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Patterns of Use and Dependency on Smartphone by the Bangladeshi Urban Youths

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[Abstract: Smartphone is one of the most popular new communication devices amongst the urban youths in Bangladesh. The youths use smartphones on multiple purposes including to remain updated with the flow of information, access entertainment content, and maintain communication with friends and social acquaintances. Besides, as this study finds, the youths consider smartphone as a trendy device in their social life. This research saw how the Bangladeshi urban youths were influenced by smartphone. As a theoretical standpoint, the uses and gratification theory has been applied to analysis various aspects of smartphone usage by the young users. The researchers conducted a survey with a structured questionnaire among 100 smartphone users based in Dhaka and its suburb Savar area. There were three key findings: i) youths spend maximum hours [of total time they spent with smart phone in a day] by browsing through the cyberspace, predominantly on social networking sites; ii) youths consider ownership of smartphone as well as access to internet through it as an integral instrument to achieve their goals; and iii) excessive use of smartphone creates dependency on the device, leading towards an addiction to this gadget.]

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1. INTRODUCTION

In last two decades, people across the globe have experienced a significant change in the activities related to their socioeconomic and personal life. Smartphone is a device that has been accepted by a wide range of people in every society because of its usability and dimensions. More than 50% of the global market for mobile phone was dominated by the smartphones (Davey and Davey, 2014). The smartphone has reframed the everyday activities in human life, easing communication and offering convenience in multitasking (Anshari and Alas, 2015). In present era, a sense of incompleteness might be noticed in a person who is surrounded by the smartphone users, if he or smartphone. According she fails to afford а to Bangladesh Telecommunications Regulatory Commission (BTRC), as many as 84.6 out of 90 million internet users in Bangladesh use mobile phone internet (bdnews24.com, 2018). Bangladesh's capital Dhaka ranked second in the world in terms of number of active users of social network facebook (We Are Social and Hootsuit cited in Murad, 2017). There were 22 million active facebook users in Dhaka city in 2016 (Murad, 2017).

While describing the rapid expansion trend of smartphones across the globe, Sarwar and Soomro (2013) state that people now live in a "frenetic smartphone society" where people's activities, behaviours, and social life are influenced by smartphone (Sarwar and Soomro, 2013). According to them, smartphone influences society both in a positive and a negative way. On the one hand, people use the smartphone to remain connected with a wide range of people, but on the other hand, this device isolates the users, helping them to develop a "micro-cultures" which is a 'dangerous' phenomenon (Sarwar and Soomro, 2013). This digital gadget does not serve as a communication device only. Rather, the users of this machine use it on various purposes -- to do interpersonal or group communication, take photograph and shoot film, and use the internet etc. Besides, smartphone is widely used to access entertainment content in the virtual world. Because of its multifunctional capacity, the smartphone has, over the course of time, become a "multi-purpose medium" also a "multifunctional personal device" (Ahad and Anshari, 2017). According to Oxford Living Dictionary, a smartphone is a device that "performs many of the functions of a computer" with an option to access the internet. The term 'smartphone' was generated as the part of a marketing strategy (Sarwar and Soomro, 2013). This very form of mobile device offers a range of services including steering with the still and moving images, games, navigation, camera, recording, send or receive of emails, applications to use social media networks, wireless internet, and so on (Sarwar & Soomro, 2013).

One of the key efficiencies of smartphone is its capacity to access wireless internet. People can do a range activities on cyberspace -- exchanging emails, doing voice and video conversations, using social networking sites, accessing entertainment and news media, finding direction of a place and so on, from every corner of the world as long as they have internet connection to their smartphones. The cyberspace has appeared as a new environment in public domain that is different from the real world where the people live in. This study intends to understand the patterns of smartphone usages by the Bangladeshi youths and explore the level of dependency of youths on this device. The following two questions guided the study:

- i) What are the common practices of smartphone usages amongst the urban youths in Bangladesh?
- ii) To what extent the urban youths are dependent on this new communication device in their daily life?

