## Mobile Usage in Academic Behaviour Among School Students in Punjab

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Abstract - Smartphones have become an inextricable element of life in the twenty-first century. Because there has been little research on the relationship between mobile usage, social relationships, and academic behaviour among children in Schools, the current study will investigate the relationship between these three variables in the context of school children in Jalandhar district in Punjab. A descriptive correlational study approach was adopted to gather and analyse the data, which came from a total of 150 children who answered to an online Google form delivered through a WhatsApp link. The questionnaire's items were adapted from numerous doctoral research. Descriptive and inferential statistics such as the mean and standard deviation were used to analyse the data. Children in Jalandhar district schools were found to have a moderate instance of smartphone usage, according to the study. The findings also revealed a link between the three variables of mobile usage, social relationships, and academic behaviour. According to the data, social relationships have a favourable impact on academic behaviour, whereas mobile usage has a detrimental impact on students' academic behaviour in Schools.

*Index Terms* - Academic behaviour, mobile usage, social relationship, school students.

#### INTRODUCTION

The advent of information and communication technology (hereafter referred to as ICT) has had a considerable impact on the globe, notably in terms of linking people, facilitating seamless communication, and providing easy access to information. The fusion of communication technology, digital technology, and artificial intelligence has blurred the barriers between the physical, digital, and biological domains, resulting in a significant increase in most people's quality of life. Because technological devices or tools such as handheld communication and entertainment devices, mobile phones (including smartphones), and computers have undoubtedly become an integral part of our daily lives, the impact of these developments has become very significant.

Mobile phones have grown alongside other technologies to do more than merely make and receive phone calls and text messages as a wireless communication device. Smartphones, as their name suggests, are now capable of a wide range of complex functions. It can be used to capture, edit, and store images and videos, record and play audio and music, access the internet, send and receive instant messages and emails, connect to social media platforms, track physical activities and health-related information, live stream webinars or meetings, virtual banking, and many other things. Mobile phones have become so common in our daily lives that HuffPost's Executive Lifestyle Editor Lori Leibovich ("Smartphone Usage") has referred to them as "an extra limb."

## PROBLEM STATEMENT

The public, parents, and educators are concerned about the rising usage of smartphones among children today. However, research on the links between media usage and teenage academic achievement has shown mixed results. On the one hand, the internet and media consumption are important sources of educational enrichment that may help students improve their grades. Recent research, on the other hand, suggests that excessive usage of the internet and media, particularly for non-educational objectives, might harm academic performance (Volungis et al., 2020; Weaver et al., 2013). Numerous study findings imply that modest usage of computer games, the internet, or media might help students improve their academic performance and build cognitive abilities.

Celikkalp et al. (2020) did a study on the association between smartphone use and academic achievement, and their findings were slightly different, yet fascinating. The findings revealed that using a smartphone for learning activities was associated with improved academic performance; however, excessive or non-use was associated with poor academic performance. Other research has found that exposure to smartphone media material has a significant impact on students' academic behaviour and social relationships.

## LITERATURE REVIEW

Bandura's social learning theory (Bandura, 2002), displacement theory (Valkenburg & van der Voort, 1994), and the U & G approach were the theoretical frameworks used in this quantitative study (Katz et al., 1974). Embracing theoretical frameworks that incorporated many views would yield deeper and more in-depth insights than looking at the link between media usage and students' academic behaviour and social relationships through the prism of a single theory. Given the transitory phase of adolescence, which is typically distinguished by intense investigation and creation of gender identity (Arnett, 1994), media's impact on young people is complex and changing. As a result, rather than focusing on one discipline, an evaluation of the relational effect of media on teenagers benefits from a multidisciplinary approach.

The social learning theory of Albert Bandura provides a theoretical framework for studying the impact of media content on the aggressive behaviours of young people. These negative social behaviours were acquired through observation, modelling, and imitation, according to social learning theory (Bandura, 2002; Bandura et al., 1963). The idea held that social and environmental cues functioning in a certain situational setting might influence behaviour, and that learning new behaviours was the result of seeing others' behaviours and recording the seen information in memory.

As a result, it's been hypothesised that aggressive behaviours represented in smartphone media material may have been preserved in the students minds and maybe repeated if bold characters' observations were constant. Although the majority of studies on video games have focused on their impact on aggressiveness, there have been few that have emphasised the benefits of non-violent video games.

