

Quality Education & Use of Smartphones among School Students: A Case Study on Selected Institutions of Raninagar Upazilla in Naogaon District.

Al Amin¹

ABSTRACT

This investigation aims to find the effect of smartphones on the quality of education of School level students as smartphones have become available to them after Covid-19 to ensure e-learning. A mixed method of qualitative & Quantitative analysis was utilised to determine the impact of the smartphone. Random sampling was undertaken among 100 school-level students from four selected schools of Raninagar Upazila in Naogaon District for a questionnaire. An FGD was also made with those schools' teachers to analyse the impact on quality education. This study shows that about 65 percent of high school students got a smartphone after the Covid-19 period. Even though smartphones are beneficial for online classes and preparing study materials, adolescents are becoming reliant on them for unneeded communication. Spending extra time on smartphones hampers their way of achieving quality education. As we cannot ignore the necessity of smartphones in the e-learning process, we can allow smartphones to them but with some restrictions. The use of smartphones can be restricted at night, and morning time can be allocated to get the maximum benefit within a shorter period. Also, keeping a smartphone during class time should be strongly prohibited.

KEYWORDS: Smartphone, Covid-19, Quality Education, Students, Social Media.

¹ Assistant Engineer, BCS (Roads & Highways), Bangladesh, Email: aalaminrue10@gmail.com
(Corresponding Author)

INTRODUCTION

Background & Problem Statement

Education is a basic need of human beings and a fundamental right of people. It is a process of learning instructions systematically. Through the advancement of the world, quality education is a must to survive. The use of smartphones is not now a luxury but a necessity. Different users have different ways of using this device. All of them use the phone for communication purposes. However, many other functions in a mobile phone can attract users and easily create an addiction to specific users. So, it is time to analyse the positive and negative use of a smartphone by specific users. Social networking systems and online games connect the world in a way no other generation has ever seen. Especially the young generation is easily getting addicted to new features of the smartphone. Social media has both positive & negative impacts on students' performance. According to research, there is a negative correlation between the time given by schoolboys on Social networks and their quality education due to the lack of enthusiasm or readiness to use the social network for education issues (Dahlstrom et al., 2011). Some researchers have emphasised the positive impact of smartphone use on enhancing communication. One research shows that for confirmation of course guidelines, help on particular assignments like papers or projects, and performance comments, students use online communication channels like email (Waldeck et al., 2001). In some studies, much importance is given to the use of the phone as a communication apparatus between the teacher & students, significantly affecting their academic performance (Young et al., 2011).

After the Covid-19 outbreak period, as the smartphone reached the school level, students to ensure their virtual studies officially get access to social media. So, an impact analysis is required to determine how smartphones affect their education quality!

1.2 Objectives of the Study

Most parents are afraid of their kids' rising social media usage and unsure whether their children are paying enough attention in class. This study is being conducted to investigate the influence of school-level students' use of smartphones on their studies and public lives. What motivates Bangladeshi students to utilise social media? Is it true that students' use of

social media reduces the amount of time they devote to their studies? How much study-related help are they getting from a smartphone? The perseverance of the study is to define how excessive smartphone usage affects personal and social lives and retards the quality of education of school-level students. Hopefully, this study's findings will raise awareness among school-level students who use smartphones. The key objectives of this study are:

- 1) To examine how the smartphone is helping students as an e-learning tool;
- 2) To identify the key features of the smartphone that the students use most of the time; and
- 3) To assess the effects of smartphones, especially social media, on achieving quality education.

Justification of the Study

It is found that Facebook, Twitter, Instagram, My Space, IMO, Viber, Messenger, WhatsApp, Google +, Skype, YouTube, Academia.edu, and LinkedIn are the most well-known SNSs. Candy crush saga, Subway surfers, Temple Run, Hill Climb Racing, Fruit Ninja, Angry Birds etc., are the most common mobile games among high school-level students. The value of those online sites among students is becoming increasingly recognised and popular since they provide access to information, group discussion, resource sharing, and entertainment. On the other hand, social networking systems have both beneficial and negative impacts on pupils' academic and private lives. We hope to gain insight into how students are now utilising social media and games in a variety of everyday activities by surveying their use of Social media as a specialised apparatus.