The word 'youth' has different meanings in different sociocultural settings. In this paper, the term "youth" refers to males and females who are between 18 to 25 years of age, and the word 'patterns' predominantly indicates the common practices of using smartphone by the youths. The word 'dependency' represents the level of usage of smartphone by the youths, meaning the amount of time they spend with smartphone in their daily life.

2. LITERATURE REVIEW

A significant portion of the existing studies on smartphone uses are mainly focused on the impact of cellular phone (including feature phone) on human life. The phenomenon of growth in mobile phone usage has further taken into consideration in these researches. As part of reviewing the existing literatures, this paper will examine the level of connection between the youths and smartphone in section 2.1 below. Besides, the scenario of cyber literacy in relation to propaganda and vulnerability of youths in Bangladesh is discussed in section 2.2.

2.1 Youths and Smartphone

Research demonstrates that "access to and use" of media by the youths has increased over the period of time (Livingstone and Haddon cited in Lauricella et al., 2014). Besides, the youths have showed up as "early adopters" of new communication technologies (Madden et al. cited in Lauricella et al., 2014). The university students adopt smartphone more quickly than other users (Tangmunkongvorakul et al., 2019). The youths use smartphone on various purposes including for recreation and to share information (Ahad and Anshari, 2017). At the same time, the researchers have claimed that use of smartphone, among others, may be identified as a cause of "poor academic performance" by the youths (Campbell cited in Ahad & Anshari, 2017). The youths consider smartphone as a "precious acquisition" in their life and a "sense of independence" from families, teachers, authorities, and socio-cultural values develops in their minds following possession of smartphones (Ahad & Anshari, 2017). Besides, the youths use smartphones for their relaxation, particularly when they are in "emotional stress" (Ahad & Anshari, 2017).

In the present era, the youths are considered as the "avid users" of mobile devices and the invention of mobile tablets (smartphone) has influenced the patterns of usage of smartphones by the youths (Lauricella et al., 2014). The youths use the internet and new media devices on different purposes and 'motivations' that further shape their "media use behaviour" (Lauricella et al., 2014). Excessive use of smartphone may create an addiction to smartphone what is widely known as "communication addiction disorder". The studies claim that addiction to the smartphone is "increasing rapidly" (Sarwar and Soomro, 2013). According to a research conducted by a Korean ministry, 8.4% users of the smartphone are addicted to this device (Sarwar and Soomro, 2013). The previous researches have showed that smartphones are popular because of its features that help the users to maintain social relationships including the romantic ones. However, the critics have identified a number of negative aspects of smartphone usage which include "addiction, distraction, cyber bullying and exposure to explicit content" (Ahad & Anshari, 2017).

In a study conducted on the college students, aged 19 to 25 in Korea, Park & Lee (2014) found that females have a high addiction tendency to smartphone than their male counterparts. The members of this high addiction tendency group have a higher level of motivation for chatting and spending time on social network sites, and they consider smartphone as a positive tool to develop "bonding and bridging" in social relationships (Park & Lee, 2014). Some researchers have mentioned that addiction to a mobile phone is no less than drug addiction. Excessive use of mobile phone also causes "sleep disturbance, anxiety, stress and depression" (Gutierrez et al., 2916). The urge of using smartphone also influence the youths to get engaged in criminal activities including stealing from their peers (Netsafe, 2005). Bangladeshi media reports suggest that young drivers of vehicles use mobile phone while driving, increasing the rate of accidents on the streets. In an interview, the Commissioner of Dhaka Metropolitan Police Asaduzzaman Mia said: "Using headphones or talking on the phone while driving is one of the major causes of traffic accidents (in Bangladesh)" (Rabbi, 2017). The parents say that they give mobile phones to their children on safety issues. A report published on the Bangla daily Prothom Alo, based on a study conducted by the University of San Diego, USA, claims that smartphone makes the youths lonely to a certain extent (Prothom Alo, 2017). This study also mentions that social activities like dating and hanging out with friends will decrease gradually because of the excessive use of smartphone by the youths. The excessive use of smartphone creates insomnia amongst the youths (Prothom Alo, 2017). A University of South California study finds that (cited in Davey and Davey, 2014) "unprotected adolescents sexual activity" rate is higher among the smartphone users than others. The "social and psychological effects" of smartphone, following the excessive use of the device by the adolescents, has been a matter of concern for some time in India. The present Indian generation, as argued by Davey and Davey (2014), "abuse" smartphones as this device has made mobile communication easier than previous time and the adolescents are prone to smartphone addiction. A recent article published by the Oxford University Press shows that the psychological difficulties are increasing amongst the Bangladeshi teenagers who indulge the screen-based activities in an excessive manner and stay away from physical activities (bdnews24.com, 2018).

