increasing. Often called a cellphone or cell phone, a mobile phone is a portable communication device that can be used for texting, making and receiving calls, browsing the internet, and a number of other purposes. In the world, mobile phones are among the most popular devices; by 2023, nearly 5 billion people will own a mobile phone. Over time, mobile phones have evolved into more advanced devices. Mobile phones started to come equipped with internet connectivity and text messaging capabilities in the 1990s. Smartphones, which are mobile phones with an operating system and a multitude of applications similar to those on computers, were first released in the 2000s. Nowadays, smartphones are the most widely used kind of mobile phone. They may be used for a multitude of purposes, such as productivity, entertainment, and communication. Concern over the incidence of cell phone dependence among teenagers in secondary school has grown in recent years. Teenagers are getting more integrated into the digital world due to the growing use of smartphones and easier access to mobile technologies. While there are many advantages to this connectedness, there are drawbacks as well, especially when it comes to dependence on mobile phones. Teenagers use their mobile phones for more than simply communication; they are becoming essential instruments for socializing, amusement, and education. These developments provide concerns of overuse and dependence even as they present chances for learning and connectivity. Teenagers in secondary schools are more likely to be dependent on their mobile phones than not due to a number of variables. For people in this age range, the appeal of social media, online gaming, and instant messaging can be especially strong. Peer pressure, the need for continuous connectivity, and FOMO (fear of missing out) all add to the addiction to mobile devices. According to research, teenagers' physical and mental health may suffer as a result of their excessive usage of mobile phones. Some possible effects of mobile phone dependence include disturbed sleep, decreased physical activity, and elevated stress and anxiety levels. Due to the possibility of reduced focus and productivity from continuous use, academic performance may also be impacted. Mobile phones are an indispensable component of contemporary life, notwithstanding their drawbacks. They are a potent weapon that can be employed for either evil or good. It is each person's responsibility to use their phone sensibly.

1.1 Rationality of the study

Considering how common cellphones are in today's world, researching the effects of mobile phones on teenagers is pertinent and crucial. Knowing how teenagers use smartphones can help with understanding a number of elements of their lives, such as their social, academic, and psychological well-being.

In today's world, mobile phones are ubiquitous, particularly among teenagers. Given how widely this technology is being used, it is imperative to comprehend their effects. Teenagers' use of mobile phones greatly enhances their ability to communicate and engage with others. Analyzing these interactions can reveal how technology affects their interactions.

Examining the connection between mobile phone use and academic achievement is essential since teenagers frequently use their phones for communication, information access, and educational purposes. It's critical to investigate how using a cell phone affects both mental and physical health. Examining topics like sleep habits, screen time, and the possible psychological repercussions of continuous use are all part of this.

1.2 Objectives of the study

The study was intended to explore student perception about mobile phone and what they think about the necessity of mobile phone. While exploring the primary objectives, some specific objectives were also considered-

- To find out how common mobile phone dependence is among teenagers enrolled in secondary schools.
- To determine how much a student's daily life depends on their cell phone.
- Investigate and pinpoint possible risk factors linked to secondary school pupils' dependence on mobile phones.
- To look at the relationship between reliance on a cell phone and academic achievement.
- To examine the usage patterns of mobile phones in secondary school students' behavior.
- To investigate how often and for how long people use their phones, particularly in the classroom.
- To look at the psychological impacts of teenage dependence on mobile phones, such as stress, anxiety, and social disengagement.

1.3 Limitations of the study.

Every researcher has to go through many difficulties while conducting their research study and researcher of this study, is not an exception. As an undergrad student, the researcher is an amateur in this field and this project is the first step for his in the research field. Like all other researchers, the researcher also has faced difficulties that could not be avoided. While carrying out the research work, the researcher has faced the following constraints:

The intricacy required to completely comprehend the context and subtleties of mobile phone dependence in secondary school settings may be lacking from survey-based approaches.

Participants may over report or underreport their use of mobile phones because they are unaware of their own habits or because of social desirability bias.

There may be problems with generalizability if the sample is not a true representation of all teenagers enrolled in secondary schools.

It might be difficult to determine causative linkages or monitor changes over time when using cross-sectional surveys, which only offer a snapshot of mobile phone reliance at one particular moment in time.

Non-response bias, in which individuals who choose to participate may differ systematically from those who do not, may be introduced by low response rates.

Respondents might give answers that they believe to be more socially acceptable than truthful, particularly when talking about potentially harmful actions.

There is a chance that participants won't remember or report their cell phone usage precisely, which could result in inaccurate statistics.

Independent of the study, outside variables like modifications to school policies or advances in technology may have an impact on mobile phone dependence.

It can be difficult to determine the direction of the association between mobile phone dependence and other variables because the survey's correlation results do not necessarily indicate causality.

More tech-savvy participants might be overrepresented, which could distort the findings.

As the survey was carried out via a self-reported survey questionnaire participants might need some guidance while filling out the questionnaire but there wasn't any opportunity to make them understand. However, with all the adversities, the researcher has tried his best to carry out the study and to present the study findings by taking all possible initiatives carefully.

CHAPTER: 2

LITERATURE REVIEW

While reviewing the literature, the researcher has tried to review the pieces of literature related to the concept of the study. Keeping the objectives in mind the researcher has tried to discuss the concept and find out the Prevalence of Mobile Phone Dependence in Secondary School Adolescents,

Globally, the impact of information technology is increasingly altering student behavior. The primary determinant of the modern world's development is technology. The impact of mobile phones on people's daily activities affects not just individuals but also the entire nation. Bangladesh is a developing nation with the goal of implementing technology in every facet of the nation. Even though mobile phones were first introduced in the 1990s, they have had a greater impact on Bangladesh than any other technology. The majority of students use their phones for everyday tasks. Mobile phones have the power to alter people's behavior at times. The psychological state of the human mind and body might be adversely impacted by mobile addiction (Goswami & Singh, 2015). Numerous studies have determined the usefulness of this change-making apparatus. In addition to being communication tools, mobile phones are also employed as non-formal communication medium, such as news and information sources (Rajeev & Jobilal, 2015). In wealthy nations, the old means of communication are becoming less and less relevant. Nearly the same phenomenon occurs in poorer nations. Mobile phones have a significant impact on human behavior and psychology and can have both beneficial and harmful effects on how people behave in society (Chatterjee, 2014).

The urban adolescents use mobile phones for a wide range of activities in their social activities (Nurullah & Syed, 2011). There is a radical change on social contacts are replaced by virtual world contacts because of mobile phone usage in a wide range (Ling, 2011). There are many studies supporting the idea of media addictions to television and the Internet but research regarding mobile phone is very rare (Goswami & Singh, 2015). Most of the time the people are generally used the mobile phone more than any other task and even in some particular people are totally addicted by the mobile phone. According to certain research, texting and driving may be more risky than driving while intoxicated (Oktay, 2006; Johnson, 2007 ; Dinesh, 2015; Campbell, 2005). Mobile phone use has extremely detrimental effects at home as well as on the road. When people use their phones during emotional moments, their conduct is drastically altered (Dragutinovic & Twisk, 2014). Some health risks associated with mobile phones can even result in cancer (Sanchez, 2006).

Information communication technology (ICT), which includes computers and mobile phones, can expose people in physical and psychological ways that can impact their health (Thomé, 2012). All around the world, mobile phones have opened up new

opportunities; in Africa, they have brought about a dramatic shift (Aker & Mbiti, 2010). Teenagers' behavior can quickly alter as a result of mobile phones (ASHIQ, MAHMOOD, & SIRAJ, 2013). Mobile technology, such as cell phones, can be utilized to analyze good disaster management and to properly handle emergency situations involving both people and a broader community (Borkar & Borkar, 2013). Although mobile phones have many advantages, we also cannot ignore the drawbacks they have. One of the most well-known drawbacks of smartphones is how they can negatively impact people's behavior and health (Abu-Shanab & Haddad, 2015). "Smartphone addiction" is one example of a term [Casey 2012; Lee, et al. 2013]. "Mobile phone addiction" [Park 2005; Ahmed et al. 2011; Szpakow et al. 2011] According to Billieux et al. (2008) and Takao et al. (2009), "problematic mobile phone use" The term "mobile phone dependence" was used by Satoko et al. (2009) and Choliz (2012). "Excessive usage of mobile phones" [Matthews, et al. 2009] and "overuse of mobile phones" [Perry and Lee 2007] [37], have all been used to characterize essentially the same phenomenon: people who are excessively absorbed in using their smartphones.