LITERATURE REVIEW

In Bangladesh, there has been little research related to Internet access in rural areas and rural schools, colleges, etc., and its impact. Most of the research is on overall Internet availability, its growth, usage, barriers, and Bangladesh's standing in usage. Some recent studies are also carried out regarding young people's addiction to social media and its negativity on mental and physical health. A study of 520 young people from various institutions in Bangladesh have been asked about social media addiction during the covid-19 period, and the results showed that many new students were addicted to social media during that period. The addicted

people, particularly students, were more vulnerable to facing mental and physical health problems during COVID-19 (Hasan, 2021). A study showed that more than half of early adolescent pupils devote at least 3 hours daily to their smartphones for social media purposes (Mondal et al., 2020). The cited research was mainly conducted on university-level students. Nevertheless, this study has been done on high school level students, and it is alarming that smartphone use frequency results are almost the same. The use of smartphones is not always unnecessary for students; it has some positive sides too. A student can benefit significantly by using a smartphone's modern features. Taking help from social media, he can gather much information by gossiping with other mates and teachers. Students should thoroughly understand all of the present features of social media platforms (Prodhan et al., 2020).

In this study, students' addiction to social media is shown and analysed. However, the effect of playing online games and other features of smartphones on the way to achieving quality education is skipped. The present study will discuss the combined effect of social media, online games and other features of the smartphone. More than half of students use a social networking site multiple times to upload or download images or videos, obtain information about their job or academic work, communicate with friends, watch movies, and do research; While kids may use these sites as a kind of entertainment, it may harm their academic achievement (Mingle & Adams, 2015). This study indicates that smartphone has even an impact on school students as well as kids. Smartphone addiction makes it difficult for students to focus on schoolwork (Hiscock, 2004; Selwyn, 2003; Samaha; Hawi, 2016). When students do not have access to a smartphone, they become nervous. Most of the studies related to smartphone use are done in different countries. However, there needs to be more research accomplished on this issue in Bangladesh. Spending more extended time on the smartphone by the students, their participation and concentration in studies and assignments are reduced gradually. (Jeong and Lee, 2015; Samaha and Hawi, 2016).

Limited research on social media use by school students is based on Bangladeshi institutions. That research was done before covid-19 period, but this study was performed after the pandemic when mobile became available among all ages. Most of the research is done on city students, whereas; this study aims to analyse the impact of using social media and

online games on regular academic life. A study was done on the quality of education in Bangladesh where authors tried to make the use of most of the limited time available by informing the selected teachers of schools through email or phone calls and enlisting the assistance of some teachers and village residents to find the homes of the dropped-out pupils (Rahman et al., 2022). It is not a problem that students are using modern technologies through smartphones. The problem is how much time they are given to using those features. In this research, the author tried to find the average time a student spends on social media or gaming after getting the opportunity of having a smartphone and how a smartphone helps him to his study or harms his study by wasting time. Another researcher showed that using Facebook as a mobile tool negatively affects the grade point of students at school & college levels. (Kirschner and Karpinski, 2010). The research mentioned above mainly focused on the negative impacts of social media and, thus, smartphones. In contrast, this research is concerned with both the positive and negative impacts of social media, youtube, online games etc. In Bangladesh, where parents are not very educated, the use of smartphones by children, especially social media, whether beneficial or harmful, should be analysed. Some research shows the positive impacts of using social media through a smartphone. Social Network intensity includes evaluations of the participant's attitude shifts, which assess how emotionally connected the participant is to social networks and how much social media is incorporated into daily activities (Ellison et al., 2007). The above-mentioned research focused on only social media and its impact on a person's attitude, emotions, strengths, weaknesses, activity power etc. But, this study is concerned with the impact of smartphone use by students on the way of achieving quality education. Although most of the research showed the negative impact of smartphones on students' performance and attitude, it is hardly impossible to ignore the importance of smartphones to students as a vital e-learning tool.

