Effect of uncontrolled use of Smartphone on behavioral pattern of students in Bangladesh

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ARTICLE INFO

ABSTRACT

Smartphone is one of the modern means of communication and entertainment to the people of all ages. But it is considered as the most precious object to the young. Due to the pandemic of COVID-19 most of the times students were bound to stay inside the home and passed their time by using Smartphones. Besides, the provision of online classes and exams prepared the valid ground of using Smartphone for the students. As such the intimacy with Smartphone became a habit of the students that initiated a radical change in their behavioral pattern. The aim of the study was to find out the rate and frequency of using Smartphone by the students, the ways of penetration of western culture in their minds by various social media and to determine the negative impact of age-restricted sites on the students. Therefore, we started to collect data on a random basis from various educational institutions in and around Khulna district of Bangladesh during September to December 2020. The study showed that the use of Smartphone recently accelerated in our country when the government of Bangladesh initiated the provision of online programs for the students. In fact most of the students want to keep their phone in their hands all the time except the sleeping hours. The study demonstrated that uncontrolled use of Smartphone brought fundamental change in the behavior, culture, tradition, thoughts, morality and psychology of the students throughout the country.There is a strong correlation between research findings and the use of Smartphones. As well as presenting the results, this study highlights some far-reaching recommendations to reduce the negative impact of using smartphones.

INTRODUCTION

The journey of Smartphone started in 1989 in our country when Bangladesh Telecom Limited (BTL) got the license to operate cellular phones and other wireless communication networks (Wikipedia, 2021). In the fiscal Year 2019-20 the total number of manufactured and imported mobile phones was 29.48 million (Dhaka Tribune, 2021). About 165,615,000 phone numbers are used in Bangladesh which ranks 9th position in the world (Wikipedia, 2021). Now, in the age of globalization and open market economy the world has become an object of our hand. We can communicate with a person within a short possible time. We can meet up our educational purpose by taking part in online classes, we can conduct our trading dealings by browsing the net, we can easily offer our love & affection by phoning the person, and even we can use a Smartphone as a media of entertainment. All these emerged a trend of cultural integration throughout the world.

The students of the first world country are quite free from the control of parents in using mobile phones and they don't follow any healthy time table of using Smartphones. As for example, the majority of students in the USA like to make phone calls at night. Sleepless and restlessness bring adverse effects in their lives (Aoki and Downes, 2003). Psychological and physical disability is seen among those who have excessive addiction to Smartphones. The constant use of Smartphones curtails the sleeping hours of the people and as such they show an angry attitude (Francisca, 2007).

By nature people feel the highest curiosity to sexual affairs at their adolescent period and the Smartphone is one of the easiest means to enter the world of sexual fantasy. Soft-core picture & videos, hardcore picture & videos, sex chat, sex show, webcam sex, child porn, gang rape etc. can be browsed very easily by smart phone (Brand et al., 2016). The mania of browsing porn sites has a far reaching impact on family life. The habit of pornography turns into addiction and it affects the relationship with sexual partners (Kühn and Gallinat, 2014). During 2016, 4,599,000,000 hours of pornography was viewed by the people on one of the biggest pornography sites on the internet (Perry and Schleifer, 2018). As such if we want to establish family peace we have to find out other sorts of recreation facilities to save the adolescent from the curse of porn sites.

Sometimes the SMS that contains users' personal information like internet banking passwords, credit card detail etc. hacked by the brilliant teenagers with a view of thrilling, entertainment or any ill intention that drive the youths to the mafia world. Even the systems of NASA, US Army, Navy and Department of Defense were hacked right after the 9/11 attacks (Kowalski, 2002). Such types of information is spreading everywhere in the world with a great speed by Smartphone. As such many negative issues are taking place in the knowledge bank of the human mind. Sometimes that knowledge is out bursting by the behavior and attitude of the teenagers.

Considering the above fact the present study was undertaken to observe the behavioral pattern of students in Bangladesh.