"Mobile phone addiction" and, more recently, "Smartphone addiction" are the most often used terms to characterize this type of addiction. In Bangladesh, mobile phones even have a big influence on the education sector (Rahaman & Akter, 2017).

Both positive and negative effects of mobile phones, especially smart phones, are present in our society and on human behavior in all spheres (Nath & Mukherjee, 2015). A mobile phone is a common communication tool in every nation (Vicente, Reis, & Santos, 2008). There are far more negative aspects of mobile phones than positive ones (Repacholi, 2001). Even culture can shift as a result of mobile (Wei & Beth E., 2005).

CHAPTER: 3

METHODOLOGY OF THE STUDY

3.1 Study design.

The quantitative method was applied while collecting data for conducting the study. The numerical quantitative method help to explain a particular phenomenon in numerical data and generalize the results across group of student for specific study (Babbie, 2016).

At first a through literature review was done keeping the study objectives in mind. Literature reviews provide an overview of sources concerning the investigated research problem and give direction to the researcher to present their study which fits within a larger field of study (Fink, 2010). With this standpoint, different type of national and international journal articles, books, reports, policy guidelines etc were reviewed for getting secondary information and for the development of the research study based on the relation of the subject with the study topic.

After doing a literature review, a web based self -administered survey was conducted to collect the data from the participants. The world has been experiencing considerable progress using the online survey methodology for conducting research studies over the last twenty years (Wright, 2019). A semi structured questionnaire was prepared by using the Google doc from in this regard.

3.2 Study population, sampling procedure and sample size.

Students who studies in class 8th, 9th 10th and has internet access were approached for participating in the study. As well as data was collected to directly from different coaching center and schools like Barishal Model School, Barishal Sadar Girls and Barishal collector School etc. There wasn't any specific exclusion criterion for selecting respondents. The sampling unit was considered an individual in the study. For pretesting the survey questionnaire, the researcher used convenience sampling as in this method participants are easy to recruit. And to reach the study population, snowball sampling was followed where each students to whom the link of the created Google doc form was sent through email and social media, was requested to share the link with other to fill up survey questionnaire to reach more students. The sample size of the study was determined based on the timeline of data collection. The researcher set a timeline of 15 days for data collection. Total of 111 participants have responded within the timeline of the data collection process.

3.3 Study instrument

A semi-structured survey questionnaire was prepared using the online platform Google Form. The survey was conducted to explore student perception and prevalence of mobile phone dependency on secondary school adolescents. There were a total of 27 question in this survey (like name, class, school location, From which class do you start using your mobile phone, mobile type, Whether to bring mobile phones to educational institutions, Do you use your parents' phone, Where do you get the money to buy mobile data, What kind of mobile data does it use, How many gigabytes (GB) of data is used per month on mobile, What kind of use does mobile phone use,

Whether to communicate with the opposite sex using the internet on mobile, How many hours a day do you use your mobile phone, How many hours do you use your mobile phone at night, How long do you talk every day on mobile, Whether to do group chat on mobile, Whether you have the experience of watching porn videos or pictures on mobile, At what time do they access this site, Whether you've ever met the opposite sex or contacted via mobile or internet, How long have you been without a mobile phone, Have you ever suffered a mental injury from mobile phone use, How much money does you spend on mobile every month, Whether mobile use has any kind of effect on the body, What is the nature of mobile phone addiction, Social relationship status due to mobile addiction, Whether cyberbullying has been reported on mobile, Whether mobile phone use is considered a technological hazard).The question were both open ended and close ended where relevant.

3.4 Data collection

The primary data were collected from 10 October 2023 to 25 October 2023. The researcher initially set a timeline of fifteen days for collecting data, but to get a round figure of the responded participants two days were extended. Total of 150 respondents participated in the survey. The link to the questionnaire was circulated among the respective participants via email, Facebook, WhatsApp, and other social sites The researcher requested the participants to share the survey link with other for getting higher responses. The questionnaire took approximately 10 minutes to complete The participation was voluntary and a consent form was given briefing the objectives of the study and their flexibility to leave the survey questionnaire any time if they didn't want to participate The participants got access to the questionnaire only after giving their consent to participate in the survey.

3.5 Data analysis

The gathered data were presented in the Google Excel Sheet and Sigma plot 11. The researcher also compiled the data in Microsoft Excel 2013 for modifying the graphs which were presented on the online platform. Apart from the direct graphical representation of the found results in percentages and proportions, the responses with multiple options being recorded from a single respondent for a particular question were explored and arranged in tabular form.

3.6 Ethical issues

Webster's New World Dictionary defined ethics as the standard of conduct for any specific group. In research, some standards of conduct should be followed both by the researcher and participants as well (Babbie, 2014). The researcher also tried to maintain ethical issues while conducting the study. The following issues were considered during the study-

- The study participants' voluntary participation
- Care was taken to make sure the participants were safe. To make sure the researcher used the online survey to get more accurate results □ Consent was guaranteed to be informed.
- The poll maintained respondents' anonymity and confidentiality by not obtaining their name, email address, phone number, or precise location.
- The survey questionnaire included a reference to the study's objectives.

CHAPTER: 4

RESULT AND DISCUSSION

Students who studies in class 8th, 9th 10th and has internet access were approached for participating in the study. As well as data was collected to directly from different coaching center and schools like Barishal Model School, Barishal Sadar Girls and Barishal collector School eetc One hundred and eleven valid surveys were obtained, where 29 read in class eight (26.1%) 48read in class nine (43.2%) and 34 read in class ten (30.6%).

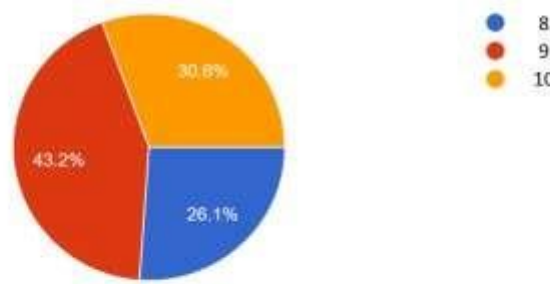


Figure 4.1: Pie diagram showing the percentage of students.

Table 4.1: Numbers of students and their class and percentage.

class	frequency	percentage
8	29	26.1
9	48	43.2
10	34	30.6

4.1 First using mobile phone at which class

When deciding whether to give a young child a cell phone, parents should consider the child's degree of maturity, their family's beliefs, and their commitment to appropriate and balanced technology use. As kids become older and their needs and comprehension change, it's critical that parents and kids keep talking about their digital behaviors.

My project paper shows that majority number of students using mobile phone first at primary level (24.3%) followed by class eight (18.9%) ,class seven (14.4%), class six

(10.8%), class nine (9%) and the least number of mobile at first use in class ten (6.3%).It delighted to see that 16.2% of students are not being used mobile phone yet. They are not aware about the use and abuse of mobile phone.