Conceptual Framework of the Study

Conceptual frameworks are intermediary theory that tries to connect to all academic domains. Conceptual frameworks can provide road maps that link empirical research together. Their remedies must be aimed at ensuring quality education among high school-level students. A conceptual framework is established in order to find out the significant

outcomes of the study. The whole study is summed up here, including a questionnaire survey, focused group discussion with teachers and ex-students of those institutions, author's comments, results and recommendations. In consideration of the discussion and literature review discussed above, the research framework has been structured in Figure 1 below:

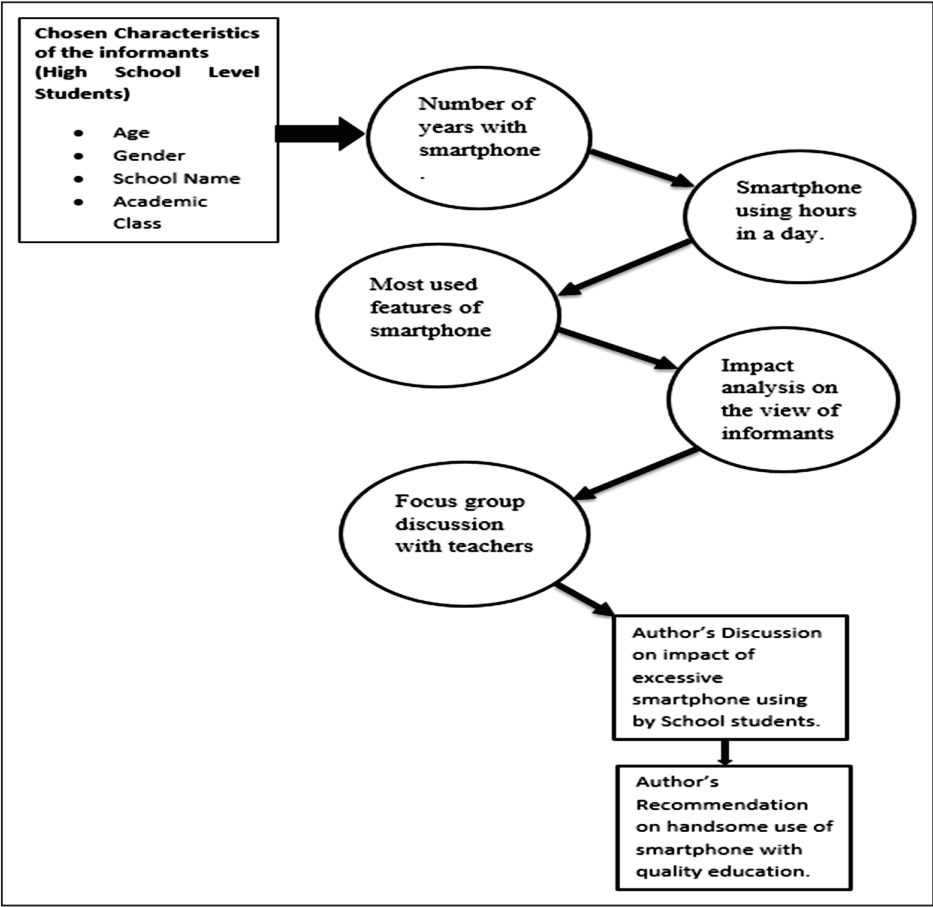


Figure 2.1: Conceptual Framework of the Study

METHODOLOGY

Research Design

This study looked at the void created in ensuring quality education by the excessive use of smartphones by high school-level students. The quantitative approach, along with a focus group discussion, was used to

determine the goals of the study. A questionnaire was administered among the school students, and an FGD was executed on the teachers' comments. Finally, the author discussed questionnaire results and FGD to make the overall comments.

