

A REVIEW OF POSITIVE AND NEGATIVE IMPACTS OF MOBILE PHONES ON STUDENTS' EFFECTIVE LEARNING AND PERFORMANCE

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ABSTRACT

The rapid development of new communication technologies is currently taking place, and one indicator of this development is the spread of mobile phones. A mobile phone, in contrast to a regular mobile phone, is supplied with a significant amount of storage space, a camera, an internet connection, and a multitude of other functions as standard equipment. E-mail, social networking, gaming, maps, and other similar applications are all instances of this category of functionality. 72% of individuals today have a mobile phone in their possession and use it regularly. The education, psychological, and societal implications of using mobile phones will be the primary areas of investigation in this project. To identify the mobile phone usage pattern among students, a review of the relevant literature is going to take place. As a result of this, an analysis of this study is required in order to review the outcome of students' usage of mobile phones and to determine whether or not this usage has a positive or negative effect on the lives of the students. In addition, a conclusion must be reached regarding whether or not this usage has a positive or negative effect on the lives of the students. Academics might be able to gain from this knowledge by putting it to their advantage when they are undertaking more study in this sector.

Keywords: Mobile phone, students, Impact, Education, Psychological health, Learning

I. INTRODUCTION

The rapid acceleration of technological development has led to the production of electronic devices such as mobile phones, the capabilities of which go far beyond those of simple text messaging to include, among other things, the facilitation of communication across extended distances. These capabilities have been made possible as a result of the rapid acceleration of technological development. Despite the fact that a mobile phone is much more portable than a computer, it is possible to refer to a mobile phone as a minicomputer because the capabilities and features that it offers are equivalent to those that are offered by a computer. This makes it possible for a mobile phone to be referred to as a minicomputer (Rambitan, 2015).

The number of individuals using mobile phones has seen a substantial rise across the board in every region of the world (Slavin, 2019). 98% of 400 children and adolescents between the ages of 10 and 19 years old have acknowledged that they have a comprehension of the internet, and

79.5% of those children and adolescents have become users of the internet (Gayatri et al, 2016). The combination of two aspects, namely ease of use and enjoyment, results in an excessive amount of time spent using mobile phones. A majority of teenagers between the ages of 15 and 20 have acknowledged to using mobile phones for more over five hours each day. In addition to this, 48 percent of the 416 teenagers surveyed admitted to using their mobile phones for more than four hours every day (Hasanah et al, 2020). According to Ariani (2018), the majority of time spent by both parents and children is spent using a mobile phone rather than engaging in conversation with their family, which results in less time spent together as a unit. This is a problem because it decreases the quality of time spent with one another as a family unit.

The great majority of the time that young people spend on their mobile devices is spent conversing with others or searching for prospective new friends on various social media websites. In addition, kids like exchanging pictures with one another, a behaviour that does not appear to have any bearing on the success they make in their studies. Despite the fact that mobile phones provide a variety of functions to select from, the vast majority of young people's attention is focused on these activities. It would imply that customers go for their telephones as soon as they wake up in the morning and immediately before they go to sleep at night (Lee et al., 2014). Because of the rise of mobile devices such as mobile phones, people's methods for acquiring information have undergone a considerable transformation in recent years. In addition to using them to make phone calls and send text messages, individuals who use mobile phones are also using them for a variety of other activities. These activities include taking pictures, playing games, and listening to music. Some of these uses include watching movies and sharing images, as well as shopping and banking online, listening to music online, and doing all of these activities online. Other usage includes watching videos and exchanging photographs (Anderson, 2016).

The younger generation is today so enamoured with mobile phones and the technology that is related to them that mobile phones have practically become synonymous with the age group that comprises the younger generation (Skierkowski & Wood, 2011). As a result of the fact that members of today's technologically savvy generation are so dependent on the most recent touchscreen technology, which enables applications to be used on mobile phones at any time by simply touching the screen, and internet access is available twenty-four hours a day, this circumstance is easy to observe and comprehend. Likewise, the method in which people connect with one another has almost undergone a full shift as a result of the arrival of modern technologies such as mobile phones. The usage of mobile phones by people and civilizations all over the world has a variety of distinct effects on those people and civilizations. These effects may be broken down into a number of categories. This is as a result of the fact that mobile phones are utilised in a variety of settings, such as for academic reasons, for professional purposes, and for the communication of individuals with one another. Mobile phones have made life simpler by providing a variety of capabilities that enable users to manage the majority of the responsibilities involved with day-to-day living with the simple press of a button. Because of this, the total amount

of time spent performing these responsibilities has been cut down by a substantial amount. Users are able to connect with one another in a manner that is both more streamlined and easy when they make use of the various resources that the internet makes available to them. Users may also obtain a broad range of information by doing so.