METHODOLOGY

Study area and participants

The study was conducted among the students of Class IX to X and the students of Universities situated at Khulna, Bangladesh during the first quarter of 2020. We preferred the students from 13-24 years of age in our study because these groups of people are easily available surrounding us and they are also quite free from the control and monitoring of parents in using Smartphones.

Study design

The research was divided into two stages, in the first stage a survey had conducted on the basis of close and open ended questionnaires.

In the second stage a frame for sampling was made in the study areas with150 students (Sample Size-150) and to accept 5 percent error tolerance at the 95% confidence level.

The data was collected unanimously. For searching remedial measures, we considered the opinions of 20 parents as well as 20 faculty members of different educational institutions.

FINDINGS AND DISCUSSION

Respondents' Profile

The profile of respondents' background is presented in Table 1. We have collected data from 150 students out of them 39.33% are the students of secondary level, 42.66% students of higher secondary level and 18% students of university level. The data were collected from the students of homogenous economic status. Among the students 65.33% are male and 34.66 % are female. Data were collected from those who have quite experience in using Smartphones and browsing the internet. Authors felt difficulties to collect data from the females as most of them are influenced by traditional mentality and they are afraid of their privacy and secrecy. But the students of secondary level were very spontaneous to provide data and information as they want to keep pace with the changing world. For this reason their participation is the highest in the study. It was observed that the students possessing the age of 17-20 years are more interested in using Smartphones. But the students who are having the age of 13-16 years didn't get so much freedom in using Smartphones because of control of their parents. The highest freedom is enjoyed by the students having the age more than 20 years.

Table 1: Respondents' profile

Respondents' Background	No. of Respondents (N=150)	Percentage
Educational Status		
Secondary Level (IX-X)	59	39.33 %
Higher Secondary Level (XI-XII)	64	42.67 %
Higher Level (students of University)	27	18.0 %
Total	150	100 %
Age		
13 – 16 years	57	38.67 %
17 – 20 years	63	40.67 %
21-24 years	30	20.67 %
Total	150	100 %
Gender		
Male	98	65.33 %
Female	52	34.67 %
Total	150	100 %

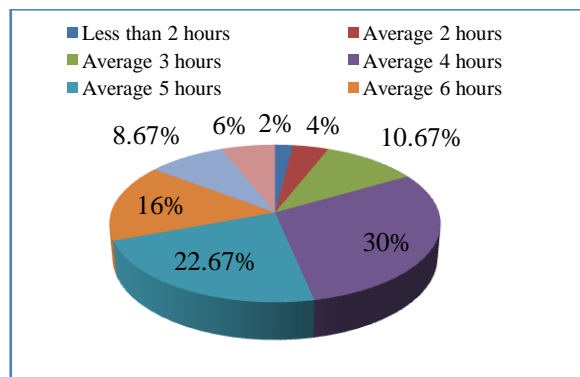## Time spends by the respondent in using Smartphone

Figure 1: Time spends by the respondent in using Smart Phone:

Figure 1 shows that only 2% of respondents use Smartphones in less than 2 hours and this is the lowest figure of spending time by Smartphones among the 150 respondents. 30 % of respondents use Smartphones on an average 4 hours in a day and this is the central tendency of using Smartphone. 6 % of respondents use Smartphones more than 7 hours in a day. But all of them like to hold the Smartphone in their hands all the time even they prefer to keep the Smartphone beside them while sleeping. Among 150 respondents, no students were found who doesn't have any Smartphone. The study observed that once upon a time gossiping and roaming with friends was a

better option of time pass and entertainment but at present the practice of gossiping with peer groups is replaced by Smartphone that makes the adolescent introvert and self-centered.