Here bar chart show using mobile phone at which class

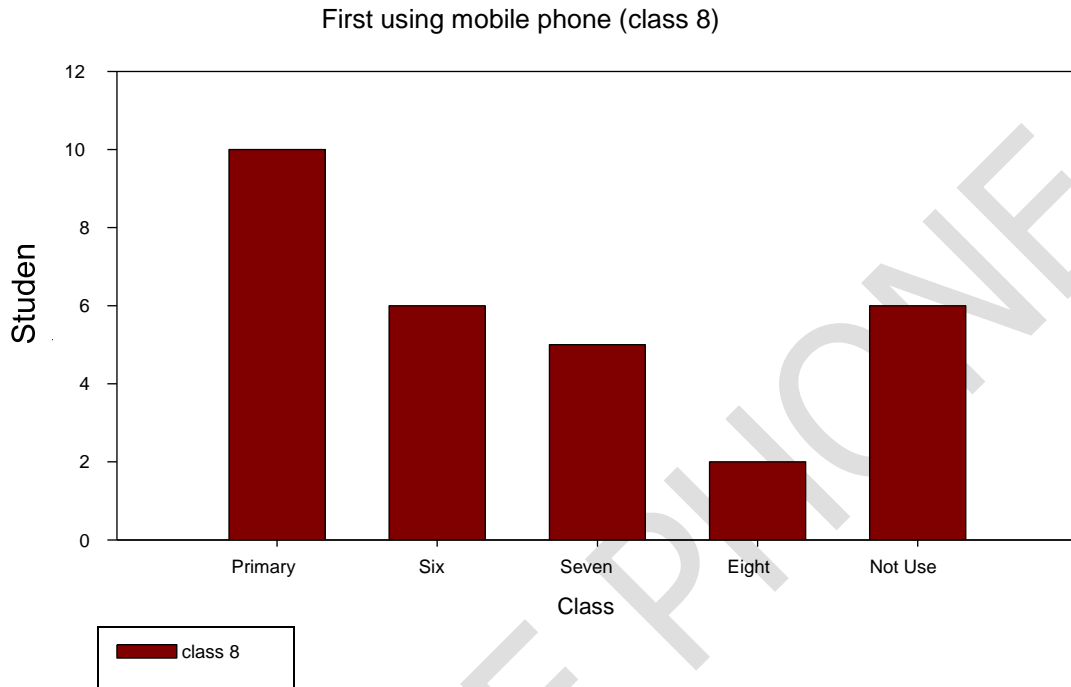


Figure 4.2: First mobile phone use (class-8)

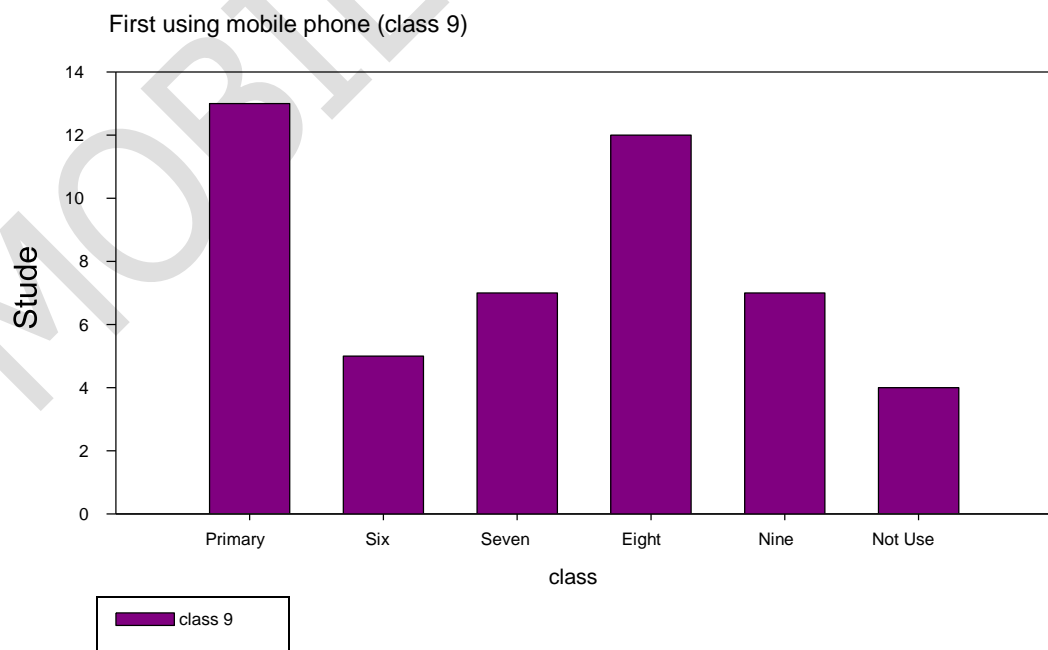


Figure 4.3: First mobile phone use (class-9)

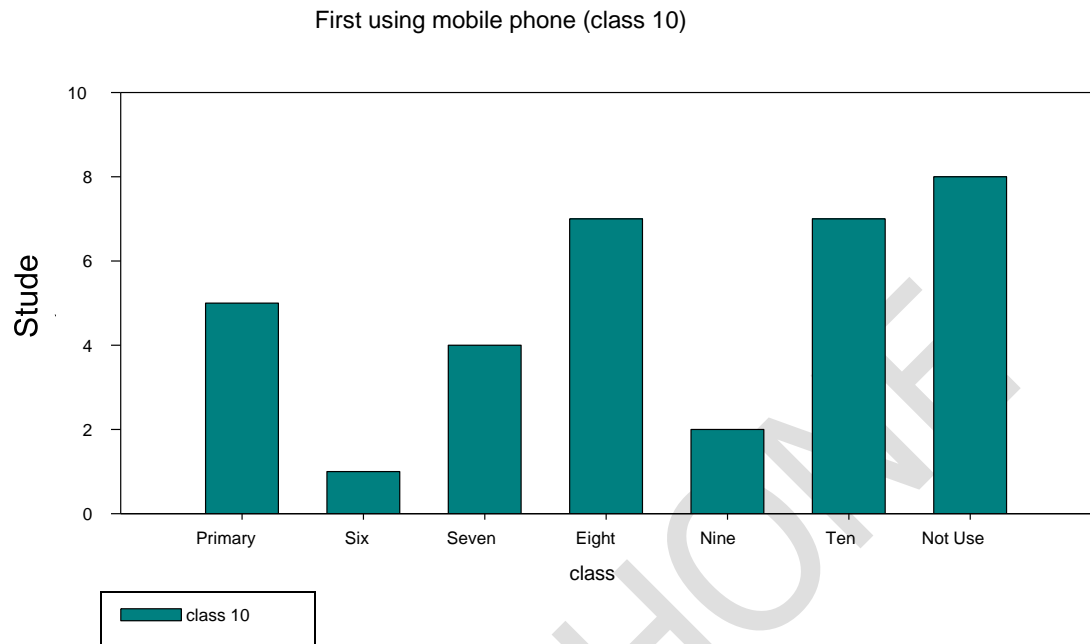


Figure 4.4: First mobile phone use (class-10)

4.2 Kind of phone they use

Globally, smartphones are now very common, and many kids of all ages—including those in grades 8, 9, and 10—own and use them often. Smartphones are used for a number of things, such as communication, entertainment, research, and instructional programs.

The precise proportion of students that use smartphones can change based on a variety of factors, including region, financial status, and cultural norms. Furthermore, adoption rates of new technologies might shift quickly. Referring to recent surveys, studies, or reports from educational institutions, government agencies, or technology research organizations would be the best way to get up-to-date, accurate information about smartphone usage among students in particular classes or age groups.

Table 4.2: Kind of phone they use

Class	Phone use	Frequency
Eight	Not Use	6
	Featured Phone (Button Phone)	1
	Smart Phone	22
Nine	Not Use	3
	Featured Phone (Button phone)	4
	Smart phone	41
Ten	Not Use	9
	Featured Phone (Button Phone)	2
	Smart Phone	23

Table shows that maximum number of student using smart phone as their first choice (78.4%), and 8.1% student using featured phone. There is no land phone user found in my project survey. Project survey also show that 16.2% of student are not being used any kind of mobile phone.