II. Impact of Mobile phone on Education

Teaching and learning have increasingly made use of information and communication technology (ICT) over the course of the past several decades. This is due to the fact that it is recognised as an essential factor that must be modified in order to facilitate the growth of social environments. This is because information and communications technology has grown more readily available to pupils in recent years (Rung et al., 2014). Not only is it utilised in instructional contexts, but it is also employed for the execution of activities that are considered to be ordinary. In the realm of information and communications technology (ICT) applications, the ever-increasing reliance on mobile devices that are linked to the internet is rapidly becoming the most prevalent pattern. This is not just due to the fact that it is utilised for ordinary work, but also due to the fact that it is applied in instructional contexts (Koszalka & Ntloedibe-Kuswani, 2010). The use of mobile phones in the educational setting enables a variety of activities, some of which include gaining access to the subject matter that is discussed in classes, facilitating the exchange of information and conversation between teachers and students, and collecting data on the overall performance of students (Cochrane, 2010). Therefore, the use of mobile phones may result in a significant effect, leading to an improvement in the performance of students as a consequence of this device's capacity to enrich the teaching and learning experience. This may be the case because mobile phones have the ability to enhance both the teaching and learning experience. It's possible that the use of mobile phones is directly responsible for this boost in performance. According to Woodcock et al. (2012), when students begin utilising this technology to better their learning skills, various aspects of the students' life will alter as a result of increased mobile phone use. One of these aspects is the students' academic performance. These alterations are going to take place as a direct consequence of the increasing use of mobile phones. All aspects of students' life, including their social lives, academic lives, and professional lives, are encompassed within these components. Students might be able to become more aware of the benefits they could encounter by utilising mobile phones in an educational setting if this information is presented to them. One of these advantages is the ability to learn anything, at any time, in any location, and from any device. In addition to this, it has the ability to inspire students to participate in extracurricular activities that are relevant to their education. This suggests that the opportunities available to students, particularly in the context of their academic pursuits, may be opened up and expanded as a result of developments in the capabilities of technology. A self-report survey was used by Froese et al. (2012) to investigate students' usage of mobile phones while in class as well as the potential influence that such use may have on students' ability to concentrate on their studies. Additionally,

the authors investigated the potential influence that such use may have on students' ability to pay attention in class. The findings suggest that the usage of mobile phones by students makes it more difficult for them to study, and the students think that texting during classroom instruction prevents them from concentrating on their academics. Tindell and Bohlander (2012) carried out yet another study with the purpose of analysing the ways in which students make improper use of their mobile phones when they are enrolled in college courses. The discovery indicates that students in the class are not paying attention to the lecturer since they spend a disproportionate amount of time texting rather than paying attention to what is being stated by the teacher. Students who used their mobile phones while they were at school had poorer grades than students who did not use their mobile phones, as revealed by the findings of a study that was carried out by Elder (2013). In addition to that, it appeared as though these students had forgotten a significant amount of the material that had been covered in the previous session. According to the conclusions of a study that was carried out by Alfawareh and Jusoh, students do not use their mobile phones with the primary intention of enhancing their educational experience (2014). Instead, students rely on their mobile devices for activities such as making phone calls, taking photographs, and browsing the internet. Moreover, Hanson et al. (2011) discovered that students would rather utilise instant messaging, email, and web-surfing while at the library rather than check into the online resources that the library provides. This finding supports the previous finding. The fact that students prefer to employ these activities is supported by this finding, which is consistent with a prior finding. In addition, despite the fact that the vast majority of students want to put their education ahead of everything else, many have a tough time finding a balance that is suitable between their academic responsibilities and their need to maintain strong connections with their fellow students. It would appear that students are more motivated to publish their status on Facebook rather than download the homework for their class. The widespread availability of mobile phones has brought about enormous changes in a variety of facets of the life of students, the most notable of which is the transformation of the educational system. As a result of using mobile phones in the classroom, students have instant access to a vast amount of information at the click of a button. This gives teachers the ability to present students with a whole new universe of learning opportunities. Students in today's world have the capability to remain connected at all times as a direct result of the internet connection that is pre-installed on their mobile phones. Students now have a lot simpler time obtaining academically relevant content online anytime they desire it thanks to this development. According to Sarwar and Soomro (2013), the positive effect that mobile phones have in the context of education is that it enables societies to access a variety of learning resources and provides opportunities for individuals to continue their education by participating in remote learning. In other words, mobile phones make it possible for individuals to continue their education. To put it another way, people are able to maintain their level of knowledge because to the availability of mobile phones. However, using a mobile phone for an extended period of time or continuously might have a negative impact on a person's health; the person might experience headaches, and