2.2 Cyber Literacy, Propaganda & Vulnerability of Youth Users: Bangladesh Context

An estimated 47.6 million, which is 30% of the total 158.5 million populations, were aged 10-24 in Bangladesh (Daily Star, 2015). A huge number of youths in Bangladesh are "tech savvy" (Alam, 2015). The human life today is surrounded by the flow of information related content and media messages (Potter, 2016). As media content are "highly attractive" people consider increasing their volume of time spending with media message each year (Potter, 2016). The concept of medial literacy comes to fore taking this reality into consideration. Media literacy refers to individual's capacity to "access, analyse, evaluate and create message" in the domain of various media forms (Aufderheide, and Christ and Potter cited in Livingstone, 2004) and this is a "skill-based" approach (Livingstone, 2004). As Potter (2016) states: "…with the advent of technologies to convey messages in addition to print, the of literacy was expanded to also include things like visual literacy, story literacy, and computer literacy (the ability to record one's own messages, to send them to

others electronically, to search for messages and to process meaning from electronic screens)." Livingstone (2003) argues that it is important to develop skills and capacity to manage and use content in the field of information and communication technologies as the sector is turning out as a key element in the modern society.

Computer literacy, internet literacy and cyber literacy are three new forms in the field of media literacy (Livingstone, 2003). Cyber literacy is particularly important in present era as people, especially the youths are becoming more and more active day by day in the domain of social networking platforms which are often used by a section of users to spread propaganda on various issues in public spheres, causing anarchy and disputes in the societies. In 2012, a mob vandalised a Buddhist village, making hundreds homeless, in Ramu under Cox's Bazar district in Bangladesh, following a facebook post on the profile of a Buddhist youth. Local media later discovered that the Buddhist youth did not have any connection with that social media post (BBC, 2013). Besides, different internet-based platforms including social networking sites are used to radicalize the youths. Thompson (2012) states social media platforms are used by individuals and organisations to radicalize people for "political and social changes" and it is being possible due to people's easy access to internet with "mobile computing devices" (Thompson, 2012). The extremist groups use "online tools and resources" to disseminate the message violence, hire followers, and collect funding from patrons. In order to do that, the radical groups spread propaganda and sentiments through the cyberspace (Alam, 2015). A risk of online radicalization does exist in Bangladesh because of the availability of smartphones in lower prices and cheap internet (Alam, 2015). In an article published in The Daily Star, Monirul Islam (2018), chief of Counter-Terrorism and Transnational Crime of Bangladesh police, states: "...online radicalisation has become a very commonplace. And we know that a lot of things are happening online -- starting from the initial motivation and training to finance collection and target selection." A survey conducted by Bangladesh police on jailed militants found that 82% of the total respondents were radicalised on social media (Corraya, 2017). Therefore, it is arguable that Bangladeshi internet users, especially the youths who spend time on social media sites by their smartphones are vulnerable to violent online message and radical connections. Bangladeshi education system, especially the school-level curriculum, does not ensure sufficient content in books on cyber literacy and standard practices of using the internet platforms including the social media. Only some universities offer courses on communication, journalism and media studies. This shortage of content on cyber literacy in the

academia makes the young users of internet vulnerable to online propaganda and radicalization.

