J. Dhaka National Med. Coll. Hos. 2020; 26 (01): 16-20

Original Article

Use Pattern of Smartphone on Young People, Blessings and Risks

Sabrina Shafi Zinia[1], Jannatul Nayeem[2], Belal Ahmed[3], Md. Khorshed Alam[4]

[1]Intern doctor, Dhaka National Medical College hospital, [2]Intern doctor, Dhaka National Medical College hospital, [3]Professor, Department of Community Medicine, Dhaka National Medical College hospital, [4]Professor, Department of Pharmacology, Dhaka National Medical College hospital.

Abstract

Introduction: This paper presented a study on trends in smartphone usages among the young people in Dhaka city. This research provided various purposes of using cell phone and access internet on distinct ways.

Objective: This study was undertaken to compare socio economic characteristics, purposes, behavioral changes, commonly using applications and problems arising from using smartphone.

Methodology: This study was done in some selected area of Dhaka city from February 2019 to February 2020. A cross sectional design was used to collect data from 1000 respondents with the specific age group ranging from 15 to 40 and convenient type of non-probability sampling was used as a sampling technique. Data analysis was done by the computer with the help of SPSS 22 programme.

Result and Discussion: About 79.8% of young people use smartphone for communication, whereas 69.1% for watching videos. Maximum users of smartphone are students. For this excessive use of smartphone they faced some problems such 22% are complaining headache, 27.3% for eye pain and so on.

Conclusion: Results revealed health issues most significantly eye pain, neck pain and headache. Further it showed not only the merits of smartphone but also some demerits of excessive use of it.

Keywords: Smartphone, young people, merits and demerits

Introduction

The smart phone, being a very new invention of humanity, have come to be an inherent part of human`s existence. It permits clients to picture, memories, private data, correspondence, fitness, economic information in single vicinity. According to USAID, mobile devices have following impact on the society" increase of 10% in mobile penetration can raise the annual GDP growth rate by as much as 1.2% in a developing country; 93% of female mobile phone users feel safer with a phone; 85% feel more in independent; 41% use their phones to increase their income and professional opportunities"[1]

Because of convenience, the majority people in developed and developing country countries use mobile phones. the research group estimate that at least 70% of Japanese population and 62% of U.S. inhabitants useds mobile phones in 2005.[2] In Australia, 81% of people used mobile phones in the same year.[3] The author moreover discusses blessings and disadvantages of smart phones utilization via people and brings examples of folks that refuse to use cell phone.

People are also grateful to have smart phone for making their life more easier in this competating world. Smart phone along with the different use of internet that makes the things more easier as well as more helpful. On the other hand, it may be that smart phones are increasingly replacing traditional computers for work tasks, a view spread by some of the popular press.[4]

Now-a-days smart phone is very common by all classes of people, similarly in our study we also found that smart phone is more popular in young people. In our research we took equal varient of male female data. But we found that most of the middle aged people specially students are fond of smart phone. According to PEW research center, the number of smartphone owners comprises 56% of American adults in 2013 and their average daily use of device is about 195 minutes.[5]

However, with maximum amount of facilities, there are some drawbacks such as headache, eye pain or redness, neckpain, finger pain and professional disadvantage like typing difficulties. Research conducted by a group of Korean scientists from Injr University an effect of cell

phone on hamd held device users was "a significant association between the total times spent using a mobile device each day and pain in the right shoulder, and between times spent internet browsing and pain at the base of right thumb."[6]

Although it has some beneficial effects too. As it is convenience, people get too many things so easily through the mobile phone. People can communicate each other in a long distance as well as get health related information and valuable things. People specially the younger generation become addicted by smart phone. In many cases people becoming more and more aggressive. Without mobile phone to be exact smart phones they think life will be stand still.

This special vulnerability of college students to internet addiction has been characterized by: 1) an increasing investment of resources on Internet-related activities; 2) unpleasant feelings when off-line, including anxiety, depression and emptiness; 3) an increasing tolerance to the effects of being on-line and 4) denial of the problematic behaviors.[7] Thus people become more addicted to smart phone same occurance are happened in our society for excessive use of it. prodigious amount of road traffic accidents are happened now a days. For this reason strict traffic rules are taken such as prohibition of use of mobile phone while driving. Some people are obeying the rules in contrast some are denied it. Additional negative concequence of heavier Internet use in college students is impaired academic performence.[8,9] Because of using smart phone while driving, accidental rates are increased. For tackling this issue some citizens are taking some measures.