frequent messages and calls lead to interruptions on students' concentration and focus on completing their coursework, which will have a negative impact on their academic performance. Using a mobile phone for an extended period of time or continuously might also have a negative impact on a person's academic performance. A person's health might be negatively affected if they use their mobile phone for a lengthy amount of time or continually throughout the day (Abu-Shanab, 2015). Samaha and Hawi (2016) discovered that the possibility for mobile phone addiction can be associated to life satisfaction via academic achievement and perceived levels of stress. 2016 was the year that the study was conducted, and the following year, in 2017, the findings were presented at a conference. It demonstrates that children who do not do well academically are likely to experience a lower level of life satisfaction and will have a greater tendency to become hooked on their telephones. This is because children who do not fare well academically tend to have a lower level of life happiness.

III. Impact of Mobile phone on Psychological Health

There is a connection between the development of a variety of behavioural and mental health difficulties and having an unhealthy relationship with one's mobile phone. This connection exists because there is a link between the two. Many of today's young people believe that they would be unable to function normally if they were to be removed from their mobile phones because of the strong connection that they have established with their devices and the tight connection that they have forged with their telephones. Students frequently turn to the internet and online games as a means of relieving the mental strain that they suffer as a result of the pressures that they are under to deal with issues that arise as a result of their relationships with their peers or their academic responsibilities. This strain can be caused by the fact that students are under pressure to deal with issues that arise as a result of the fact that they are expected to deal with issues that arise as a result of the fact that students are constantly put under pressure to resolve difficulties that come up as a consequence of their interactions with their classmates or the duties they have in their academic work (Kim, 2013). Students in the past relied on computers to browse the internet as a way to deal with stress; however, students in today's environment have a tendency to rely more on mobile phones due to the ease with which they can access the internet on their devices. In the past, students relied on computers to browse the internet as a way to deal with stress. As a direct consequence of this, students have a propensity to become increasingly dependent on their mobile phones. According to the conclusions of a research that was carried out by Kibona and Mgaya (2015), the vast majority of students use their mobile phones for social activities rather than educational activities. Twenty percent of pupils surveyed reported that they engage in educational activities on their mobile devices. In addition, 65% of the students said that, even though they are supposed to be focusing on their academics, they use their mobile phones to access social networking sites. This is despite the fact that they are supposed to be focused on their academics (such as Twitter, Whatsapp, Instagram, and Facebook). The respondents' mobile phone use was