Purposes of using Smartphone by respondents

Beside usual communication all of the respondents opined that Facebook is the most preferred site to them and spend most of the time with this (Figure 2). As a result instead of face to face friendly relations the trend of technology based indirect relationship is developing among them. 64% respondents use Smartphones for online classes arranged by their respective educational institutions. 27.33% of students especially from secondary level have affinity to many mobile games and they waste times from their study period. Only 4.66% of respondents consider Smartphones as a means of outsourcing that developing mentality of self-dependence among them. 34.66 % of respondents, especially females, like chatting on Smartphone. 15.33 % and 12% of respondents are the fans of many TikTok and Vigo artists and they have some favorite TikTok and Vigo idols. 80.66 % of respondents like to watch Hindi Movie, Songs & Drama on YouTube which influence the students especially female's motivation toward Indian culture. 86% of respondents like native Bengali culture. It proves that the influence of (Indian) Hindi culture is very much remarkable on the adolescent. 32% of respondents like English movies, songs and

dramas but most of them are male and their main intention of watching English videos is to learn English language and to be successful in job sectors. 41.33% of respondents of teenage groups like sports channels and they said that the habit of watching sports on Smartphone pushes them away from playgrounds. 70% of respondents like to watch news updates in order to do better in the exam of Bangladesh Civil Service (BCS). Only 17 % of respondents admitted that they watch age restricted sites on Smartphone but they were feeling shy to talk about this. In fact the real number of the pornography viewer is more than that.
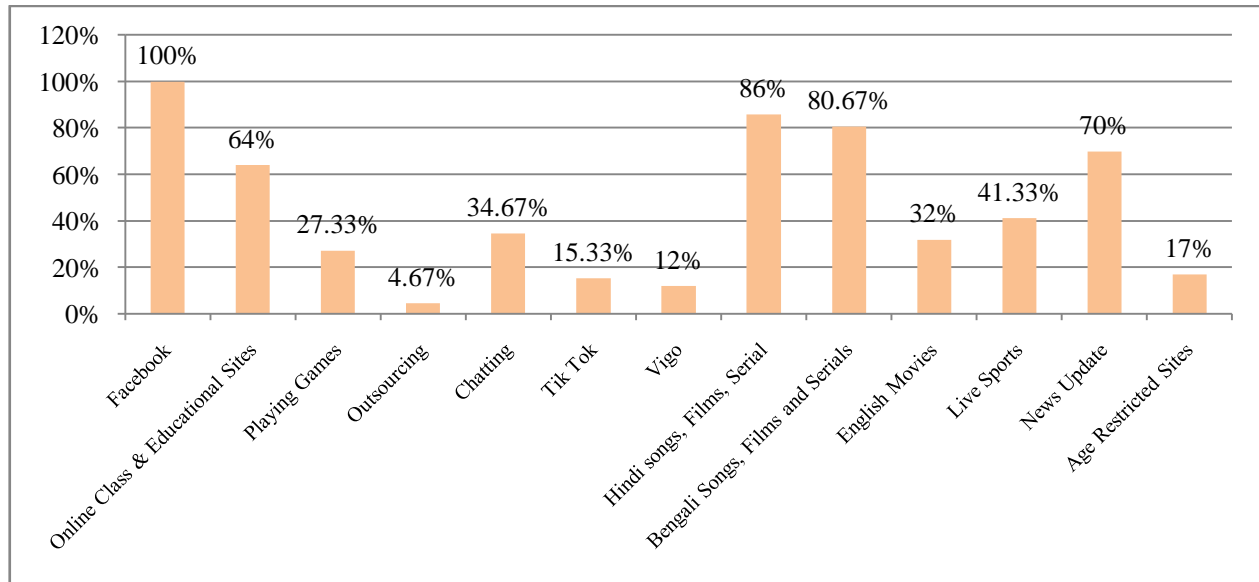