Study Area

As a part of the "73rd Foundation Training Course" arranged by BPATC for BCS Cadre Officers, the author visited his village to fulfil the assignment on "Village Study". The village name was Bhawanipur of Raninagar Upazila in Naogaon District. During the visit, the data were collected from adjacent schools. Four schools of that Upazila were selected for sampling, namely 1. Ghoshgram Kafilia High School 2. Trimohoni High School 3. Ataikula High School & 4. Gona High School.

Questionnaire Survey

The questionnaire survey was conducted between 5th June 2022 and 9th June 2022. The whole questionnaire process was separated into five sections. The first section was about the name of the school & class. The second section was "whether they use phone or not", the Third section was "how many years they are using a phone", the Fourth section was "how much time a day they use it", Fifth section was "which feature of smartphone they like most", Sixth section was "does it harm their study or help". The researcher distributed a written questionnaire among 130 students and received the paper from them after three days. After the collection of data, the total responses were 120. After cleaning the unnecessary data, 100 practical responses were finally received.

Focus Group Discussion (FGD)

The qualitative approach made it easier to gather information, conduct an inquiry, and give a thorough and in-depth understanding of teachers' concerns, students' awareness, perceptions, and experiences. A conversation, checklist and guide were created to focus on the reasons behind conducting FGDs and interviews for the study. There were a total of 7 participants in the FGD. For conducting FGD, several teachers of affiliated schools and some ex-students were selected to find out the actual picture of the present education quality of those schools and to know their view on how smartphone affects the student's academic, social, physical or personal life.

Data Management & Analysis Technique

After collecting all the data, the author sorted them sequentially. A descriptive analysis was carried out with the data through percentage findings. The percentage was presented with pie charts for better understanding. Then, the result from the focus group discussion was analysed by thematic analysis.

Ethical Consideration

While performing the survey, Focus Group Discussions (FGD), and tape-recording assignments, the author obtained written consent. The author consented to a moderator's assistance to complete the FGD, allowing him to record and compose the draft report. The author guaranteed the sources that their information would be kept entirely confidential and that their identities would never be revealed. The author also let his participants know they might stop the study at any point in time if they found the procedures uncomfortable.

RESULTS

Demographic Questionnaire among respondents

A survey was done on demographic issues like gender, age, class etc., among the students. Among the respondents, 56% were male & 44% were female. Most of the students, i.e. 60%, were from class 10, 32% were from class 9, and 8% were from class 8.

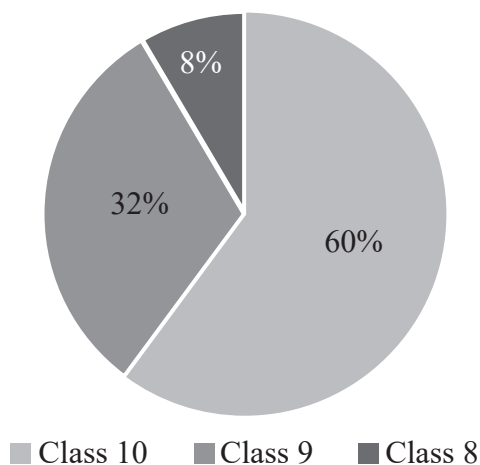


Figure 4.2: *Class-wise Division of the Respondents*

Years of using a smartphone

A survey was executed on how many years they have been using a smartphone to know whether they are pre-covid or after-covid users. As per the survey, most respondents got individual smartphones during the Covid-19 period, i.e. they have been using it for the last 2-3 years. The survey results are shown below-