Smart phone is a blessing for young generation and for society. Now-a-days, it becomes an alarming issue to be discussed however not any work has been done yet. We studies about it and tried to focus on its merits and demerits.

Methodology

The study was a cross-sectional study. Place of the study was some selected area of Dhaka city. Period of the study started from February 2019 to February 2020. For this survey studied population was younger generation between the age of 15 to 40. Convenient type of non-probability sampling was used as a sampling technique and our sampling size was 1000. Structural questionnaire was first prepared, it was pretested. After finalization it was used as research instrument. In this survey face to face interview used as method of data collection. For data analysis aninterpretation of it collected data were checked to exclude any error. Techniques of graphical representation such as pie chart, bar chart & histogram were applied & analyzed using SPSS 22 programme.

Result and Discussion

Table-I: Distribution of the Respondents according to socio-economic characteristics

Sex of the Respondents	Frequency	Percent
Male	500	50.0
Female	500	50.0
Total	**1000**	**100.0**

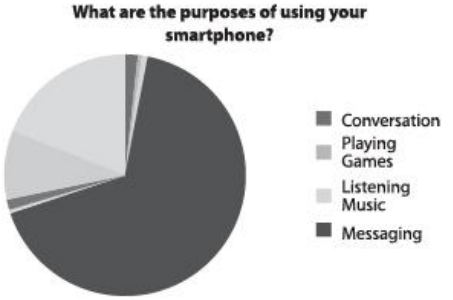
Age of the Respondents	Frequency	Percent
15-20	383	38.3
21-25	322	32.2
26-30	188	18.8
31-35	79	7.9
36-40	28	2.8
Total	**1000**	**100.0**

Education of the Respondents	Frequency	Percent
Illiterate	11	1.1
Primary	8	.8
Secondary	157	15.7
Higher Secondary	320	32.0
Graduate	485	48.5
Post Graduate	19	1.9
Total	**1000**	**100.0**

Occupation of the Respondents	Frequency	Percent
Student	786	78.6
Service Holder	83	8.3
Businessman	44	4.4
Housewife	53	5.3
Garments workers	5	.5
Labour	26	2.6
Jobeless	3	.3
Total	**1000**	**100.0**

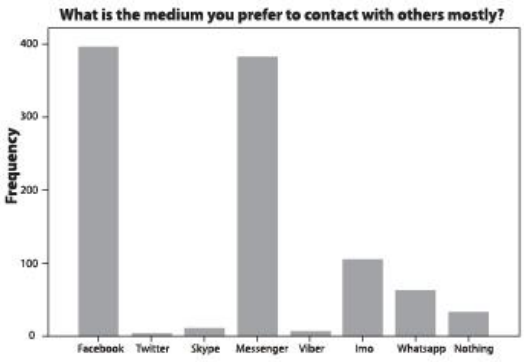
The above table represents socio-economic characteristics of the respondents where half of respondents are male 500(50%) and half of respondents are female 500(50%). So, there are equal users of mobile phone. Among these respondents, more using age of smart phone is 383(38.3%) which ranging from 15-20 years. Among all respondents 11(1.1%) are illiterate and 989(98.9%) are literate. Majority respondents were students (8.3%), 21.1 & were engaged in various types of jobs only 0.3% were jobless during the survey.

Figure-I: Distribution of Respondents according to different types of motives of Respondents



798(79.8%) respondents are using Smart phone only for conversation. In contrast, 202(20.2%) respondents are responding negatively. Other than that, in this survey, respondents have various motives of using Smartphone, such as- 69.1% for watching videos, 53.1% for playing games.55.8% for listening music, 85.3% for online banking, 59.1% for calling Uber/ pathao, 74.6% for ordering food by food panda.

Fiqure-II: Distribution of Respondents according to mostly used apps



Majority of respondents (39.6%) are using facebook mostly to contact with others. all along (38.2%) are using messenger and then about (10.5%) are using Imo, (6.3%) are using whatsapp and (1.1%) are using skype, (0.3%) are using twitter and (0.7%) are using viber to contact with others mostly.