3. METHODS

The authors follow the survey research method to conduct this study. A total of 100 youths, aged 18-25, were interviewed with a structured questionnaire. The survey is a recognised method in social science as it is useful to generate data from a sample of a large population group. As Polland (2005) states: "Surveys (also called questionnaires) are the systematic way of asking people to volunteer information about their attitudes, behaviors, opinions and beliefs. The success of survey research rests on how closely the answers that people give to survey questions matches reality – that is, how people really think and act." Besides, survey research is very useful for attaining the determination of degree to which a desired objective is achieved as an outcome of a pre-planned program.

The samples for this study were selected conveniently from two urban neighbourhoods -- Bangladesh's capital Dhaka and its suburb Savar. Convenient sampling is a strategy in which persons are selected deliberately irrespective of their positions, (Alauddin, 2009) also based on the availability of the interviewees (Wimmer and Dominick, 2011). Convenient sampling, a technique which is widely used in non-probability sampling, was followed to select the interviewees. This form of sampling technique proved useful since randomization was not possible, considering the issue of time and resources, given the total size of population (Etikan et al., 2016). In 2016, the population in capital Dhaka was recorded 18.23 million and it was estimated that the population of this mega city would be around 20 million in 2019 (World Population Review, n.d.). Fortunately, the target population (urban youths) met other conditions of the convenient sampling strategy which are -- "homogenous, easy accessibly, geographical proximity, and availability at a given time" (Etikan et al., 2016). Of the total survey respondents, 50 were university students - 25 each from Jahangirnagar University, Savar, and University of Dhaka while others are divided into journalists, doctors, development workers, and government employees. Of the total interviewees, 60 were male while 40 were female. As this study is focused to observe the habits of smartphone usages and dependency on the device by the young users, 50 students selected from two public universities were considering their geographical positions – Jahangirnagar University (located in Savar) and University of Dhaka (located in the capital Dhaka). Besides, the young professionals were interviewed as the authors were interested to explore the patterns of their practices of smartphone usages. The sample size was kept limited to 100 considering the time and resources of the research team.

4. THEORETICAL FRAMEWORK

Uses and Gratifications Theory has provided a pioneering theoretical approach in the early stages of each new mass medium -- newspapers, radio, television, and now the internet. It may be argued that the timely upsurge of computer-mediated communication has only strengthened the theoretical effectiveness of uses and gratifications theory by allowing it to stimulate productive research into a proliferating telecommunications medium. As DeFleur and Shearon (1995) mention: "...early studies were based on a theory of the effects of mass communication derived directly from the assumptions of the nature of mass society noted earlier. This early theory assumed that the media had great power to influence every individual, more or less uniformly. ... the effects of mass communication are powerful, uniform and direct. This set of ideas has often called the magic bullet theory of media effects." After a couple of years, it was observed that magic bullet theory has some problems defining the impact of mass media. The audiences are not inactive, even they are not ready to receive whatever they get from mass media. They are selective in terms of receiving information. "Thus, the effects of the media are neither uniform, powerful, nor direct. Their influences are selective and limited by individual psychological differences", as argued by DeFleur & Shearon (1995). Eventually, researches did a lot of work to explore the patterns of impact of media on people.

This paper progresses based on the theories related to the impact of mass media, particularly the uses of gratification. In the last phase of 20th century, researchers started to work on the effect of media in a large area. Their researches showed that the effect of media is very powerful and perceptible. Katz et al. (1974) describe the uses and gratifications approach as one concerned with "(1) the social and psychological origins of (2) needs, which generate (3) expectations of (4) the mass media or other sources, which lead to (5) differential patterns of media exposure (or engagement in other activities), resulting in (6) need gratifications and (7) other consequences, perhaps mostly unintended ones." These gratification, when sought by audience members, are viewed as one of the major causes of action, purposive media consumption behaviour directed at gratification fulfillment.