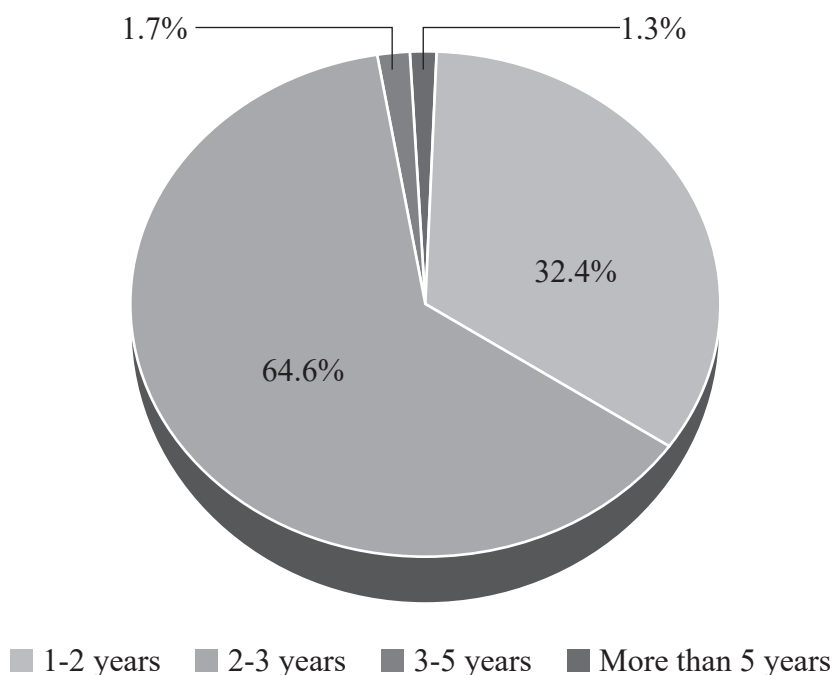


Figure 4.3: *Number of Years with Smartphone.*

Smartphone using hour

A question was given among the respondents to find out the smartphone used hours a day by them. From their answers, it is found that 40% of the students use a smartphone at least 2-3 hours a day. 32% of the students use smartphones for 3-5 hours a day, and 15% use them for 1-2 hours a day. Respondents who use smartphones for more than 5 hours is 8% which is concerning.

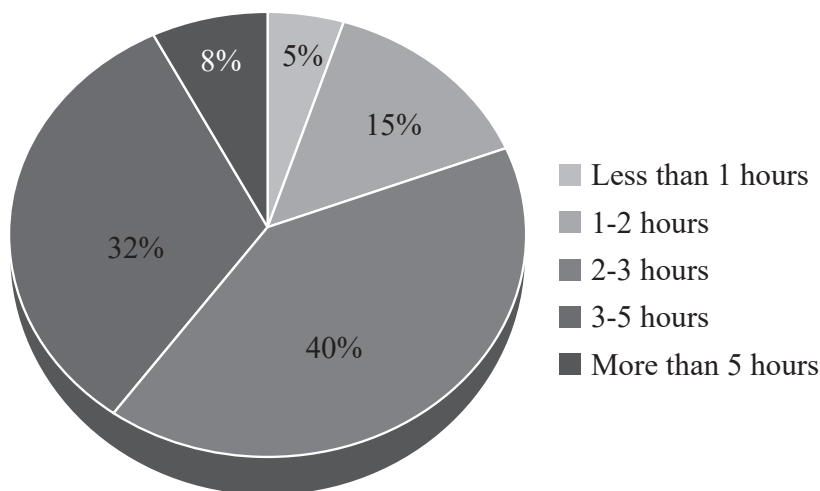


Figure 4.4: Smartphone Using Hours a Day

Most used features

Among the respondents, 87% of the male students have their own smartphones, and 56% of the female respondents have personal smartphones. Most of the respondents spend their maximum time on social media like Facebook, Youtube, online gaming, WhatsApp, imo, e-learning tools etc. The most liked feature by the respondents is Facebook 62%, Youtube 10%, Online Gaming 19%, e-learning 2%, imo 3% & WhatsApp 4%.