Figure 2: Purposes of using Smartphone by respondents except usual phoning

Table 2: Effect of Smartphone on respondents' daily time table and health

Time of waking up in the morning		
Time	**No. of Respondents (N=150)**	**Percentage**
After 6 am	24	16 %
After7 am	77	51.33333 %
After 8 am	28	18.66667 %
After 9 am	21	14 %
Total	150	100 %
Time of going to bed at night		
Time	**No. of Respondents (N=150)**	**Percentage**
After 11 pm	32	21.33333 %
After 12 am	69	46 %
After 1 am	36	24 %
After 2 am	13	8.666667 %
Total	150	100 %
Effect of using Smartphone on health		
Symptoms	**No. of Respondents (N=150)**	**Percentage**
Feeling drowsiness	11	7.333333 %
Feeling headache	9	6 %
Feeling eye problem	26	17.33333 %
Problem in ear	14	9.333333 %
Nothing mentionable	90	60 %
Total	150	100 %

Effect of Smartphone on respondents' daily time table and health

Among the respondents only 16 % wake up from bed before 6 am. 51.33 % of respondents wake up from bed after 7 am and this number is the maximum among 150 respondents (Table 2). 14 % of respondents said that they wake up from bed before 9 am because they go to bed at the late hours of night. In the same way only 21.33 % of respondents go to bed after 11 pm. 46 % of respondents go to bed after 12 am and only 8.67 % of respondents go to bed after 2 am. But everybody was unanimous that Smartphones curtail their sleeping hours and sometimes as a result of restlessness 7.33 % and 6 % of them suffer from drowsiness and headache respectively. 17.33 % of respondents also said that because of using Smartphones for a long period they felt eye problems. 9.33 % of respondents said that because of continuous use of earphones they suffer from hearing problems. 60 % of respondents said that they didn't feel any adverse effect of Smartphones on their health. It proves that 40% of respondents are facing more or less adverse effects of using Smartphones on their health.

Table 3: Respondents' inclination towards Indian culture and Western culture over native culture

Cultural inclination	No. of Respondents (N=150)	Percentage
Inclination towards Indian Culture	31	20.67 %
Inclination towards Western Culture	43	28.67 %
Inclination to both of them	36	24 %
Equal inclination to those along with native culture	34	22.67 %
Avoiding Those	6	4 %
Total	150	100 %

Table 4: Respondents' inclination towards western dress and fashion

Male		
Types of dresses	**No. of Respondents (N=98)**	**Percentage**
Shirt Pant	23	23.47 %
Panjabi Pajama	11	11.22 %
T-shirt Jeans	64	65.31 %
Total	98	100 %
Female		
Types of dresses	**No. of Respondents (N=52)**	**Percentage**
Salwar Kameez	29	55.77 %
T-shirt Jeans	6	11.54%
Tops-Skirt	4	7.69 %
Sari	8	15.38 %
Veil	5	9.61%
Total	52	100 %

Respondents' inclination towards foreign culture

A large number of adolescents of Bangladesh are influenced by the foreign culture. 20.67 % of respondents, especially the female, possess deep interest in Indian culture and they are fans of many Indian drama serials which are available on YouTube (Table 3). But 28.67 % of the respondents, especially the male are influenced by the western culture and many of them want to admit themselves in the western universities for higher education. 24 % of respondents showed their interest in both Indian culture and western culture. 22.67 % of respondents said that they like to watch all types of channels on YouTube to keep pace with the globalization of culture. But only 4% respondents avoid both of the Indian and western culture.

Respondents' inclination towards western dress and fashion

Adolescents are very much fond of imitation. 23.46 % of respondents (male) like to wear usual shirt-pants. 11.22% respondents said they like to wear Panjabi Pajama on various occasions and festivals (Table 4). But 65.30 % of respondents said that T-shirts and Jeans pants like the western countries are the most comfortable dress. 55.76 % of respondents (female) feel comfort by wearing Salwar-Kameez. 11.53 % of respondents (female) like to wear T-shirts & Jeans. Only 7.69 % of respondents like western Top-Skirt. 15.38 % of respondents said that Sari is their most favorite dress but they wear it occasionally. Keeping the religious doctrine in mind only 9.61 % of respondents use veil and always try to avoid the western dress. Both male and female opined that the facility of online shopping over Smartphones made various types of dresses like the western countries available to them that brought radical change in the pattern of their dresses.