Media consumption or the satisfactions of the consumers are not only the main issues now-a-days. A dependent relation has become grown through all the years between the technologies and the human beings. According to Media System Dependency theory, a media dependency relationship is one "in which the satisfaction of needs or the attainment of goals by individuals is contingent upon the resources of the other party" (Ball-Rokeach and DeFleur 1976). By taking an ecological approach, this theory emphasizes upon the characteristics of the dependency relationship. The media system dependency theory suggests that in today's society individuals have to rely on media information resources in order to attain their various goals (Patwardhan and Yang, 2014). Though the media–audience-member dependency relation is variable with respect to intensity, the individuals are often marked by ambiguity, threat, conflict, and change that tend to open the door to media effects.

5. RESULTS & DISCUSSION

The final results of the survey data are presented in pie and column charts. As the Chart 1 below depicts, the highest number of survey respondents, 46% of the total, spend about five to six hours of a day with smartphones whereas 12% respondents spend more than eight hours in a day with their smartphones. Around 18% of the total respondents spend six to seven hours of a day with activities involving smartphone while 24% respondents spend one to four hours of a day with this device. The youths, as the data show, pass a significant portion of time of a day with their smartphones that indicates the level of dependency of youths on this modern communication device.

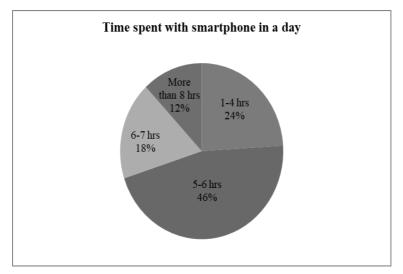


Chart 1: Visual representation of time spent with smartphone in a day

According to survey data, the youths use smartphone on different purposes including to do verbal communication with friends, family members, and other social and professional acquaintances. As the Chart 2 below represents that the highest number of the survey respondents, 58% of the total, spends around three hours talking over phone in a day while 23% interviewees talk over phone for two hours in a day.

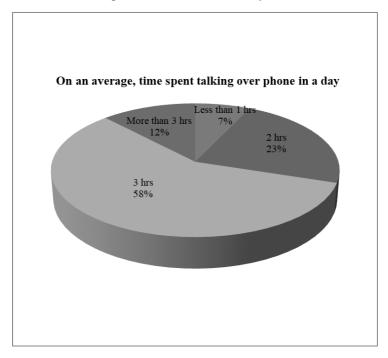


Chart 2: Visual representation of time spent talking over phone in a day

Besides, 12% of the total survey respondents spend more than three hours in a day speaking over phone. Only seven percent of the total respondents talk over the phone less than an hour in a day. This chart also points to the fact that youths use smartphone for their oral communication, and they, on an average, spend a mentionable amount of time in a day in this purpose. However, this study did not attempt to explore with who the youths talk more over the phone. Besides, using the smartphone for verbal communication, the youths who participated in the survey said that they browse through cyberspace using their smartphones. In order to access internet platforms, the youths use wireless data facilities -- mobile data and Wi-Fi. As the Chart 3 below describes, the highest number of the survey respondents, 73% of the total, spend around two hours in a day on cyberspace whereas five percent of the interviewees spend around three hours and three percent of the total survey respondents spend more than three hours in a day in this purpose.

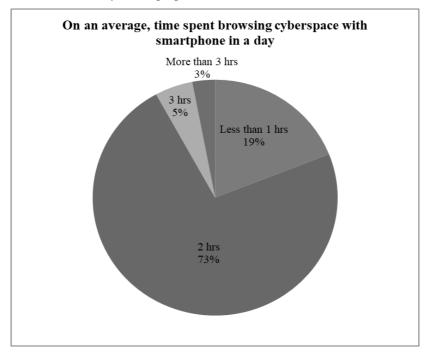


Chart 3: Visual representation of time spent (on an average) browsing through cyberspace with smartphone in a day

The phenomenon of browsing through cyberspace using smartphone is increasing day by day in Bangladesh. The survey data reveal that youths browse through a wide range of platforms on the cyberspace using their smartphones. As the Chart 4 below narrates that most of the survey respondents, 75% of the total, prefer browsing through the social media networking sites, predominantly facebook (see Chart 4).