According to the media displacement hypothesis, people have a finite amount of time and attention, and

participating in one communication activity reduces one's capacity to participate in others (Xie, 2016). In other words, time spent on media would cut into time spent on other activities such as intellectual (reading and studying), creative (free play and creating), and physical (sports and hiking) activities (Hofferth, 2009; Neuman, 1995; Xie, 2016). In this aspect, media displacement theory and Valkenburg and van der Voort's reduction hypothesis shared a similar viewpoint (1994). According to the idea, the distinctive nature of media acts as a deterrent to users' intellectual processing, resulting in low academic achievement.

Online entertainment and social networking sites such as Facebook, YouTube, Instagram, Tik Tok, and emails are examples of media in this context. Excessive media usage, according to both theory and hypothesis, might influence students' academic performance by displacing other important activities for their academic growth, such as reading and studying, obtaining enough sleep, and engaging in physical activities. Shann (2001) discovered that exposing adolescents to the media for up to 10 hours per week has a detrimental impact on their academic performance. Minimal media use, on the other hand, has not always been associated with a risk to academic performance, as the amount of time displaced may be insignificant when compared to the amount of time required for educational activities (Hofferth, 2010).

Adolescent media consumption has a negative impact not just on their academic achievement, but also on their pro-social behaviour.

It has been proposed that excessive media use may have a detrimental impact on teenage attendance at school and interactions with instructors, parents, and peers. Several studies have revealed that teenagers who utilised media more regularly had worse selfesteem, were more socially isolated, were unable to relate to others, and were more reliant on media.

As a result, according to media displacement theory, the more time teenagers spent on non-academic activities like watching television, the less time they spent on constructive activities like reading, studying, sports, sleeping, and engaging in pro-social behaviour.

#### **REVIEW ON MOBILE PHONE**

Mobile phones are a vital tool for adults, as well as teenagers and young adults, particularly students enrolled in post-secondary schools. Early individuals between the ages of 13 and 25 years (IPPBM, 1999) were exposed to electronic gadgets from a young age and appeared to have apparent comfort, confidence, and familiarity navigating different devices (Nguyen et al., 2020). Children have been dubbed "digital natives" as a result of this (Donnie et al., 2018). Park and Lee (2012) reported in one of their studies that school students' use of the internet and smartphones had increased dramatically in recent years. Students were not only using it to communicate with family members and foster relationships among peers (Auter, 2007), but they were also using it for educational purposes, such as group discussions via instant messaging applications, accessing notes on learning management systems, or simply searching for information. Higher education classrooms are becoming increasingly diverse, and technology integration has become critical to providing a responsive learning environment for students to maximise their potential (Awang-Hashim et al., 2019). As a result, incorporating technology and the usage of mobile phones into school courses has become a must. Many colleges, on the other hand, have already attempted to limit smartphone usage during class hours, citing it as a disruptive use of technology during the teaching-learning process. Nonetheless, the smartphone's capability and significance, particularly in e-learning, has grown in importance to the point that it can no longer be ignored (Wali & Omaid, 2020).

#### MOBILE USAGE

Because not all school students have the expertise and understanding of how to use technology effectively and responsibly, they are the most exposed to the negative consequences of excessive use of electronic gadgets. Technological gadgets have been shown to have a disruptive influence on one's life (Dian et al., 2020), and the usage of mobile phones has been observed to be a double-edged sword, particularly for youngsters (Park & Lee, 2012). According to Chandrasena et al. (2005), while smartphone use may be advantageous to youngsters, there are also risks associated with excessive use. College students' irresponsible usage of mobile phones will diminish their focus during class lectures, cause billing concerns, cause them to develop risky driving behaviours, and finally lead to mobile phone usage (Hiscock, 2004; Lepp et al., 2014).

Other negative consequences of smart phone usage in class included lower attention on courses and tasks, as well as a diminished capacity to comprehend knowledge during lectures (Ehrenberg et al., 2008). Apart from that, smart phone usage has been shown to have a detrimental influence on student social skills such as face-to-face communication and social interactions (Pierce, 2009). It may cause mental and physical problems, as well as affect their academic performance (Thomee et al., 2011).