45.33 % of respondents like to take fast food from shops along with their friends nearby their educational institutions instead of taking food at home and it is becoming a habit of them (Table 5). They also (female) said that they are learning to make various foreign food items by watching YouTube videos. 13.33 % of respondents buy food from restaurants because they want to avoid hardship of cooking at home. They also opined that the provision of online shopping and home delivery service made this process very easy. Now, anyone can order food items from an online restaurant by staying at home. 19.33 % of respondents like to take traditional food from restaurants as these are quite cheaper. Only 22 % of respondents said that they always try to take native homemade food along with other family members at home. In this way the traditional food habit of the young is gradually adapting with the modern world.

Respondents' inclination towards fast food

Table 5: Respondents' inclination towards fast food

Preferred food Items	No. of Respondents (N=150)	Percentage
Fast food from outside shop	68	45.33333 %
Chinese food from restaurant	20	13.33333 %
Traditional food from restaurant	29	19.33333 %
Native homemade food	33	22 %
Total	150	100 %

Table 6: Respondents' inclination of using foreign words along with mother tongue while talking

Using foreign words	No. of Respondents (N=150)	Percentage
Habit of using Hindi words	17	11.3333 %
Habit of using English words	63	42 %
Habit of using both	47	31.3333 %
Habit of avoiding those	23	15.3333 %
Total	150	100% %

Respondents' inclination of using foreign words along with mother tongue while talking

11.33 % of respondents (mostly female) use few Hindi words while gossiping with friends as an art. 42 % respondents (mostly male) try to use English words and sentences in their speech in order to learn English (Table 6). They also watch English Language Course on YouTube Channels. 31.33 of % respondents like to use both Hindi and English

as they are very much farsighted and want to adjust with the changing world. Only 15.33 % of respondents avoid those because they are afraid of pronunciation. In this way language is going to take a global shape because of Smartphones.

Respondents' favorite celebrating days

20.67 % of respondents, especially from university level consider Pahela Baishakh (Bengali New

Year) as their most favorite celebration. 14.67 % of respondents, mostly from secondary level anxiously wait for 31st night and they send greeting SMS of the new year to their inmates. 11.33% of respondents like Valentine Day very much. 18.67 % of respondents usually sent greeting SMS to their friends on friendship day. 10 % of respondents (especially female) wish their father on father's day. 14 % of respondents wish their mothers on mother's day. Only 10.67 %of respondents like to wish their teachers on teacher's day (Table 7). However, 78 % of the respondents have no clear conception about the traditional Bengali Village Fair. In this way wishing the friends, parents and teachers are gradually becoming an indispensable part of adolescent habit.

Table 7: Respondents' most favorite celebrating day

Celebrating Festivals	No. of Respondents (N=150)	Percentage
PahelaBaishakh	31	20.66667 %
31 Night	22	14.66667 %
Valentine' Day	17	11.33333 %
Friendship Day	28	18.66667 %
Fathers' Day	15	10 %
Mothers' Day	21	14 %
Teachers' Day	16	10.66667 %
Total	150	100 %

Parents' opinion to provide Smartphone to their children

12 parents opined that they had given Smartphone to their sons against their will. But 7 of them opined that they have given Smartphone to their daughters willingly considering their security & safety. 8 parents said that Smartphone is a basic requirement of modern age and they didn't impose any control over the use of Smartphone by their children. 11 parents said that the price of Smartphone and the monthly bill of Wi-Fi or internet data creating financial pressure on them. 9 parents expressed that they had given Smartphone to the children so that they can take part in online class smoothly. 8 parents also said that they are not so much expert in using Smartphone rather sometime they seek help of their children when they face problems to operate the device. Both father and mother of the 7 students are involved in service and most of the time they remain outside of their home. Such parents said that the Smartphone can remove monotony of their children in absence of them.