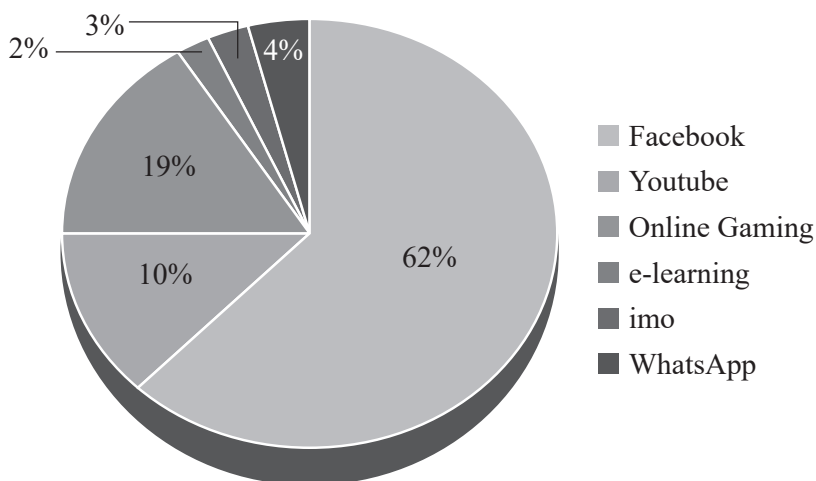


Figure 4.5: Most Used Features

Impact analysis by respondents

Students were asked an open-ended question about whether using smartphones harms the quality of the study or helps them or they cannot evaluate. They were given space to comment. About 32% of respondents think that smartphone harms the quality of education, whereas 26% think it helps them earn knowledge and e-learning. 30% of them cannot evaluate its impact, and 12% did not make any comment.

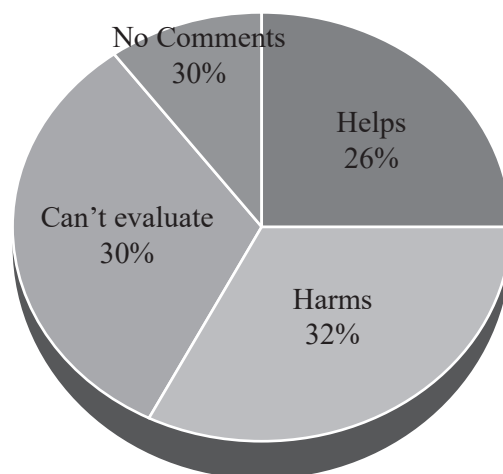


Figure 4.6: *Impact Analysis by Respondents*

Impact Analysis by Focus Group Discussion

Informant-1, a school teacher at Ghoshgram kafiliala High School, said that

"Quality education is greatly hampered by the availability of smartphones among young students. Especially, male students are getting addicted to special features of smartphones like facebook, youtube, tik tok etc. harms the quality of education to a great extent. You can see the result of class 10, where there are 15 female students in the top 20".

Informant 2, an assistant teacher at the same school, included

"Informant-1 is correct, but a proper use can make a student smarter than others". Informant 3, an ex-student of that school, said, " Smartphones should be allowed after a certain level; it should not be common to all as everyone cannot decide about their proper use."

Informant-4, An English teacher at Trimohoni High School, said that.

"Smartphone is like drugs, a small amount of it can be very beneficial to health, but an excessive amount can harm one physically and mentally".

With the opinion of Informant-4, a teacher from Ataikula High school (Informant-5), said that

"Smartphones and the internet cannot be avoided as we are living in digital Bangladesh. During the Covid-19 period, we took full advantage of internet features. Even, we used social media as an important learning tool. But, now students are getting addicted to smartphones very much. It makes them inattentive to studying a lot. So, mass awareness is a must now."

Informant-6, a teacher at Gona high school, added.

"It is concerning that, now a lot of students are using mobile phones even in the classroom. They are found using facebook during their class. It takes them away from their concentration. Awareness is necessary at the family level. Parents should control them first. We should also motivate them during class to avoid ill use of social media. E-learning process should be made interesting to them."