Here Bar Chart showing type of mobile phone they use

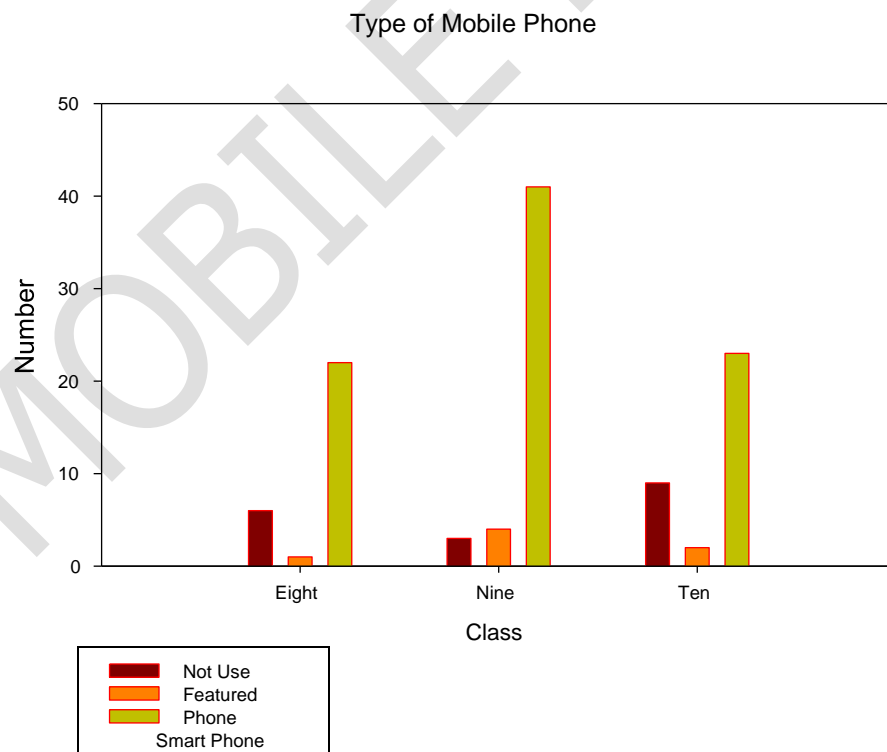


Figure 4.5: Type of mobile phone they use

4.3 Using parents phone and carry mobile phone in institution

Whether they own them or share them with their parents, eighth, ninth, and tenth grade kids frequently use smartphones. Numerous students use smartphones for communication, education, and information access, among other things.

The rules governing the use of mobile phones in classrooms, however, can differ. In order to reduce distractions and preserve a focused learning environment, some educational institutions, such as schools, may have strict policies regarding the use of mobile phones in the classroom. Students may be permitted to bring cell phones to class under certain situations, but they must keep them off or in silent mode.

It is imperative that parents and students understand the norms and guidelines that each educational institution has established regulating the use of mobile phones and follow them. These regulations are frequently put in place to control any disruptions and guarantee a favorable learning environment.

Table 4.3: Number of students using parent mobile phone

Class	Remarks	Frequency
Eight	Yes	18
	No	4
	Sometimes	7
Nine	Yes	21
	No	9
	Sometimes	18
Ten	Yes	7
	No	14
	Sometimes	13

Table shows that 46(41.4%) number of student are using parents phone. Whereas 27 (24.3%) are not being use parents phone and sometimes 38 (34.2%) number of student are using parents phone.

Bar diagram showing the exact number of student those who are using or not using the parents mobile phone.

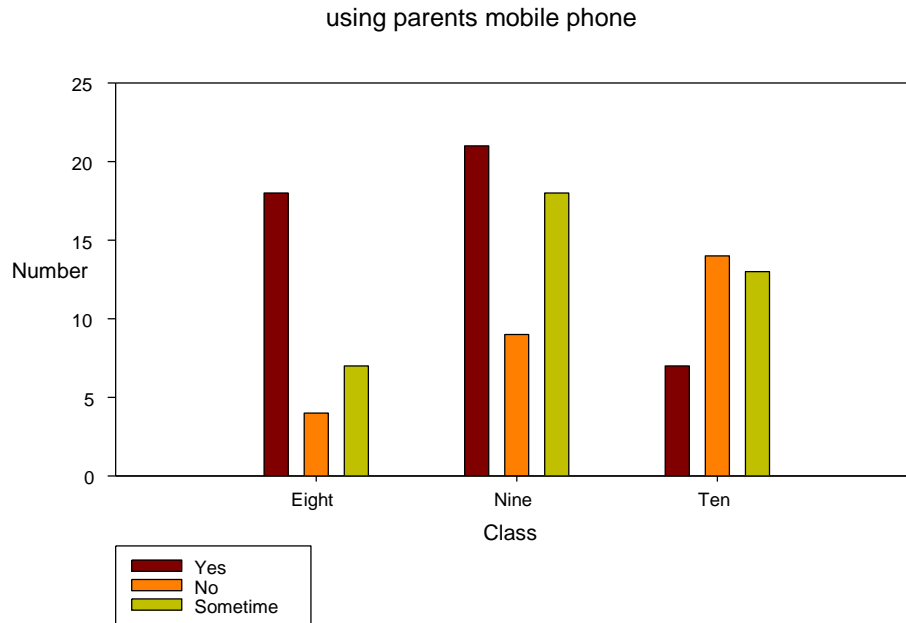


Figure 4.6: Using parents mobile phone

The choice of whether or not to permit teenagers to carry cell phones in school should be a parent phone made after giving careful thought to the policies of the institution, the unique requirements of the students, and striking a balance between maximizing the educational benefits of technology and reducing any potential for abuse or distraction. It's critical that parents and educators set up clear rules and teach kids about proper cell phone use.

Larger number of students do not carry mobile phone in the educational institution. It almost 84 (75.7%) of students. On the other hand 10.8% of students do carry mobile phone in educational institution. Sometimes 13.5% of students do carry mobile phone in educational institution.

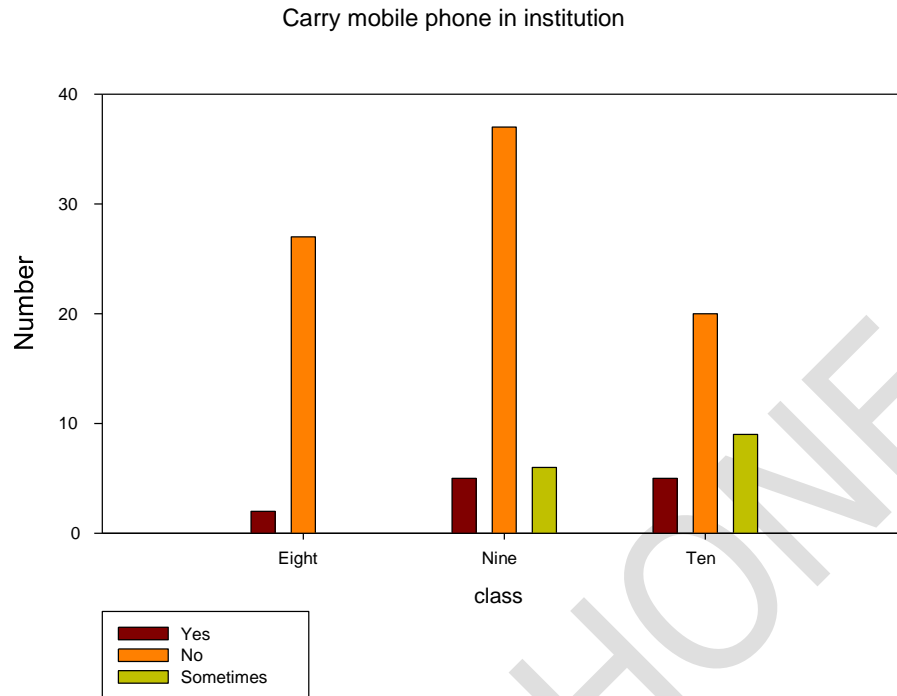


Figure 4.7: Carry mobile phone in institution

4.4 Type of internet used

Adolescents employ a range of data connections according to their needs, preferences, and availability, just like people of any age group. Teens frequently use the Wi-Fi networks at their houses, schools, and other places where it is accessible. A dependable and quick internet connection is offered by Wi-Fi. Teenagers frequently surf the internet while on the go using mobile data on their smartphones. Cellular networks supply mobile data, which is helpful when Wi-Fi is unavailable. Public Wi-Fi can be used by teenagers in locations like malls, libraries, and cafes. When you're out of the house and have limited mobile data, it's a convenient choice. Teens may occasionally use a wired connection using an Ethernet cable, particularly at home or in other circumstances where a dependable and quick connection is required.

Though less prevalent, some teenagers may decide for a variety of reasons—such as personal preferences or financial limitations—to not use the internet frequently or to not have easy access to it. It's important to remember that many factors, such as geographic location, family resources, and personal habits, might influence the choice of data connection. Teens may also employ a combination of these alternatives, based on their individual requirements and the kinds of connections that are available to them in their surroundings.