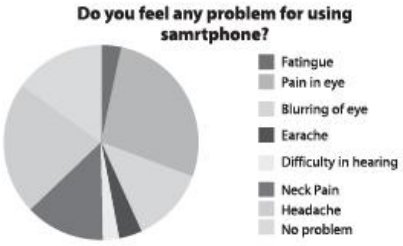
Table-II: Distribution of Respondents according to change of behavior

Changes of sleep pattern of the Respondents	Frequency	Percent
Increased	145	14.5
Decreased	512	51.2
No change	343	34.3
Total	**1000**	**100.0**

Addiction to smart phone of the Respondents	Frequency	Percent
Yes	576	57.6
No	424	42.4
Total	**1000**	**100.0**

Large number of respondents (51.2%) are dealing with sleeping issues that is decreased their sleeping habit but 34.3% having no change of sleep. However, 57.6% respondents are feeling addiction to their phone.

Figure-III: Distribution of respondents according to facing problems while using smartphone



Almost one third (27%) respondents are facing problem of eye pain and 22% respondents are facing problem of headache. Other respondents are feeling difficulties like neck pain (13%), blurring of eye (12%), earache (3.7%), %), fatigue (3.2%), hearing problem (2.6%).15% respondents are not having any problems.

Discussion

The study aim to find out the use pattern of smart phone as well as advantages and disadvantages among the young people. In the study, we collected 1000 data in equal number both male (50%) and female (50%). The studied age group 38.3% and 32.2% were used smart phone in major portion, ranging 15-25years. The age distributions of the respondents were corresponded

with the study" Amanda Lenhart in The Pew Internet and American Life Project also reported that as of 2010, 82% of American adults owned a mobile device; the percentage was found to be even higher for younger adults aged 18-29years."[10] All the 1000 data (100%) 1.1% of illiterate and 98.9% of litterate. From this educated respondents were higher secondary 32% and graduate 48.5% who used smart phone enormously." Others studies agreed that full-time students were more likely to be addicted to the internet, and they were considered to be at high-risk for problems because of free and unlimited access and flexible time schedule."(9) Mostly 78.6% respondents were students and 21.1% were job holders. More than half of the respondents 67% were using smart phone as a purpose of messaging whereas 79.8% for conversation, 69.1% for watching videos, 53.1% for playing games and 78.9% for social networking. In addition, 5.8% were used smartphone for listening music, 59.1% for calling uber/pathao, 74.6% for ordering food by food panda. Moreover, more than 50% (56.4%) purchased on online and a tiny fraction (14.7%) dealt with through online banking. "Mobile consumers in the middle east are also using their smartphone to engage with online and offline advertisements .More than ¾ of the smart phone user in Egypt, have performed a mobile search after seeing an ad such as a TV commercial offline". "Although they also claimed that they used smartphone as making phone call, checking email, checkin website pages, sending text massages ,reading documents, taking pictures, browsing internet, downloading software, listening music taking videos watching movies, watching TV, use as an alarm clock and use as a watch."[11] Kim and co researchers have conducted a study on adopting smartphone as learning technology at Seoul National University, Korea. their study focused on the use of smartphones application for learning among education and engineering students. Their findings revealed that generally each studentshad 80 applicantions on their smartphones. 16% of the applications were used for some kind of learning"[12] "The usage of smartphones among Malaysian students was reported tha university students in malaysia had adopted smartphone as a necessarily for learning institutions, sharing notes between classmates, recording lectures".[13] In this study, Around 90% respondents are using internet in their Smartphone. For communication purpose we used facebook frequently in our daily life (36.1%). Second highest group of people who used YouTube for educational and entertainment purpose around 35%. Rather than these apps, others using apps were Messenger(38.2%), Imo(10.5%), Whats app(6.3%), Skype(1.1%), twitter(o.3%), Viber(0.7%)." Turkish research showed the smartphone users (56.9%) stated that they used cellphones in order to find radiological information and the most used wave pages were Google(93.8%), Radiopaedia. Org (73.3%), Radiologyassisstant.nl (76.7%) and pubmed (64.8%). Social media uses were as follows: None(5.7%), Facebook(79%), Twitter(31.3%), Google + (29%) and YouTube(25%)."[14] Because of excess use of smartphones, some adverse effects were occured both physically and mentally. Almost one third (27%) respondents are facing problem of eye pain and 22% respondents are facing problem of headache. Other respondents are feeling difficulties like neck pain (13%), blurring of eye (12%), earache (3.7%), fatigue (3.2%), hearing problem (2.6%).15% respondents are not having any problems. "The scientists used Disabilities of Arm, Shoulder and Hand (DASH) – in their analysis 27.5% of them were known to be unaffected by hand pain symptoms, 44.5% of them affected by mild hand pain for moderate hand pain, there were 24% of them. Apart from that, there were 3.5% of students were know to be affected by severe hand pain and worst possible pain."[8] In Berolo's research, noted that" mobile or the hand held device user complain of discomfort at least on one area of upper extremities, back or neck. long term usage of the devices leads to tension on the tendons, muscles, and perimetrics tissue, which could result in visual display terminal (VDT) syndrome."[7] At the time of study just above 50% and 70.8% pedestrians were using smartphone while waking and driving. Almost all the people (85%) thought that it was a risk to drive while on phone. In Itabashi, Tokyo, October 2013, a man in his 40s was hit by a commuter train and died at a level crossing where the warnings (flashing red lights and tonal alarm) were on and barrier was closed. It was observed that he was operating a cell phone while walking on the crossing.[15] In a study, the National Highway Traffic Safety Administration (THTSA) estimated the total economic cost of motor vehicle accidents at $277 billion.[7] While survey majority of respondents (57.6%) were addicted to their phones. Some research mentions new addictions. These addictions consist of a number of distinct common components (Silence, mood modification, tolerance, withdrawal, conflict and relapse) with many additional commonalties that may reflect a common etiology of addictive behavior; this suggests that addiction may be a separate syndrome.[15]