Another Ex-student of Ghosgram Kafilia High School (Informant-7) said that

"Students should not allow mobile phone for full time. They should be allowed to use a mobile phone on purpose basis. Parents should allow phone only during their study related necessity".

DISCUSSION

It is evident from section 4.2 that about 65% of students among the respondents have been using a smartphone for the last 2-3 years. Another 32% have used it for the last 1-2 years. The covid-19 pandemic started in 2020 in Bangladesh, and most of the students received easy access to smartphones during that period. Students of classes 9 and 10 generally pass a sensitive time as they have just achieved their youth. So, a mobile phone can lead them to decay. From section 4.3, it is found that about

72% of the students spend 2-5 hours a day on social media and games. In research, the author showed that about 46% of undergraduate students spend about 1-2 hours on Facebook, and 37% use 3-5 hours a day (Renaissance, 2020). This is the time only they keep smartphones alive in their hand.

Nevertheless, that smartphone also breaks their concentration during their study. From the focus group discussion, we learned that excessive use of Facebook might reduce one's attentiveness to a study. So, this duration must be kept in control.

From section 4.4, it is observed that more than 60% of the students mostly use Facebook as their leading social media. Although it can also be a learning and communication tool, Facebook is mainly used for recreation. A researcher claimed that his respondents mostly use Twitter as a learning tool (Junco et al., 2010). Other features like online games, youtube, imo WhatsApp also significantly impact the study of school students.

From section 4.5, it is found that about 32% of students themselves think that using a smartphone is harmful to them. Even they use it just for their addiction. Another 30% cannot evaluate whether it is harmful or helpful to them. 26% of students think that smartphone is beneficial to them. In research, social media like Facebook is shown as a fast communication tool and very effective in students' e-learning process (Bishop-Russel et al., 2006). Although, another researcher showed that excessive use of social media badly affects students' health & family life (Renaissance, 2020). From FGD, we came to know that smartphones can enrich a student's knowledge. As we live in this digital Bangladesh, we cannot avoid the positive sides of technology. There is no alternative to using a smartphone to get introduced to the modern world.

From FGD, it can be summarised that smartphone is vital to technological advancement. We cannot ignore it. If we ignore this device, we will lag behind the rest of the world. We should be careful about its use and access as nowadays, the smartphone is not only a means of personal communication but also a means of recreation. According to a teacher, the smartphone is like a drug. He provided the most emphasis on Social media like Facebook. Many students are getting addicted to this well-known feature of the modern communication era.

CONCLUSION

For several reasons, the smartphone can be an essential e-learning tool: teachers give the link and materials; students can consult and obtain information from one another; it provides immediate feedback, encourages student collaboration, provides access to updated information, and promotes communication between teachers and parents. Shy students gain confidence thanks to a stimulating and fun teaching platform. Smartphone has many benefits in saving time and cost. Teachers also enrich their knowledge using internet facilities, even in rural areas. Through another feature like messenger, they can internally connect for study purposes and attend group discussions. Not only covid period, but different schools in city areas of Bangladesh are also using the facilities for internet connection and smartphone availability as carrying the expenditure of personal laptops is not easy for every family. Information, lecture, handout, course material, routines, notices, fee collection etc., are quickly done using mobile features. So, the benefits of the smartphone one cannot ignore. This study is carried out in a rural area where internet connection is not very strong. Schools are not connected with a broadband connection. Students are using mobile data to browse social media and other features. Even the negative sides of smartphones have become very much visible. Where the internet connection is very available, especially in city areas, the problem may be too serious.

Contribution to forming social relationships through Facebook: networking and connectedness, invitations to social gatherings, charity and blood donations, teaming up lost or old friends and graduates, learning from alumni's experiences, raising social consciousness, closing the cultural gap, and so on. Few students are involved in an internet business when it comes to forming social bonds. They use the Facebook group to showcase their extracurricular activities and supplement their income by selling things. These issues prove that using a smartphone has a lot of positive sides too. But, the problem is that they spend 3-5 hours a day regularly, which is excessive for a school student. Due to spending much time here, they cannot provide enough time to study with full attention and concentration. Some recommendations may be pointed out here from the findings:

- Students should use social media only when necessary. Internet addiction wastes time in the classroom and puts one's health at risk.