Of the total survey respondents, 12% prefer browsing through the news portals whereas eight percent respondents choose personal websites and five percent of the survey respondents browse through all types of websites using their smartphones. The highest number of survey respondents, 69% of the total, says that they have personal accounts at least on two social networking sites whereas 22% of the total respondents have accounts on one social media platform. Seven percent survey respondents said that they have accounts on three social networking platforms while two percent respondents have accounts on four or more social media sites. About activities on the social networking sites, all the survey respondents state that they share photos and videos of their everyday activities on their preferred social media platforms. Besides, they express their emotions and opinion on sociopolitical issues on their preferred social networking site social networking site social networking site social networking site amongst the highest number of the survey respondents – 88% of the total. Seven percent of the total survey respondents prefer social networking platform Twitter whereas Google+ and other types of social networking sites are preferred by three and two percent of the total survey respondents respectively.

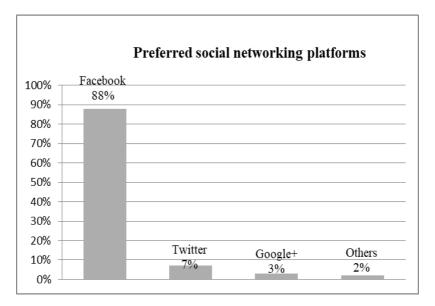


Chart 4: Visual representation of preferred social networking platforms

While asked about importance of using smartphone in young age, most of the survey respondents, 75% of the total number, argue that using smartphone by the youths is "very important". Eighteen percent survey respondents find this device useful while six percent think that using

smartphone is important to a certain extent in their life. As the Chart 5 below shows only one percent survey respondents opine that using smartphone is not important for the members of young generation. These opinions indicate that the youths consider smartphone as a key element in their everyday life.

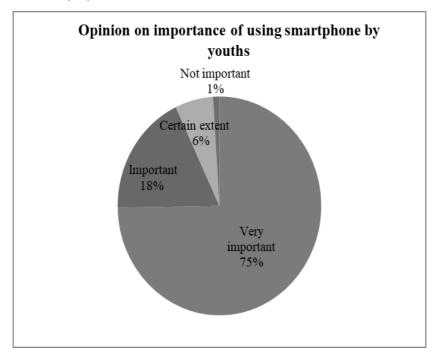


Chart 5: Visual representation of opinion on importance of using smartphone by youths

Besides, 63% of the total survey respondents believe that the habit of using smartphone does not kill sufficient amount time in their life whereas 37% youths who participated in the survey think that they are wasting a noteworthy amount of time by using smartphones. At the same time, 72% of the total survey respondents, as the Chart 6 depicts, believe that impact of smartphone use on the youths is positive while 28% of the survey participants think smartphone has negative impact on youths. The

respondents, who believe that smartphone use is positive, argue that this device has brought positive changes to their lives.

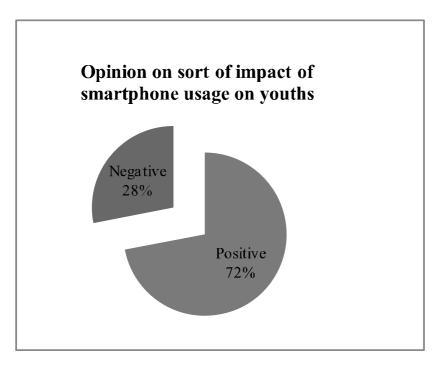


Chart 6: Visual representation of opinion on sort of impact of smartphone usage on youths

However, 59% of the total survey respondents think that they have dependency on smartphone usage whereas 37% survey respondents believe that they are not dependent on this gadget. Four percent of the youths who participated in the survey are not sure whether they have dependency on the device or not.

As the Chart 7 below presents, of the 58% of smartphone users who spend more than five hours with smartphone in a day, 26% think that they, to a certain extent, are addicted to their smart device while 18% think they are addicted to it. Of this group of respondents, 41% claim that they are not addicted to their habit of excessive use of smartphone while 15% are not confirm whether they are addicted to the device or not.