Table 4.4: The type of data used

Class	Type of Internet used	Number
Eight	Not use	7
	Mobile data	4
	Wi-Fi	18
	Public Wi-Fi	0
Nine	Not use	6
	Mobile data	14
	Wi-Fi	28
	Public Wi-Fi	0
Ten	Not Use	5
	Mobile data	14
	Wi -Fi	14
	Public Wi-Fi	1

Table shows that maximum number of student using Wi-Fi as their first internet choice. It almost 58 (52.3%) number of student. 31 (27.9%) number of student are using mobile data and 26 (23.4%) number of student are not using any kind of data. It is notable that only 2.3% student using public Wi-Fi.

Bar diagram showing the type of data used

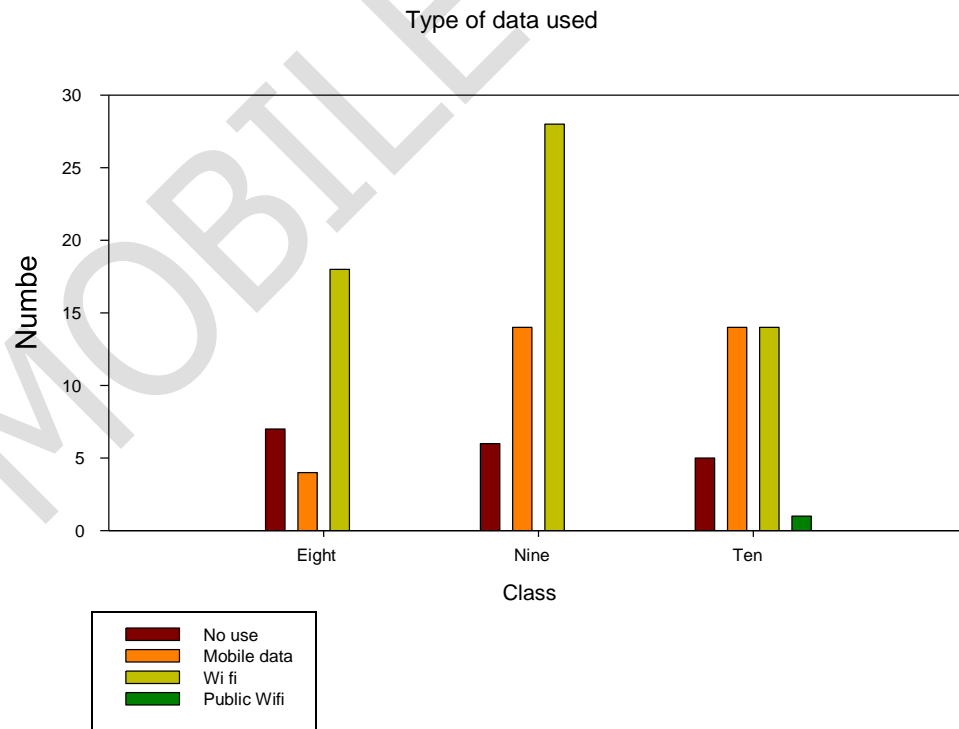


Figure 4.8: Type of data used

4.5 Average MB used per month

Depending on personal preferences, the kind of online activities engaged in, and the accessibility of Wi-Fi, the typical data usage might vary significantly. A light internet user may use 1-2 GB of data per month if they primarily use social media and peruse webpages. People who watch movies on websites like YouTube or Netflix on a regular basis can consume a lot more data. One hour of standard-definition streaming can take up to 1 GB of data, whereas an hour of high-definition streaming can use up to 3 GB.

Depending on how intense their online activities are, students that participate in online research, classes, and instructional content may utilize different amounts of data. The monthly amount can vary from a few hundred megabytes to many gigabytes. Depending on the game and how often it is played, online multiplayer games can use anywhere from a few hundred megabytes to a few gigabytes of data every month. In general, using voice calls, video calls, and messaging apps uses less data than streaming videos. But the total can go higher based on how often and how long you communicate.

Additionally, a lot of children have access to Wi-Fi at home or at school, which can help them rely less on mobile data. When students are not in these places, they might mostly use mobile data if Wi-Fi is easily accessible.

Table 4.5: Average MB used per month

Class	MB used per month (GB)	Frequency
Eight	0	12
	1-5	3
	6-10	4
	11-20	3
	>20	7
Nine	0	11
	1-5	7
	6-10	7
	11-20	5
	>20	18
Ten	0	11
	1-5	6
	6-10	9
	11-20	2
	>20	6

Table shows that 25.2% number of student using more than 20 GB data in per month.18.9% number of student using mobile data between 1-5 GB in per month,18% between 6-10 and 9% between 11-20 used internet. It is note that 28.8% number of student are not using any kind of internet. Many students also have access to Wi-Fi at home or school, which can significantly reduce the reliance on mobile data. If Wi-Fi is readily available, students may primarily use mobile data when they are away from these locations.

Bar diagram showing the average MB used per month in GB

Average mb used per month in GB

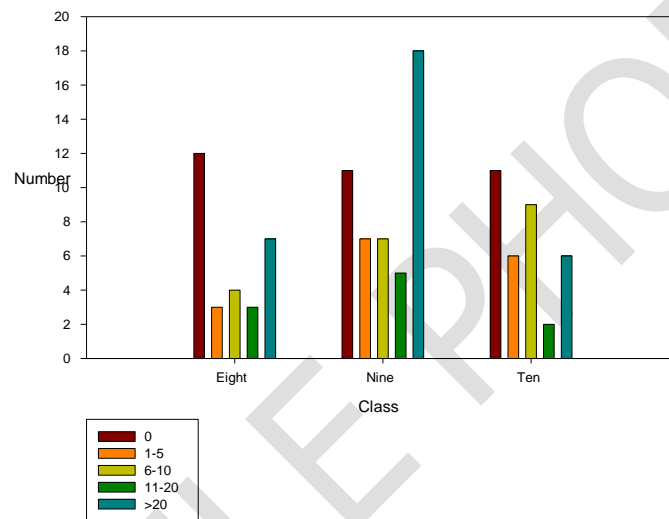


Figure 4.9: MB use per month

4.6 Average time spend in mobile phone (hours)

Depending on personal preferences, routines, and the accessibility of technology, students' mobile phone usage can vary greatly. Some secondary school kids might use their phones for rudimentary internet browsing, infrequent social media checks, and basic communication. This demographic may use their phones for one to two hours a day on average. Students may spend two to four hours a day on their mobile devices if they utilize them for social networking, communication, entertainment, and education. It's possible that some kids use technology excessively, participating in online gaming, streaming videos, social networking, and other activities. These people may use their phones for more than four hours per day.

Table 4.6: Average time spend in mobile in hours.

Class	Time spend in hours	Frequency
Eight	0-1	11
	2-3	14
	4-6	2
	>6	2
Nine	0-1	25
	2-3	15
	4-6	5
	>6	3
Ten	0-1	10
	2-3	12
	4-6	5
	>6	7

Table shows that 44.1% Students using mobile phone less than 1 hours per day.37.8% number of students using mobile phone 2-3 hours per day and 10.8% number of student using mobile phone 4-6 hours per day. Only 3.6% number of student spend more than 6 hours per day. Balancing screen time with other activities, such as physical exercise, reading, and face-to-face social interactions, is essential for maintaining a healthy lifestyle. It's also worth considering the educational aspects of mobile device usage, as some students may use smartphones and tablets for educational purposes, including research, reading ebooks, and participating in online learning.