Mobile phone usage, according to Billieux (2012), can impair a person's social life, behaviour, and emotions. Apart from that, it can induce wrist discomfort, exhaustion, poor vision, anxiety, sleep difficulties, and, worst of all, it can cause accidents when used while driving (Lee et al., 2014; "Signs and Symptoms," n.d.; Walsh et al., 2008). All of these issues might arise as a result of a failure to selfregulate mobile phone use until it becomes a risk to oneself and others. According to Kim et al. (2014), the average daily use of the smartphone device caused 43.4 percent of mobile phone usage. To put it another way, the more time a person spends on a mobile device, the more likely he or she is to develop a usage. Mobile Usage and Social relationships

Individuals who suffer from mobile usage are more sensitive to social interactions and feel more unpleasant emotions than those who are not addicted. Przybylski and Weinstein (2012) found that smartphone usage was linked to negative feelings including despair and anxiety.

People with severe anxiety or depression have also been observed to avoid face-to-face talks because social contact, with its delicate conversational subtleties, is difficult for them to handle. For example, Babadi Akashe and Zamani (2014) found that students addicted to mobile phones were "affected with depressive disorder (17.30 percent), obsessivecompulsive disorder (14.20 percent), and Social sensitivity (13.80 percent)" in their study on mental health and mobile phone usage among school students in Iran (p. 93).

Rosen (2011) observed that children who were hooked to their phones acted narcissistically and had difficulty forming social relationships. Based on their study of undergraduates, Volungis et al. (2020) found that students who spent more time on their smart phones had greater levels of social and emotional discomfort, as well as neuroticism. Celikkalp et al. (2020) discovered that communication skills scores decreased as usage scores increased in another study including young adult students. Without effective communication abilities, it is difficult to form any type of connection. As a result, it is clear that the research has shown an underlying link between mobile phone usage and social relationships, which frequently leads to bad feelings or relationship troubles.

## MOBILE USAGE AND ACADEMIC BEHAVIOUR

In addition, multiple studies have found a link between smart phones usage and poor academic performance among pupils. Kibona and Mgaya (2015) discovered a link between smartphone usage and poor academic performance among Tanzanian students of all ages, genders, and marital status. These findings are consistent with those of Albarashdi et al. (2016), who highlighted mobile phone usage as a side effect that may contribute to poor academic performance in students. There were two key causes for students becoming mobile phone addicts, according to Albarashdi et al. (2016). The first was due to their excessive reliance on smart phones as a means of avoiding loneliness. Second, most device manufacturers' marketing strategies are ineffective. In their commercials, they specifically targeted these young adults. Some even profited off well-known musicians or worldwide celebrities. Blackpink, for example, uses brand ambassadors to advertise their products. smartphones. Aside from that, these companies had to compete with each other. They were motivated to make the best product for each other via their products. to attract young people, the most up-todate smartphone versions and applications folks. The rising craze for mobile gadgets, in particular Researchers have been prompted by the rise of generation Z and the digital natives to advocate for the spread of meaningful and enjoyable activities aimed at to divert youths' attention, youths can organise fun runs and sports events.

Much work remains to be done, and government and stakeholder actions are critical if we are to reduce smart phone usage, which has a negative impact on students' academic performance at school level. This also necessitates raising awareness of mobile phone usage among young individuals and those who are more vulnerable, as well as assisting them in becoming more responsible and thereby recognising the right use of mobile phones in daily life. As a result, the current study felt it was necessary to first investigate the current state of mobile phone usage among children in Jalandhar district higher education institutions before considering possible solutions.

## MOBILE USAGE, SOCIAL RELATIONSHIP AND ACADEMIC BEHAVIOUR

According to the Smartphone User Report, smartphone users in India spent an average of 288 minutes per day on their devices, or 4.8 hours per day. According to reports, Jalandhar district smartphone users mostly utilised their devices to browse social media and chat apps. Smartphones have been discovered to be a flexible communication and sociability tool that may help people improve their social interactions. It is also used as a tool to exert social influence and increase persuasive power (Ding et al., 2011). These findings show that smartphones, particularly among the younger generation, play an important role in influencing a community's techno culture.

Despite its benefits, it has been shown that excessive and unregulated smartphone usage can lead to negative consequences such as smartphone usage. Due to the users' inability to regulate their usage of the gadget, previous research has classified smartphone usage as a sort of behavioural usage. Smartphone usage, particularly among school students, may result in mental health difficulties as well as a drop in academic performance. Excessive usage of mobile phones has also been linked to a variety of health issues, including headaches, weariness, decreased attention, sleeplessness, and hearing issues. It has also been suggested that this usage may cause certain social connection issues, such as the development of poor self-esteem, extroversion, stronger approval drive, and more self-monitoring. These signs are more noticeable in those who are addicted to their phones.