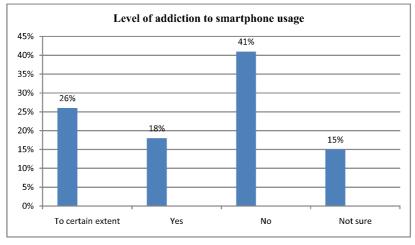


Chart 7: Visual representation of level of addiction to smartphone usage

After analyzing the above information, this is evident that Bangladeshi urban youths pass a mentionable amount of time in their daily life with smartphone where the popular social media network facebook comes to the centre. Besides, the survey respondents mentioned that using smartphone is a need in their lives, considering the present local and global contexts. The youths also opined that the habit of using smartphone is a positive practice.

The study wanted to explore the level of dependency of youths on smartphone. As the survey data reveal, smartphone usage plays a central role in the life of the young Bangladeshis, living in Dhaka and its suburb Savar area. Besides, the Bangladeshi youths have efficiently adapted the practice of smartphone usages from the previous feature mobile phones. It was not surprising to the authors that young people are attached to this new communication device. Although the survey respondents describe the patterns of their smartphone usage practice, a significant number of survey respondents did not mention that overuse of this device might turn into an addiction. Charlton and Danforth (2004) argue that addictive behaviour from excessive behaviour. Therefore. the differs concept of "communication addiction disorder" is arguably a contested discourse as people use new communication devices on various grounds - need, demand, and habit. The author selected this particular age group as it was expected that people of this group prefers to go beyond the family

boundaries and make extensive networks with peers and others in their social sphere.

6. CONCLUSION

This study finds that there is a level of dependency among the urban youths of Bangladesh on smartphone. Although they use smartphone for multiple purposes, a good number of them spend time on social media platforms using this device. Besides, they consider smartphone as an essential device for achieving successes in life. This topic deserves further comprehensive study on a bigger population as the youths are becoming more and more active on the internet platforms, without being aware of the potential harms that exist in this domain. This study concludes that smartphone helps the youths to express their feelings, emotions and opinions and share these with others, hence it generates a level of confidence in youths.

This paper further explores that there are differences in using patterns and level of use of smartphone by the youths. Most of the survey respondents use their mobile phones to do verbal communication. The youths find smartphone as the most effective medium to use for the social networking sites. They also consider smartphone as a crucial medium of micro-coordination in their life. A good number of survey respondents do not think that habit of smartphone usage can be excessive or addictive. However, a mentionable number of the youths are not aware of the negative aspects of smartphone usage and the vulnerabilities that exist in cyberspace. Further, most of them are not conscious about the concept 'cyber literacy'. As the youths depend on smartphone usage in order to maintain communication with friends and acquaintances, the authors are concern about the level of direct interaction of youths with peers in real life.

REFERENCES

- Aarseth, E. (1997) *Cybertext: perspectives on ergodic literature*, Baltimore: Johns Hopkins University Press.
- Ahad, A.D. & Anshari, M. (2017) "Smartphone Habits Among Youth: Uses and Gratification Theory", *International Journal of Cyber Behavior*, *Psychology* and Learning, 7(1): 65-75.
- Alam, I. (2015) "Social Media Radicalisation in Bangladesh: A Lurking New Threat", 5th November. Retrieved from: http://fairbd.net/social-mediaradicalisation-in-bangladesh-a-lurking-new-threat/
- Alauddin, M. (2009) Samajik Gobeshona: Boigyanik Gyan Onneyshon Poddhoti, Dhaka: Bangla Academy.
- Anshari, M. and Y. Alas (2015) "Smartphones habits, necessities, and big data challenges", *The Journal of Health Technology Management Research* 26(2): 177-185.