between five and seven hours each day, on average, for 48% of them. According to the findings of this survey, 85 percent of students are candid about the fact that they are dependent on their mobile devices, specifically their mobile phones. The results of a study that was carried out on mobile phone users found that those users who mishandled their telephones had greater levels of depression, trait anxiety, and state anxiety in comparison to regular mobile phone users. The research was conducted on those who own and use mobile phones (Hwang et al., 2012). Students who use their mobile phones more frequently are more likely to receive lower grades, experience higher levels of anxiety, and report feeling less cheerful than students who do not use their mobile phones as regularly. In addition, these students are more likely to report feeling less happy. Also, pupils who use their mobile phones more regularly are more likely to report feeling less cheerful. Students who use their mobile devices more frequently are more likely to suffer from high levels of anxiety, in addition to having worse grade point averages. Because of their dependence on their mobile phones, the students report that they had feelings of worry whenever they were compelled to go without their mobile phones for a certain length of time. Because people are so reliant on their mobile devices, this turned out to be the case. The transition from mobile phone usage being a habit to mobile phone use being an addiction may be recognised as an indicator by the increased frequency and quantity of time spent on mobile phones (Lee et al., 2014), in addition to reliance on mobile phones among young people (Roberts et al., 2014). The capacity of individuals to communicate with one another has been significantly altered as a direct result of the proliferation of mobile phones. This suggests that the rate of advancement in the creation of technology is picking up speed in order to meet the expectations that are being placed on it by humans. The proliferation of technology in today's modern society has made it much easier to communicate, and this improvement in the ease of communication has had an effect on the manner in which people interact with one another. Mobile phones are distinguished from other kinds of mobile devices by the existence of a number of features and functions that are exclusive to the device itself, in addition to the availability of a wide variety of application options. On the other hand, due to the one-of-a-kind character of its use, it presents a risk to the social connection that takes place between individuals. This is because the programme restricts the amount of face-to-face engagement that the participants are allowed to have and encourages the creation of additional chat rooms for the express goal of facilitating communication. As a result, the situation has arisen. It is possible that the result of this will be a lack of real-life social connections among students, which may result in the development of relationship problems as well as interference in the academic work that students are attempting to complete. The absence of real-life social interaction can contribute to the development of relationship issues (Kuss & Griffiths, 2011). There is an acceleration of the trend towards a world dominated by mobile phones in today's culture. As a direct result of this trend, more people are spending the majority of their time interacting digitally, such as talking and participating in social media, rather than physically interacting with their friends and family members. This trend has led to an increase in the number of people who spend

less time physically interacting with their friends and family members. In other words, people are spending less time chatting to each other face-to-face and more time talking to their phones. Even while the use of mobile phones makes it easier and more natural to connect with social companions, there is a danger that this presents to the quality of human relationships. This concern is that the quality of human relationships will decline. Reducing the total amount of time spent on mobile phones is one potential strategy for mitigating this danger. It has been discovered that the ability of individuals to build friendship groups and engage with one another through a variety of social platforms is not accompanied by a corresponding increase in their level of oral communication. This was discovered by looking at the correlation between the two factors. It was discovered that conversations that did not include the usage of mobile devices resulted in much higher levels of satisfaction for the participants than did conversations that included the participation of mobile communication technology. This was the result that was reached by researchers who looked into the relationship between the presence of mobile devices and the quality of social contacts that took place in person. They found that there was a negative correlation between the two factors. This research was conducted with the intention of determining whether or not the presence of mobile devices has an effect on the quality of social interaction that takes place face-to-face (Misra et al., 2014). When participants communicated with one another while using mobile devices, they displayed lower levels of empathy and concern compared to when they spoke without the devices. On the other hand, individuals who engaged in conversation without making use of mobile devices had a greater capacity for empathy (Misra et al., 2014). According to the findings of yet another study that investigated the effects of mobile communication technology's presence on the quality of human face-to-face interaction, the use of mobile devices has a negative impact on the quality, closeness, and connection of individuals' conversations. The study investigated the effects of mobile communication technology's presence on the quality of human face-to-face interaction. The purpose of this study was to evaluate how the presence of mobile communication technology influences the quality of face-to-face interactions between humans. It was discovered that this became more apparent when the topics of talk were linked to issues that had a considerable degree of personal relevance for the people who were taking part in the discussion (Przybylski & Weinstein, 2012).

According to the review that was just provided, it would appear that the use of mobile phones among students has a substantial number of adverse effects, while the positive advantages are fairly modest in comparison to the bad effects. Students' lives are made easier by mobile phones in a number of ways (including the provision of a variety of learning resources), but these devices also have a number of unfavourable effects on students, including the disruption of their learning processes, a decline in their academic performance, the development of psychological issues (including feelings of anxiety and addiction to their mobile phones), and difficulties in their social lives. Students' lives are made easier by mobile phones in a number of ways (including the

provision of a variety of learning resources), but these devices also (lack of real life social interaction, arise of relationship issues).