- Late-night social media use should be avoided since it disrupts the natural biological cycle and makes it challenging to work throughout the day.
- Early morning social media use is advantageous because there is less internet traffic. The goal, however, should be simply academic.
- The presence of tasty gossip in political, communal, and public groups on social media drains time; therefore, access control is vital.
- Involving close groups can steadily take us into its virtual world, diverting our focus from our daily lives. So for students, it should be strongly avoided.
- Finally, individuals should be judged enthusiastically, not by force, when exercising their freedom to use social media.

ACKNOWLEDGEMENT

The author is very much thankful to the mentor of BPATC and the respondents who gave their valueable time and support.

CONFLICT OF INTEREST

There is no conflict of interest.

REFERENCES

- Ahmed, SR 2020, 'Perception of Graduate and Undergraduate Students in the Effective Utilisation of Social Networking Sites,' *Language and Literature*, vol. 69, no. 10, pp. 65-79.
- Bishop, J, Dubord, M, Hansen, E & Webster, K 2006, 'Acknowledging a campus.com(munity): [the facebook] and diversity college,' *The University of Maine*.
- Ellison, NB, Steinfield, C & Lampe, C 2007, 'The benefits of Facebook "friends:" Social capital and college students use online social network sites,' *Journal of Computer-Mediated Communication*, vol. 12, no. 4, pp. 1143-1168.
- Hasan, M 2021, 'A Study on Social Media Addiction of Young People during COVID-19 in Bangladesh,' *Academia Letters*.
- HISCOCK, D 2004, 'Cell phones in class: This, too, shall pass,' *Community College Week*, vol. 16, no. 16, p. 4-5.
- JEONG, H & LEE, Y 2015, 'Smartphone addiction and empathy among nursing students,' *Advanced Science and Technology Letters*, vol. 15, n. 88, p. 224-228.

- Junco, R 2011, 'The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement,' *Computers & Education*, vol. 58, no. 1, pp. 162–171.
- Kirschner, PA & Karpinski, AC 2010, 'Facebook and academic performance,' *Computers in Human Behavior*, vol. 26, no. 6, pp. 1237–1245.
- Mingle, J&Adams, M 2015, 'Social Media Network Participation and Academic Performance in Senior High Schools in Ghana,' *Library Philosophy and Practice*, vol. 2015, pp.1-51.
- Mondal, SK, Paul, GK, Islam, MA, Sharna, MP, Akter, M & Islam, MR 2020, 'Use and Addiction of Smartphone in Adolescence Students in Bangladesh: Social Networking and Gaming Service,' *International Journal of Sciences: Basic and Applied Research (IJS-BAR)*, vol. 50, no. 2, pp. 65–74.
- Prodhan, MTR, Islam, MN & Hossain, MS 2020, 'Exploring the knowledge of social media platforms among higher education institute students of Rangpur, Bangladesh - Recent Research in Science and Technology,' *Recent Research in Science and Technology*, vol.12, pp.1-5.
- Rahman, M & Tembo, A 2022, 'Assessing the impact of non-formal primary education on students to achieve reading skills in rural Bangladesh: A case of Brac education program in Lahiripara village.
- Waldeck, J, Kearney, P & Plax, T 2001, 'Teacher email message strategies and students willingness to communicate online,' *Journal of Applied Communication Research*, vol. 29, no. 1, pp. 54–70.
- Young, S, Kelsey, D & Lancaster, A 2011, 'Predicted outcome value of email communication: Factors that foster professional relational development between students and teachers,' *Communication Education*, vol. 60, no. 4, pp. 371–388.