Conclusion

Over the past decade, there has been fundamental advancement in smartphone technology, such that smartphones and apps are now gambling an adjunctive position in our everyday life. Taking into consideration the adverse effects, it might consider how exceptional it could make a contribution to embracing and making use of this technology in the future at the individual, corporation and national levels.

References

1. USAID . (2015, MAY 26) . Mobile phones tackling poverty Retrieved from http://www.usaid.gov/infografics/50th/mobile-phones-tackling-poverty
2. Chi J. (2005). Cell phone market development: a Japan-U.S.comparison. (In Japanese) Stanford JapanCenter-http://sjcr.stanford.edu/research/publication/HE/pdf/SHE-2005-001-J.pdf (accessed August 21, 2008).
3. Phillips JG, Butt S, Blaszczynski A. Personality and self-reported use of mobile phones for games. Cyber Psychology& Behavior 2006;9:753-8
4. Nielsen Online. Twitter's tweet smell of success (March 18, 2009) http://t.co/oPO4jGW.
5. Sohn T., Setler V ., Mori K., Kaye J., Horii H., Battestini A., Ballagas R., Paretti C., & Spasojevic M. addressing mobile information overload in the universal inbox through lenses. In Proc. MobileHCI 2010,361- 364.
6. Pew research center : smartphone ownership2013. Retrievedhttp://www.pewinternet.org/2013/06/05/smartphone-ownership-2013.
7. Sophia B., Richard P. Wells, Benjamin C., Amick (2010). musculoskeletal symptoms among mobile hand held devices user and their relationship tp devices use : A preliminary study in a canadian university population .The Ergonomics society , Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/20833387
8. Miakoto L. – New York University. [internet] 2017 : the impact of smartphones and mobile devices on human health and life.
9. Chak K., Leung L., 2004. shyness and locus of control as predictors of Internetaddiction and Internet use. Cyber Psychology and Behavior 7:559-570.
10. Lenhart A. (2010) : The Pew Internet and American Life Project .
11. Alfawareh H.M., Jusoh S. Smartphones uses among university students: Najran University case. International Journal of Academic Research Part B; 2014; 6(2),321-326. DOI: 10.7813/2075-4124.2014/6-2/B.48.
12. Kim J.L and Altman J., (2013). Adapting smartphones as Learning Technology in a Korean University. Journal Of Integrated Design and Process Science , 17(1), 5-16.
13. Mohtar N.M. M, Hassan M.A., Hassan M.S., and Osman M.N.,(2013), IOSR Journal Of Humanitiesand Social Science (IOSR-JHSS) , The importance of Smartphone's Usage Among Malaysian Undergraduates, Volume14,Issue3, 12-118,2013.
14. Ozutemiz C., Dicle O., Koremezli N.(2015) European journal of radiology: How Turkish radiology residents access information related to their profession in this social media and the smartphone era. open 2, 129-133
15. Griffiths M. 2000. Does Internet and computer addiction exist? Some case study evidence. CyberPsychology and Behavior 3(2): 211-218.

    Griffiths M. 2005. The biopsychosocial approach to addiction. Psyke and Logos 26(1):9-26.