IV. Effects of Mobile Phone Addiction on Effective Learning

People who are addicted to mobile phones are unable to exercise self-control over their use of mobile phones, as evidenced by their inability to cut down on the amount of time they spend using mobile phones and their tendency to feel ecstatic when they are using a mobile phone rather than when they are with their family or friends. Students who are hooked to their mobile phones have interruptions in their day-to-day activities, which can manifest in a variety of ways, including the failure to accomplish daily responsibilities or projects, improper diet, and unorganised sleeping patterns, amongst other issues. Their prolonged use of mobile phones causes them to experience physical fatigue, a reduction in the number of hours they sleep, depression, worse academic accomplishment, and even a decrease in their overall level of life satisfaction. These negative effects can be attributed to the fact that they spend more time on their phones (Adesope, & Maarhuis, 2021).

The tendency to participate in social contact inside the virtual world is a component of the social element, and it relates to the likelihood of doing so. The external factors consist of the capability of the mobile phone to provide interesting information, a large variety of functionalities, and situational concerns, in particular the monotonous learning burden. Because of the monotony of online learning, the fact that they did not have any friends during the pandemic, the lack of opportunities to engage in activities outside, and an addiction to playing online games, the students admitted during an interview that they used their mobile phones for more than five hours per day. The percentage of pupils who are addicted to their mobile phones is around 48 percent (Guo et al., 2019).

It is projected that a bigger number of adolescents would be adversely affected by these unfavourable effects with a greater degree of severity. While developing the instructional plan for the class, the teacher must, as a consequence, take into account the amount of time that students spend on their mobile devices, namely their mobile phones. The first thing that teachers need to do is investigate the number of students who use their mobile phones for more than five hours a day, the types of activities that these students engage in while online, the types of things that happen to them in the real world as a result of this behaviour, and the percentage of children who do this. Second, in order to aid students in reducing the negative effects of the scenario, the teacher has to be aware of the circumstances in which the students find themselves. For instance, if a student is showing signs of physical exhaustion, the teacher ought to plan specific breaks for the student during the process of imparting knowledge to the other students. Lastly, a stimulating management method that may be used in the classroom should involve the usage of cell phones by the teachers (Asplund & Kontio, 2020).

V. CONCLUSION

As was said before, there have only been a select few studies undertaken on the issue of mobile phone use amongst students. This is a topic that warrants further investigation. The review that was provided before made it very obvious that this is the case. This is because research on the applications of mobile phones is still in its infancy stage of development. Research that has been done in the past has focused on determining the amount of time that students spend on their mobile phones, the activities that students participate in while using their mobile phones, and the students who are at risk of developing addictive behaviours as a result of their mobile phone use. However, there is still a lack of research that investigates and understands the various aspects of mobile phone use among students, such as the psychological or social impacts of mobile phone use on the lives of students. This lack of research makes it difficult to understand the various aspects of mobile phone use among students. One illustration of this is the fact that there is still a dearth of research that examines and makes sense of the myriad facets of students' use of mobile phones. In particular, this research is needed in order to investigate and acquire a deeper comprehension of the myriad of elements that are associated with the usage of mobile phones among students. Studies on the impact of mobile phone use on students' psychological or social lives had been conducted in a number of other countries. However, the culture and usage pattern of students might be different, which would mean that the impact on students might also be different. The goal of this research is to discover the reasons why students use their mobile phones, as well as the positive and negative effects that mobile phone use has on the lives of students in terms of their education, their ability to socialize, and their mental health. In addition, the findings of this research will hopefully shed light on the reasons why students use their mobile phones. In addition to this, it is essential to carry out a literature analysis on the results of earlier studies about the use of mobile phones. The findings of this study has given the information that will be helpful in evaluating both the good and bad aspects of mobile phone use, which can both have an affect on the life of a student. Additionally, the discovery may motivate academics working in this field to investigate ways to mitigate the adverse effects that students may experience if they use their mobile phones for an excessive amount of time. These effects include but are not limited to depression, anxiety, and attention deficit hyperactivity disorder (ADHD). If these youngsters use their mobile phones for a lengthy amount of time, there is a risk that they will experience unfavourable consequences.

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