Thoughts of faculty member to combat the situation

16 faculty members of different educational institutions said that students should not keep the Smartphone along with them inside the classroom. But 4 of them said that students can keep the phone along with them in a silent mood. All 20 faculty members said that instead of roaming with their friends students are mostly found using Smartphones at different corners inside the institution during leisure time. 18 faculty members said that the absence of large playgrounds increases the frequency of using Smartphones. All of the faculty members said that arranging seminars and debate about the negative impact of excessive use of Smartphones can be a motivational tool in this regard.

Government initiative to impose control over the use of internet

On 9 February 2021 Bangladesh Telecommunication Regulatory Commission (BTRC) blocked 1,279 more pornographic websites in the country. Earlier the BTRC also blocked 244 pornographic websites. However 17% of the respondents said they are very much fond of visiting porn sites (The Daily Star, 10 February 2021). It proves that the sensory measures should be improved further. Cybercrimes are reported every day in the country. 2,044 cases were filed

with different police stations. The number of cybercrime cases was only 03 in 2013, but it went up to 33 in 2014, 152 in 2015, 233 in 2016, and 568 in 2017 (Dhaka Tribune, 9 Feb 2021). In fact still now 26 % of the respondent doesn't have any clear conception about cybercrime and punishment for cyber offence.

CONCLUSION

Smartphones are very important and wonderful communicative tools used by all ages of people, especially Young generation. Without a Smartphone, life is boring nowadays. It is the need of all day long demands of the young. They not only use it as a positive way of communication to others but also use it for entering into the negative world. Taking the support of Google to find out the correct answer of many short questions is installing the mentality of cheating during online exams and day by day it is becoming an indispensable part of their habit. Their innovative and creative power will be damaged because of excessive dependence on ICT. The involvement of the young in outsourcing to earn money from childhood makes them greedy for money. In the long run they may give more emphasis on personal financial interest by avoiding the interest of society and state. Instead of face to face spontaneous relation, excessive use of social media is making the boys introverted. The boys who are using more than one ID can't answer the necessity of holding that and they said that they are using their fake ID for making their friends confused. Making the people confused is a negative approach to human attitude. The world of vulgarism is easily tempted by the young generation. Influence of Selfi syndrome is also the most lucrative part of the young generation. They are really consuming their valuable time but they are totally unaware of the fact of the detrimental effect of their life. Not only parents and the educational institutions but also it is the duty of the society and the government to protect our young generation from the negative effect of Smartphones.

RECOMMENDATIONS

1. Parents should allocate such a living room or study room for their kids which is visible from the surroundings. The constant vigilance of parents may refrain their children from the unnecessary use of Smartphones.
2. The online class should be monitored by the faculty members properly and they should also notify the attendance sheet to the guardians.
3. The schedule of online classes and exams should also be provided to the parents and the result of all sorts of exams should be acknowledged by the parents.
4. Parents should have better knowledge in operating Smartphones so that they can check the hidden folder or locked memory of their kids if necessary.
5. Parents should not provide unlimited internet facilities to their kids except for educational purposes.
6. Parents should check the friend list of their kids. Sometimes parents may invite the friends of their children in many family programs to obtain a clear conception about the peer groups of their children.
7. Parents should make their kids bound to go to bed at the right time and to wake up from the bed early in the morning.
8. Parents should monitor whether their children are suffering from drowsiness and headache or not
9. Parents should spend more time with their kids for entertainment purposes. Holiday tour may refresh the mind of the children.
10. The elder Family members especially parents should be aware of what their children are doing in their room and for which purpose they are using Smartphones
11. Proper knowledge should be spread among teen-agers about the negative sides of unethical use of Smartphones. Various motivational programs, seminars and debates can be arranged by the educational institutions as well as by the government initiatives.
12. If possible parent should not provide any Smartphone to their children for recreation and communication. Rather can provide analogue phone for security purpose if necessary. For online classes Smartphone can be provided to them under supervisor.
13. There should be government's steps to prevent the sites of pornography and there should be a government sensor board to fix what type of sites should be allowed inside our country.

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