Bar diagram showing the average time spend in hours

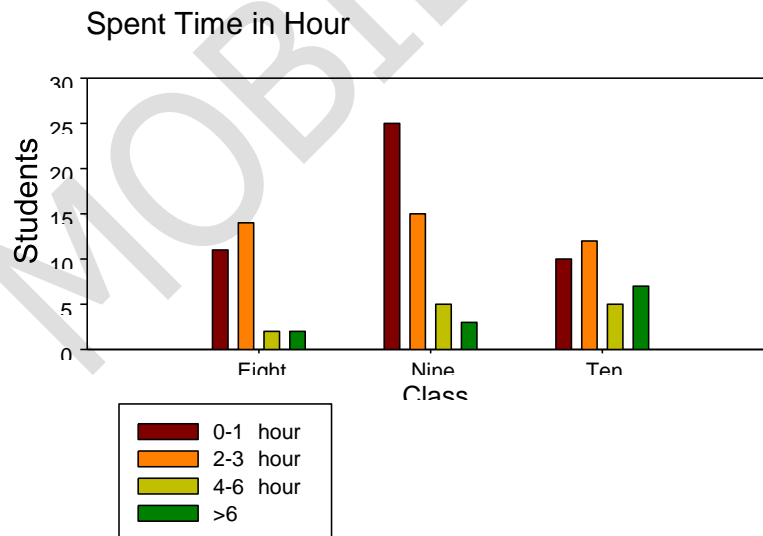


Figure 4.10: Time spent in days (hours)

4.7 Kinds of activities on mobile phone

Adolescents attending secondary schools use their phones for a multitude of purposes. The particular activities may change depending on personal tastes, cultural norms, and advancements in technology. Secondary school teenagers utilize their phones for a variety of instructional purposes. Pupils can more effectively organize and go over their class notes by using mobile note-taking apps. For this use, popular apps include Evernote, Microsoft OneNote, and Google Keep. On their mobile devices, a lot of students access e-books and digital textbooks. They may now conveniently handle several books without the added weight. Many educational apps are available to assist students in a variety of areas, including science, math, languages, and more. These apps frequently come with interactive tests, tutorials, and other resources.

Mobile phones are useful resources for studying for tests. To help students better comprehend a variety of subjects, applications that include study aids, flashcards, and practice questions can be used. Teenagers may utilize mobile devices to attend virtual classrooms like Zoom, Microsoft Teams, or Google Meet, especially in the context of blended or distant learning. Teenagers are big users of mobile phones for social media on sites like Facebook, Instagram, Snapchat, and Tik-Tok. They converse with friends and exchange updates, pictures, and videos. Teenagers communicate mostly through texting and instant messaging apps like Snapchat, Messenger, and WhatsApp.

Teenagers love to play games on their phones. They could enjoy everything from simple games to more intricate and engaging ones. Teenagers are using their phones more and more for online study, educational apps, and information research due to the growing incorporation of technology in the classroom. Teens frequently view videos on websites like Netflix, YouTube, and other streaming services. They might also produce and distribute original video material. It's normal practice to listen to music via apps like Apple Music or Spotify. These services allow teenagers to make playlists and find new music.

Table 4.7: The type of activities on mobile phone

Class	Kinds of activities	Frequency
Eight	Communication	11
	Free Caller	3
	Social Media	9
	Gaming	15
	Music	3
	Education	23
	Others	2
Nine	Communication	16
	Free Caller	8
	Social Media	16
	Gaming	11
	Music	7
	Education	36
	Others	7
Ten	Communication	8
	Free Caller	4
	Social Media	13
	Gaming	6
	Music	10
	Education	17
	Others	5

Maximum 62.2% number of students using mobile phone for their educational purpose. Where as 32.4% student using mobile phone for their communication, 33.3% students using for social media, 41.4% for listening music, 22.5% for gaming, 11.7% for free caller and 22.5% number of students using mobile phone for various others purpose. These activities can vary, and not all teenagers engage in the same behaviors. Additionally, the use of mobile phones among teenagers should be balanced with other offline activities to ensure a well-rounded lifestyle. Parents and educators often play a role in guiding teenagers to use technology responsibly and safely.

Here Bar diagram showing the number of activities on Mobile Phone
Using Mobile Phone

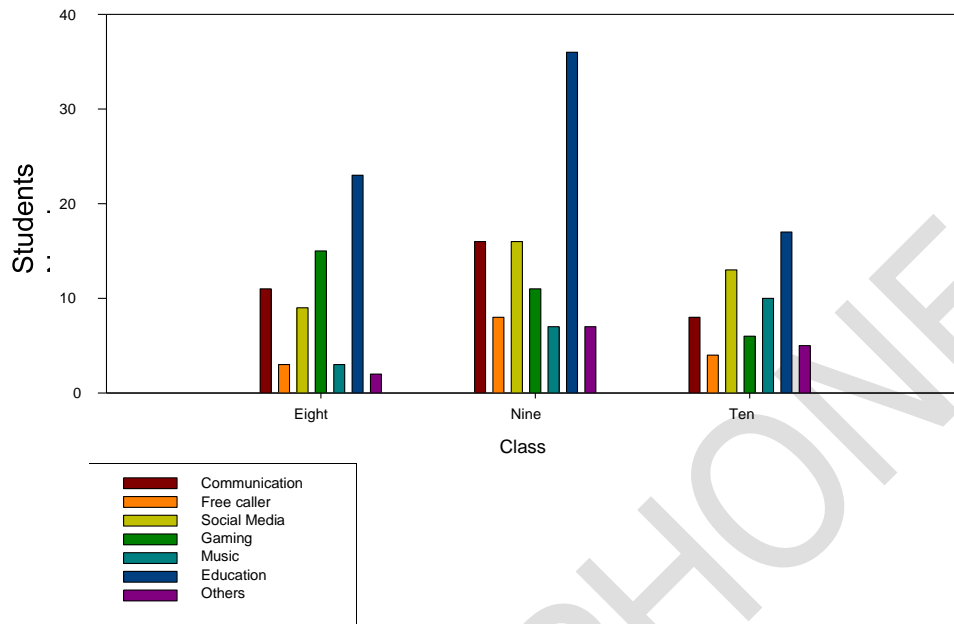


Figure 4.11: Type of activities on mobile phone

4.8 Accessing Pornography site visit

It's critical to understand that people in secondary school should not have access to explicit content, including pornography. Early exposure to explicit content can be detrimental to a child's social, psychological, and emotional growth. Unrestricted access to sexual content on the internet presents difficulties that parents, schools, and guardians must be aware of and handle. Teach kids the value of respecting oneself and others online, as well as how to use the internet responsibly. Stress the possible long-term repercussions of disclosing private information or acting inappropriately online.

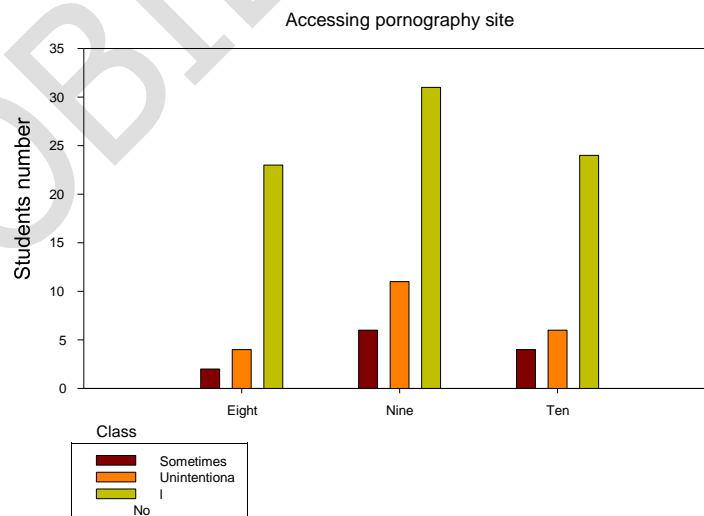
Table 4.8: Accessing pornography site

Class	Visit pornography site	Number
Eight	Unintentional	4
	No	23
	Sometimes	2
Nine	Unintentional	11
	No	31
	Sometimes	6
Ten	Unintentional	6
	No	24
	Sometimes	4

The fact that pupils are not shown an interest in visiting pornographic websites is promising and positive. This may be the result of a number of things, such as good online safety education, solid family values, encouraging peer interactions, and a positive perspective on relationships and sexuality.

Table shows that 82% number of students are not showing interest in accessing pornography site. Whereas only 4.5% of students access pornography on a irregular basis and 13.5% number of students access the site unintentionally. It's critical to keep creating an environment that encourages responsible online activity and great relationship attitudes if we want to sustain this encouraging trend.

Bar diagram showing the accessing pornography site.