Smartphone usage has been shown in studies to affect an individual's social health. Inappropriate mobile phone usage, according to Dayapoglu et al. (2016), can negatively impair face-to-face social connection, leading to anti-social emotions even among family members. This finding was supported by a study conducted by Ar. (2013), which found that the duration of mobile phone use was significantly higher not only among those who were addicted to it, but also among adolescents who felt lonely or disconnected from others. In addition, Engelberg and Sjöberg (2004) discovered a link between smartphone usage and behavioural issues such as poor social skills, low self-confidence, and low self -esteem. Overall, this research has highlighted the harmful impact of mobile devices. What impact might phone usage have on the growth or maintenance of social interactions this might have a negative influence. Young teenagers who needed to develop key social skills in order to succeed in their studies upcoming endeavours.

### **RESEARCH OBJECTIVES**

1. The goal of this study was to estimate the general mean of mobile usage, social relationships, and academic behaviour among school students.

2. To see if there's a link between mobile usage, social relationships, and academic performance among children in school.

3. The goal of this study was to determine the relative contributions of mobile usage and social relationships on the variance score of academic behaviour among school students.

#### METHODOLOGY

The association between mobile addition, social relationships, and academic behaviour among school students was investigated using a quantitative research paradigm in this study. In a cross-sectional study, a descriptive correlational research design with a survey questionnaire was judged adequate for studying the correlations between these three factors.

#### SAMPLING AND RESEARCH INSTRUMENT

A total of 150 children in school were chosen to respond to the survey questionnaire using simple random sampling, and 110 (73.3 percent) completed it. The study's participants were chosen from a publicschool in Jalandhar district, and the majority of them own a smartphone. However, data collecting was seriously hampered by the second wave of Covid-19 outbreak in May, 2021. Many students had to resort to online learning at home, and the majority of them had to discontinue their participation in the research survey due to a poor networking service in their hometowns.

## INSTRUMENTATION

A survey questionnaire adapted from a few previous studies was used as the primary instrument in this study. In a cross-sectional study, the survey questionnaire is essential for gathering data from many variables.

## MOBILE USAGE

"A condition involving obsessive misuse of mobile technology, commonly characterised as the number of times people access their devices or the overall amount of time they spend online over a specific period," according to Rouse (2018, p.1).

The current study used items adapted from a previous research study conducted by Noradilah (2012) to assess mobile phone usage levels. The questionnaire utilised in this study had 30 questions and was separated into four categories: relationship, usage, good impacts, and negative effects. The participants marked the answer with which they agreed about their mobile usage in the past six months, on a 6-point Likert-type scale (1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Somewhat Agree, and 5 = Agree, 6 = Strongly Agree). The higher the mean score would mean the higher the level of mobile usage.

## SOCIAL RELATIONSHIP

"The relations between individuals, including friendship and personal relationships," according to the definition of a social relationship (Oxford Reference, 2021, p.1). Procidano & Heller, 1983; Rubin et al., 1988; Mccarroll et al., 2008; Lanette et al., 2018) based their measurement of social relationships on a thorough examination of the extensive literature from many cultures and nations. The three dimensions of the relationship of interest in this study, namely, relationship with family, relationship with friends, and relationship in social media, were supported by the social relationship construct measurement. There was a total of 18 elements in this build. The participants were instructed to mark the answer on a 6-point Likert-type scale (1 =Strongly Disagree, 2 = Disagree, 3 = SomewhatDisagree, 4 = Somewhat Agree, and 5 = Agree, 6

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=Strongly Agree), to reflect their assessment of how their social relationship was affected by the use of a smartphone. A higher mean score would reflect a more desirable social relationship.

## ACADEMIC BEHAVIOUR

Academic behaviour (Wentzel, 1993) has been characterised as a collection of academically desirable behaviours that contribute to academic achievement. Hoffman (2009), Amez and Baert (2020), and Okafor et al. adopted the newly formed concept of academic behaviour from previous investigations (2020). There are a total of 20 items in this academic behaviour construct. These items were graded on a 6-point Likert scale ranging from 1 (Strongly Disagree) to 6 (Strongly Agree) (Strongly Agree). The participants were asked to rate how often they agreed that their academic behaviour had been influenced by smartphone use in the previous six months. A higher mean score would indicate better academic performance.