**Figure 4.12:** Accessing pornography site

4.9 Group chatting on mobile phone

Teenagers love group chatting because it gives them a platform for connection, communication, and social interaction. Teenagers can interact, exchange stories, and maintain connections with their classmates by using mobile group chat applications. Teens can socialize and forge closer bonds with their pals through group chats. They can talk about shared hobbies, give each other life updates, and deepen their friendships. Teens may easily converse in real time using group chats. They may exchange ideas, pose queries, and get prompt answers, which promotes a feeling of direct connection. Teens frequently organize arrangements for events, trips, or group activities via group chats. It's a useful method for keeping track of social circle events and staying organized.

Table 4.9: Group chatting on mobile phone

Class	Group Chat	Number
Eight	Yes	12
	No	12
	Sometimes	4
Nine	Yes	11
	No	18
	Sometimes	19
Ten	Yes	11
	No	15
	Sometimes	8

Table shows that 40.5% are not interested in group chatting, on the other hand 31.5% are highly interested in group chatting and 28.8% number of students using group chat on a irregular basis. Given that group chats are so vital to teenagers' social development, it is imperative that parents and educators understand the benefits of this activity. Teens must, however, also be taught about appropriate internet conduct, cyberbullying, and the possible dangers of oversharing personal information in group chats. Teenagers can use open communication and guidance to safely and responsibly navigate the digital world.

Bar diagram showing the group chat activities

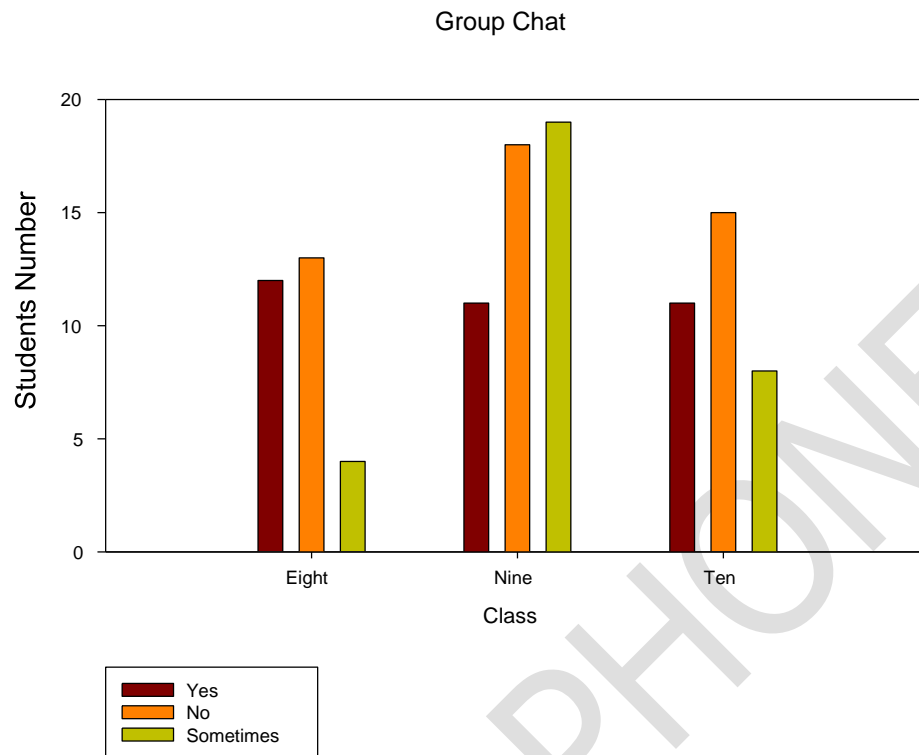


Figure 4.13: Group chatting on mobile phone

4.10 Significance health impact

Teenagers' use of mobile phones has an impact on their health, both positively and negatively. Individual experiences may differ, and the total effect is contingent upon a number of variables, including the volume of use, the type of content accessible, and the responsible management of technology. Because of the blue light that mobile devices emit and the stimulation of interesting material, using a phone right before bed might throw off sleep patterns. Overuse of mobile phones can lead to physical health problems like headaches, neck and back pain (which is frequently linked to bad posture when using devices), and eye strain.

Anxiety, despair, and low self-esteem are among the mental health conditions that can be exacerbated by excessive use, social media pressure, and exposure to certain content. Cyberbullying can occur on mobile devices and has a detrimental effect on a teen's mental health and general wellbeing. Some kids may become dependent on their phones, which could result in addictive behaviors and cause problems with day-to-day activities, obligations, and in-person relationships. Sharing events, pictures, or personal information

inappropriately online might raise privacy issues and have unfavorable effects. **Table 4.10: Significance health impact**

Class	Health Impact	Number
Eight	No	21
	Headache and pain	2
	Vision loss	6
	Tiredness	0
Nine	No	25
	Headache and pain	10
	Vision loss	11
	Tiredness	1
Ten	No	21
	Headache and pain	3
	Vision loss	7
	Tiredness	3

Table shows that 59.5% number of students do not feel any negative health impact by using mobile phone. Whereas 17.1% number of students feels headache and pain, 22.5% number of students feels vision loss and only 7.2% number of students feels tiredness. To maintain a balance between online and outside activities, set screen time limitations. To lower the risk of problems with your physical and mental health, take regular pauses from using screens. Promote healthy sleeping habits, frequent exercise, and proper posture. Recognize the material that teenagers are accessing on the internet, and promote responsible and constructive use of technology. Provide a space where teens can talk freely about their issues, worries, and experiences with technology. Even though cell phones are a common and frequently necessary component of modern life, it's important to use them responsibly and with awareness, encouraging good habits and conscientious behavior.

Bar diagram showing the health impact by using mobile phone.

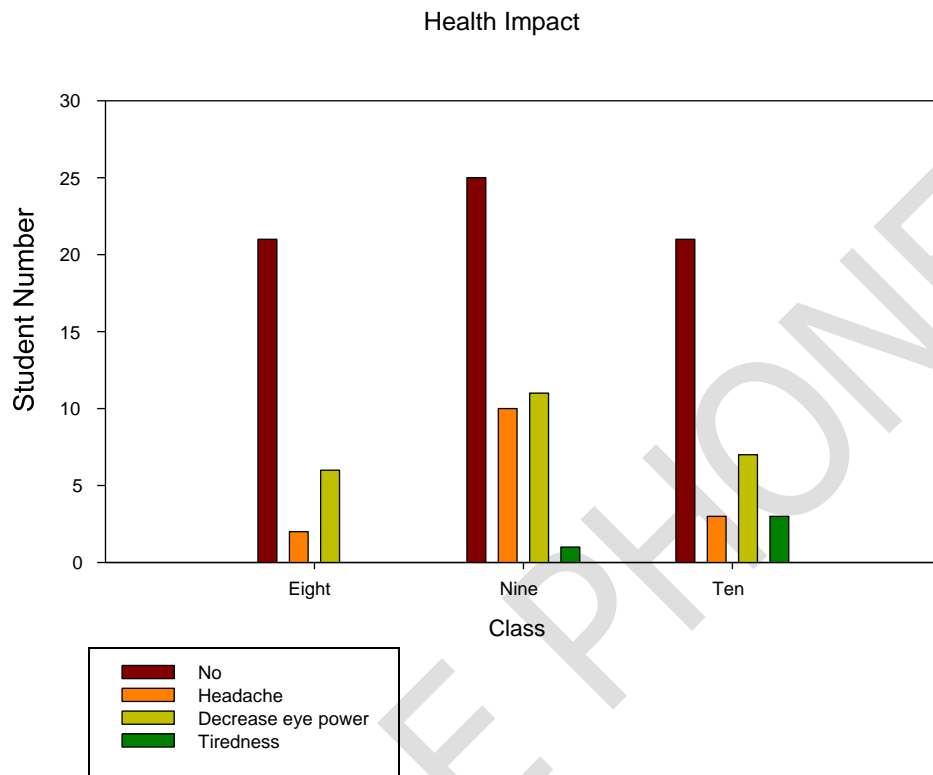


Figure 4.14: Health impact

4.11 Is mobile phone a technological hazard.

Overuse of mobile devices may result in less in-person social encounters, which could have an effect on interpersonal and communication skills. According to some research, there may be a link between problems like anxiety and depression and frequent smartphone use. Particularly social media can exacerbate emotions of social pressure or inadequacy. If not utilized appropriately, mobile phones can be a source of distraction for kids, impairing their focus and academic performance. Extended usage of mobile devices, particularly for purposes such as social media browsing or gaming, can lead to sedentary lifestyles and possible health problems.