## RELIABILITY AND VALIDITY

To ensure that the measures were correct and that the questionnaire had a sufficiently representative collection of items, instrument validation and reliability tests were conducted. Two senior psychology lecturers were invited to verify the content validity of the items since they were regarded education specialists when it came to the instrument's validity. There were no things removed, and only minor adjustments to the text structure of the items were made. Cronbach Alpha analysis, a widely utilised approach, was performed to assess the instrument's reliability. The Cronbach Alpha values for mobile usage (.88), Social relationships (.83), and academic behaviour (.85) were declared reliable as a consequence of the reliability coefficient indexes produced (see Exhibit 4). According to Hair et al. (1998), alpha values of more than 0.70 or higher are considered acceptable. As a result, this instrument has met the survey study's most important requirements of validity and reliability.

## DATA COLLECTION AND STATISTICAL ANALYSIS

The information was gathered using a Google Form, and the link was shared with students through WhatsApp groups. The data was analysed with SPSS version 20, and descriptive statistics like the mean and standard deviation were used to explain the variables of mobile usage, social relationships, and academic behaviour.

According to the United States' National Centre for Education Evaluation and Regional Assistance (2017), descriptive analysis may characterise the world or a phenomenon by answering questions such as who, what, where, when, and to what extent. Whether the goal is to discover and describe trends and variation in populations, develop novel measures of essential phenomena, or characterise samples and in studies aimed at finding causal effects, description is an important aspect of the scientific process in general and education research in particular.

Because there hasn't been much study on smartphone usage, a descriptive analysis will aid in the provision of information to potential researchers. A wide understanding of the study data, particularly in relation to its local context in the meanwhile, inferential statistical techniques such as correlation and regression are used to make inferences. The use of multiple regression was crucial in determining the association. Between the three variables, as well as the impact of other factors such hours spent, ethnicity, age, gender, smartphone usage, and personal information. The impact of social status and social relationships on academic performance. These have a different variant score.

#### FINDINGS

Mobile Usage among Children in a school. The findings revealed that the majority of the children in the survey believed that mobile usage might have negative physical and physiological consequences. While using smart phones, they claimed to experiencing little pain in their wrists or the back of their neck (M=3.51, SD=1.42). They also said that they had a minor headache or blurred vision (M=3.70, SD=1.39) and that they were weary as a result of insufficient sleep caused by excessive smartphone use (M=3.97, SD=1.27). They also had negative psychological effects, such as the desire to use their smartphone right after stopping using it (M=3.89, SD=1.24), the feeling that their life would be empty

without the smartphone (M=3.98, SD=1.31), and the belief that they could only relieve stress by using a smartphone (M=3.98, SD=1.31).

These replies suggested that these young school students have experienced the physical and psychological repercussions of excessive mobile phone usage and reliance to some extent. The data also revealed an above-average mobile phone usage among the respondents, with these children indicating that they would never give up their smart phones, even if it had a significant impact on their everyday lives (M=3.54, SD=1.22). They also felt unable to cope if they did not have their smart phones with them (M=3.59, SD=1.60), and as a result, they have attempted several times to reduce their smartphone usage, but their efforts have always failed (M=3.88, SD=1.19). The mean and standard deviation for each item is shown in Exhibit 1.

#### Exhibit 1

Mobile Usage among Children in School (n=110)	Mobile	Usage among	Children in	School	(n=110)
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Mobile Usage among Young Adults	Mean	Standard Deviation
Relationship Dimensions		
I get the feeling that my online friends know me better than my real-life friends.	2.38	1.43
I prefer to communicate with my online friends, hang out with my real-life friends, or spend time with my family members.	2.45	1.43
I have the feeling that my online friendships are more intimate than my real-life friendships.	2.65	1.43
Usage Dimensions		
It would be as painful as losing a friend if I couldn't use my smartphone.	2.62	1.24
People around me complain that I spend too much time on my smartphone.	2.72	1.34
Taking my smartphone to the washroom, even if I'm in a rush to get there	2.95	1.47
When I'm interrupted while using my phone, I get irritated.	3.15	1.17
Even when I'm not using it, I'm thinking about my smartphone	3.18	1.43
When I don't have my phone in my hand, I get easily irritated and worried.	3.24	1.43
Mobile Usage among Young Adults	2.67	1.20
I'm constantly checking my phone to make sure I don't miss any Twitter or Facebook conversations.	3.67	1.30
Even though it already has a significant impact on my daily life, I will never give up using my smartphone.	3.54	1.22
I'm getting the urge to use my phone again, just a few days after I stopped using it.	3.79	1.23
I was using my smart phone for longer than I had planned.	4.34	1.21