The blue light that screens emit can disrupt sleep cycles and possibly lower the quality of sleep, which is important for teens' general health and wellbeing. Cyberbullying is made possible by mobile phones, and it can have detrimental effects on youngsters' mental health. Teens being exposed to unsuitable content or participating in unsafe behavior online are worries. Overuse of mobile devices can disrupt daily routines and duties and result in dependency or addiction. Due to the availability of educational apps, data, and resources, mobile phones can be extremely useful educational tools. Mobile phones facilitate instantaneous and effortless communication with loved ones, creating bonds.

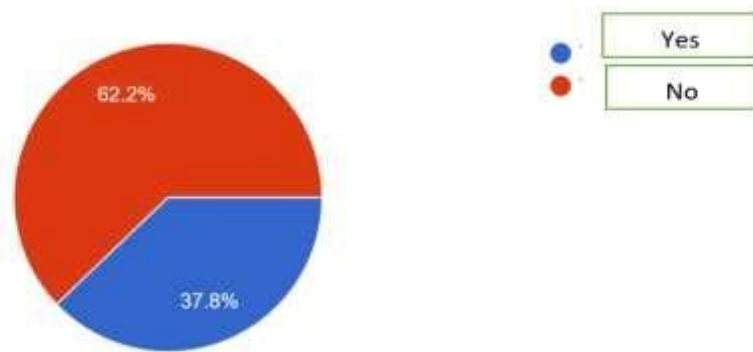


Figure 4.15: Technological hazard

Majority number of students (62.2%) do not find any kind of technological hazard when using mobile phone. Only 37.8% students considered mobile phone as a technological hazard. It's possible that because mobile phones are frequently viewed as necessary tools rather than as risks, kids do not view them as technological hazards. Mobile phones are becoming an essential part of everyday life, used for everything from entertainment to research to communication.

It's important to remember, though, that although mobile phones provide many advantages, there are risks and difficulties associated with using them. Distractions in the classroom, possible harm to mental health, and concerns about online safety and privacy are a few worries. In order to promote appropriate and thoughtful usage of mobile phones, educators and parents frequently attempt to find a middle ground.

4.12 Discussion

This study looked at the relationship between teenagers' status in the educational system and how they felt about their mobile phones as status symbols, with an emphasis on the moderating effects of academic self-concept and school attitude as well as the mediating role of academic self-concept, age, and ethnicity's roles.

Mobile phones are the main tool used by teenagers for social interaction and communication. They can easily communicate via phone calls, text messages, and video chats with their friends and family, no matter where they are in the world. This ongoing communication strengthens bonds between people and gives them a feeling of support and belonging. My project paper shows that majority number of students using mobile phone first at primary level (24.3%) followed by class eight (18.9%), class seven (14.4%), class six (10.8%), class nine (9%) and the least number of mobile at first use in class ten (6.3%). It delighted to see that 16.2% of students are not being used mobile phone yet. They are not aware about the use and abuse of mobile phone. Teenagers have unprecedented access to information and educational resources thanks to mobile phones. To enhance their education, they can download educational apps, browse the internet, and use online libraries. This wealth of information can aid in their horizon-widening, critical-thinking development, and academic success preparation. These activities can vary, and not all teenagers engage in the same behaviors. Additionally, the use of mobile phones among teenagers should be balanced with other offline activities to ensure a well-rounded lifestyle. Parents and educators often play a role in guiding teenagers to use technology responsibly and safely.

With regard to the advantages that mobile phones can offer to secondary school pupils, the following conclusions might be made:

- Enabling the usage of educational software and apps on mobile devices. Students can learn, investigate, and study online thanks to it.
- Utilizing smart phones to improve student collaboration and communication. It makes it simple for students to interact with one another and work together on a variety of projects.
- Utilizing smartphones to foster pupils' inventiveness and creativity. Pupils will be able to work creatively in a variety of ways and generate original ideas.

Additionally, when students use their phones, they should give careful thought to the following issues:

- Restricting the use of smartphones. By establishing a time limit for using their phones, students can be kept from using them excessively.
- Establishing the guidelines for mobile phone use. Establishing guidelines for using mobile phones might help educate students about their use.

- To educate children on the benefits and drawbacks of utilizing mobile devices. Students can be assisted in making wise decisions about their use of mobile phones by being made aware of the advantages and disadvantages of using them.

Among the drawbacks of mobile phones are:

- Distraction: Students' use of mobile phones can cause distractions that interfere with their academic work.
- Extra time spent: Students' use of mobile phones can lead to additional time spent, which can have an impact on their social lives, health, and sleep.
- Addictive: Students may be harmed by the addictive nature of mobile phones.

Therefore, a mobile phone's suitability for students depends on how they use it. Students may benefit if they use their mobile phones as useful educational tools. However, it can be detrimental to students if they use their phones as a source of extra time consumption or distraction. There are benefits and drawbacks to mobile phones for students, so it's unlikely that everyone will agree on this point. To lessen the potential drawbacks of mobile phones, it is crucial to teach students how to use them appropriately.

CHAPTER: 5

CONCLUSION AND RECOMMENDATION

5.1 Conclusion

The increasing prevalence of mobile phone dependency among secondary school pupils has raised both positive and negative concerns. The increasing reliance on mobile devices is a complex issue with both advantages and disadvantages. Positively, these gadgets have completely changed the way people communicate by giving them instantaneous access to a multitude of information and instant connectivity. They are effective resources for productivity, education, and world knowledge retention. But there are also issues with the growing reliance on mobile phones. Due to the widespread use of cellphones, there are now issues including fewer in-person encounters, the possibility of addiction, and distractions from work and school. The tendency for mobile applications, especially social media, to become addictive adds to worries about mental health and wellbeing. An informed and balanced approach is required to solve these issues. In order to enable people to make responsible decisions about how they use their mobile phones, it entails promoting digital literacy. Together, parents, educators, and students should create rules for responsible technology use that set reasonable limits and foster self-awareness. In addition, as technology develops, society's views and behaviors toward cell phone dependence must also change. This involves the creation of features and tools that encourage responsible use, continuous study into the psychological and social effects of smartphone use, and the promotion of an environment that values face-to-face communication and thoughtful use of technology. In essence, while mobile phones have undoubtedly transformed the way we live, work, and connect, it is crucial to approach their usage with mindfulness and responsibility. Acknowledging both the benefits and challenges allows for a more comprehensive understanding of mobile phone dependency, leading to informed decisions and practices that contribute to a healthier relationship with technology.

5.2 Recommendation

The following measures have been recommended based on the study finding-

- Establish unambiguous and uniform guidelines for using mobile phones, including as screen time restrictions, times that are off-limits (such before bed or during meals), and acceptable content.

- Responsible mobile phone use is something that parents should demonstrate for their teenagers.
- Promote an open discourse about ethical technology usage by addressing the benefits and drawbacks of using a cell phone.
- Include digital literacy courses in school curricula to inform youngsters about responsible digital citizenship, online safety, and the possible risks associated with excessive mobile phone use.
- Hold lectures and workshops to educate youngsters on the negative effects of smartphone addiction on their general well-being, sleep quality, and mental health.
- Establish designated times and locations, such as family dinners, bedrooms prior to bedtime, or in-person chats, where using a cell phone is prohibited.
- Encourage teenagers to partake in hobbies, athletics, or other offline pursuits to help them find balance and lessen their reliance on screens.
- Encourage outside activities as a way to guarantee exercise and a respite from screen usage.
- Provide talks and workshops to inform young people on the detrimental impacts of smartphone addiction on their mental, physical, and overall well-being.
- Set aside specific times and places where using a cell phone is not permitted, such as family dinners, bedrooms before bed, or in-person conversations.
- In order to assist them find balance and reduce their reliance on screens, encourage them to participate in hobbies, sports, or other offline activities.
- Promote outdoor activities as a means of ensuring physical activity and a break from using screens.

Counselors that specialize in technology-related issues or mental health specialists should be consulted if mobile phone reliance becomes a serious concern. Together, parents, teachers, and teenagers may develop a positive connection with mobile technology by putting these suggestions into practice, encouraging responsible and thoughtful use.

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