Positive Effect Dimension		
When using a smartphone, I feel the most liberated.	3.56	1.16
It's great to be able to meet more people through the use of my smartphone.	3.57	1.34
While using a smartphone, you may experience a sense of calm	3.97	1.17
Without my smartphone, my life would	3.68	1.31
be incomplete. When it comes to using a smartphone, you feel confident.	4.19	1.04
While using a smartphone, you may experience a pleasant or exciting sensation.	4.22	1.08
Being able to relieve stress through the use of a smartphone	4.36	1.78
Adverse Effect Dimensions		
I won't be capable of working without a smartphone.	3.51	1.30
fully charged battery lasts only a few hours.	3.58	1.64
Excessive smartphone use is causing a light headache or blurred vision.	3.57	1.47
Right after waking up, I check Social Media sites like Twitter or Facebook.	3.81	1.42
Due to smartphone use, you're having trouble concentrating in class, on assignments, or at work.	3.84	1.33
Rather than asking others, I prefer to use my smartphone to search.	3.84	1.32
Due to the use of a smartphone, employees are missing scheduled work.	3.67	1.20
I've tried numerous times to reduce the amount of time I spend on my smartphone but have always failed.	3.78	1.29
Excessive smartphone use makes you tired and prevents you from getting enough sleep.	3.91	1.23
Overall Mobile Usage	3.52	0.67

Note. Likert scale: 1=Strongly Disagree, 2=Disagree, 3=Somewhat disagree, 4=Somewhat agree, 5=Agree, 6= Strongly Agree.

Despite the negative consequences of smartphone usage, the majority of students reported that they felt pleased or delighted while using a smartphone (M=4.28), and that they were able to relieve stress while using their smart phones (M=4.32). These high items mean scores may explain why students used their smartphones for longer than they anticipated (M=4.45). Overall, the findings suggested that students were prone to excessive use of mobile phones, which was clearly an indication of mobile usage (M=3.52), and that this trend could be harmful to students' well-being and commitment to their studies; thus, intervention from relevant higher education institutions is required.

# SOCIAL RELATIONSHIP AMONG CHILDREN IN A SCHOOL

Exhibit 2 depicts the social relationships of school students in Jalandhar district. The findings reveal that students' social relationships were normal long before they had access to a smartphone. The total score for this construct (M=3.22 and SD=.84) revealed this presmartphone use stage finding. This was due to the fact that the majority of respondents disagreed that their use of a mobile phone had impacted their social relationships. This indicated that they did not believe smart phones had aided in the development of their connection, since their friendships and family relationships were already tight before they acquired a smartphone.

Furthermore, the students claimed that their family and friends had never requested them to put their phones away during meals since they began using smart phones (M=3.39, SD=1.56). This result suggested that the student's family and friends did not regard smart phones as a source of conflict in their connection. However, it is concerning to observe that students did not believe that excessive smartphone use will harm their relationships with family and friends (M=3.48, SD=1.68). This raises the likelihood that pupils were unaware of the negative consequences of their excessive smartphone use.

#### Exhibit 2

The Social Relationship among Children in a School (n=110)

Social Relationship among Students	Mean	Standard
		Deviation
Relationship with Family		
When I use a smartphone to	2.43	1.11
communicate my problem, my		
family and friends feel more		
comfortable with me.		
My family tries to assist me in	2.69	1.40
overcoming my smartphone usage.		
I consider my relationship with	3.24	1.45
family members to be close now that		
I have a smartphone.		
To keep my relationship with my	3.38	1.61
spouse safe, I put a security code on		
my phone.		
During meals, my family requested	3.39	1.56
that I put my phone away or turn it		
off.		
I recognise that excessive	3.47	1.67
smartphone use may jeopardise my		
relationship with my family, but I		
continue to ignore this fact.		
Relationship in social media		
Because networking apps work	2.38	1.45
better for me, I avoid talking about		
my problem face to face.		
My family believes that I spend far	3.18	1.31
too much time on social media.		

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When I haven't logged onto social	3.64	1.28
media for a while, I feel out of touch.		
I think I'm good at using a	3.63	1.44
smartphone to help others solve		
problems because it saves me more		
time and money than meeting them		
in person.		
I consider myself a member of the	3.70	1.16
social networking community.		
When I used my Smartphone, I felt	3.97	0.096
connected to my friends.		
Relationship with Friends		
I prefer having virtual friends to	2.63	1.43
meeting up with real friends in		
person.		
My friends are closer to me now that	2.75	1.22
they are aware of my true feelings		
while chatting on a smartphone.		
When I use a smartphone to	2.91	1.34
communicate with my friends, I find		
myself to be funnier and happier.		
On my smartphone, I spend the	3.12	1.34
majority of my time discussing my		
problems with my friends.		
Since I've acquired a smartphone, I	3.37	1.41
consider my friendships to be close.		
I believe that if my friend and I	3.65	1.14
communicate frequently via		
smartphone, we will grow closer.		
Overall Social Relationship	3.22	0.84

Note. Likert scale: 1=Strongly Disagree, 2=Disagree, 3=Somewhat disagree, 4=Somewhat agree, 5=Agree, 6= Strongly Agree

Despite that assumption, the students did acknowledge and agree that smartphones positively affected their social relationships with their friends and family members. They agreed with the items which indicated that with the presence of smartphones, they could be closer with their friends (M=3.65, SD=1.14), and made them better at helping others to solve problems because it helped save more time and money than meeting their friends in person (M=3.67, SD=1.34). Furthermore, they felt more connected with their friends when using smartphones (M=3.97, SD=.96). In conclusion, the students could be seen to have an average level (M=3.22, SD=.84) of social relationships with their friends and family members, with or without mobile phones as they had disagreed with most of the negative items on social relationships.

## ACADEMIC BEHAVIOUR AMONG SCHOOL STUDENTS

Exhibit 3 shows an examination of academic behaviour among school children in Jalandhar district. The findings reveal that young adults were aware of when it was suitable to use or not use their

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smartphones in class or in their daily lives in general. They did not believe that smartphones interfered with their academic performance. Students disagreed, for example, that they frequently updated their social networking status during class (M=2.25, SD=1.26) and that they felt distressed in class when their phone was not with them (M=2.92, SD=1.21). They also stated that smartphones did not prevent them from fully participating in school activities (M=3.21, SD=1.21). Furthermore, the pupils did not agree that using smartphones had harmed their academic performance.

The students' disagreement with the claim that time spent on their smartphone had harmed their academic performance (M=3.21, SD=1.31) and that time spent on their smartphone had harmed their grades or assignments (M=3.29, SD=1.42) backed up this finding. Students, on the other hand, stated that smart phones have had a favourable impact on their academic achievement.

They had indicated "agree" to additional statements implying that having access to smartphone technology had enhanced their academic achievement (M=4.22, SD=1.02) and that smartphones had also helped them improve the quality of their education (SD=4.40, SD=.92).

Exhibit 3

Academic Behaviour among School Children	Mean	Standard Deviation
Negative Academic Behaviour		
During lectures, I play games on my smartphone every day.	2.19	1.28
I've been in debt as a result of my excessive smartphone usage.	2.24	1.27
During class, I frequently update my social networking status.	2.25	1.26
I am unable to participate in in-class activities due to my use of a smartphone.	2.58	1.28
During class, I waste time writing and sending SMS.	2.69	1.19
I spend more money on my smartphone than I do on my education.	2.73	1.50
When my phone isn't with me in class, I get frustrated.	2.92	1.21
My smartphone prevents me from fully participating in in-class activities.	3.21	1.21
My time spent on academic tasks has been disrupted as a result of my smartphone usage.	3.21	1.31
My grades and homework have suffered as a result of my smartphone usage.	3.29	1.42

Academic Behaviour among School Children (n=110)
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I'm having trouble sleeping because	3.32	1.39
of my excessive use of my		
smartphone, not because of my		
academic studies.		
Other students' use of smartphones	3.40	1.43
distracts me from paying attention in		
class.		
Notifications from various groups on	3.57	1.42
WhatsApp can sometimes ruin my		
mood and activities while I'm		
studying.		
I was distracted from my classroom	3.64	1.13
assignments by using my		
smartphone.		
Positive Academic Behaviour		
When I use my smartphone to	3.45	1.22
achieve my learning objectives, I am		
more focused on my studies.		
When looking for academic	3.60	1.68
information, I prefer to use my		
smartphone rather than my laptop.		
Using a reminder app on my	4.13	1.20
smartphone, I am able to keep track		
of my homework.		
Because of smartphone technology,	4.22	1.02
my academic performance has		
improved.		
My collaboration with other students	4.31	1.05
was made easier thanks to the use of		
smartphone devices.		
The smartphone has aided me in	4.40	0.92
improving my educational quality.		
Overall Academic Behaviour	3.27	0.66
Nata I land analas 1 Cturrela I		2 Discourse

Note. Likert scale: 1=Strongly Disagree, 2=Disagree, 3=Somewhat disagree, 4=Somewhat agree, 5=Agree, 6= Strongly Agree.

Smartphones have aided school children in managing their academic schoolwork via reminder apps (M=4.13, SD=1.20) and collaborating with their peers (M=4.31, SD=1.05). Finally, it may be concluded that smartphones have had a minimal impact on these students' academic performance.

This influence, however, was skewed in favour of the benefits of utilising smartphones as a tool for staying organised, finding information, and interacting. Most of the elements connected to the unfavourable relationship between smartphone use and academic performance were met with dissatisfaction by these young people (M=3.27, SD=.66).

## RELATIONSHIP BETWEEN MOBILE USAGE, SOCIAL RELATIONSHIP, AND ACADEMIC BEHAVIOUR AMONG SCHOOL STUDENTS

Pearson's coefficient analysis was used to determine the relationship between the variables. The results show that r = .58, p = .00, implying a favourable, moderate, and highly significant association between mobile usage and social relationships. However, a negative, modest, and extremely significant link (r = -.39, p = .00) has been discovered between mobile usage and academic behaviour.

Exhibit 4

The Relationship between Mobile Usage, Social Relationship, and Academic Relationship among students in Jalandhar district (n=110)

S.No.	Factor	М	SD	1	2	3
1.	Mobile Usage	3.52	0.67	1		
2.	Social	3.22	0.84	0.58 <sup>b</sup>	1	
	Relationship					
3.	Academic	3.27	0.66	-	0.44 <sup>b</sup>	1
	Behaviour			0.39 <sup>b</sup>		

Note. ap < .05, bp < .01 Cronbach's alphas are shown in the diagonal.

## THE PREDICTING FACTORS OF ACADEMIC BEHAVIOUR AMONG SCHOOL CHILDREN IN JALANDHAR DISTRICT

Exhibit 5 depicts the results of a multiple regression analysis undertaken to determine the contributions of the predictive variables to the variance in academic behaviour among Jalandhar district school children. The independent factors, such as mobile usage (X1) and interpersonal relationships (X2), were entered into a multiple regression model to see if there was any significant correlation between academic behaviour of students in a school and the independent variables. Exhibit 5

The Relationship between Mobile Usage, Social Relationship, and Academic Relationship among students in Jalandhar district (n=110)

Mo del		Unstandar dised Coefficien ts		Standard ised Coeffici ents		
	В	Std. Error	Be ta		Т	Si g.
1	Constant	1.28	0.4 8		2.7 4	0.0 0
	Mobile Usage (XI)	-0.21	0.1 5	-0.20	1.9 6	0.0 4
	Social Relation ship (X2)	0.30	0.0 7	0.31	3.3 4	0.0 0

Note. a. Dependent Variable: Academic Behaviour R2 =.29, Adjusted R2 = .28, F = 6.87, p < .00 Predictors: (Constant) Mobile Usage, Social Relationship

#### CONCLUSION

Mobile phones are no longer a distraction in the classroom, but rather a crucial learning tool. Despite their potential for disruption in our lives, mobile phones have grown ubiquitous and are here to stay. The immediate problem for educational institutions, instructors, parents, and other stakeholders goes beyond smart phone usage control. According to the conclusions of this study, mobile usage among students is now at a modest level, and smartphone usage is not a significant concern at this time. Preventative measures such as developing a policy on mobile phone usage and misuse in school level, on the other hand, would assist give instructions if the need arises. Setting ethical standards and guidelines for correct mobile use will assist students in achieving a healthy balance.

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