- BBC (2013) "Bangladesh Buddhists pick up pieces after mob rampage" 1st February. Retrieved from: https://www.bbc.com/news/world-asia-21161354
- Bergström, A. (2008) "The reluctant audience: Online participation in the Swedish journalistic context", Westminster Papers in Communication and Culture 5(2): 60-80.
- Beyers, H. (2004) "Interactivity and online newspapers: A case study on discussion boards", *Convergence* 10(4): 11-20.
- Boczkowski, P. J. (2004) *Digitizing the News: Innovation in Online Newspapers*, Cambridge: MIT Press.
- Bromley, M. (1997) "The end of journalism? Changes in workplace practices in the press and broadcasting in the 1990s", in: Michael Bromley and Tom O'Mally (eds), *A journalism reader*, London: Routledge.
- Charlton, J.P. and Danforth, I.D.W. (2004) "Differentiating computer-related addictions and high engagement, in K. Morgan, C.A. Brebbia, J. Sanchez and A. Voiskounsky (eds.) *Human perspectives in the internet society*. Southhampton: WIT Press.
- Etikan, I., S.A. Musa and R.S. Alkassim (2016) "Comparison of Convenience Sampling and Purposive Sampling", *American Journal of Theoretical and Applied Statistics* 5(1): 1-4.
- Corraya, S. (2017) "About 82 per cent of militants radicalised on social media in Bangladesh", AsiaNews.it, 23rd March. Retrieved from: http://www.asianews.it/news-en/About-82-per-cent-of-militants-radicalised-onsocial-media-in-Bangladesh-40277.html
- Daily Star (2017) "Rise of Youths", 8 March. Retrieved from https://www.thedailystar.net/rise-of-youth-51048
- Davey, S. and Davey, A. (2014) "Assessment of Smartphone Addiction in Indian Adolescents: A Mixed Method Study by Systematic-review and Meta-analysis Approach", *International Journal of Preventive Medicine*, 5(12): 1500-1511.
- Deuze, M. (2003) "The web and its journalisms: considering the consequences of different types of newsmedia online" *New Media & Society* 5(2): 203-230.
- English Oxford Living Dictionary (n.d.). Retrived from: https://en.oxforddictionaries.com/definition/smartphone
- Gutierrez, J.D., Fonseca, F.R. & Rubio, G. (2016) "Cell-Phone Addiction: A Review", Front Psychiatry, 7: 175.
- bdnews24.com (2018) "Internet users in Bangladesh top 90 million, most on mobile device", 20 September. Retrieved from https://bdnews24.com/technology/2018/09/20/internet-users-in-bangladeshtop-90-million-most-on-mobile-device
- Islam, M. (2018) "Cyberspace is the largest platform for radicalization", *The Daily Star* 7th March. Retrieved from: https://www.thedailystar.net/opinion/the-big-picture/tackling-radicalisation-looking-answers-1544332
- Katz, E., Blumler, J.G., and Gurevitch, M. (1974) "Utilization of Mass Communication by the individual", in J.G. Blumler and E. Katz (eds.), *The uses of mass communiations: Current perspectives on gratification research*. Beverly Hills, CA: Sage.

- Lauricella, A.R., Cingel, D.P., Blackwell, C., Wartella, E. & Conway, A. (2014) "The Mobile Generation: Youth and Adolescent Ownership and Use of New Media", *Communication Research Reports* 31(4): 357-364.
- Livingstone, S. (2004) "Media Literacy and the Challenge of New Information and Communication Technologies", *The Communication Review* 7: 3-14.
- Livingstone, S. (2003) "The Changing Nature and Uses of Media Literacy", Media@LSE Electronic Working Papers. London: London School of Economics and Political Science.
- Melvin L. DeFleur & Shearon A. Lowery (January 10, 1995), *Milestones in Mass Communication Research (3rd Edition)* London: Pearson.
- Murad, M. (2017) "Dhaka ranked second in number of active Facebook users", bdnews24.com, 15th April. Retrieved from: https://bdnews24.com/bangladesh/2017/04/15/dhaka-ranked-second-innumber-of-active-facebook-users
- Park, N. & Lee, H. (2014) "Nature of Youth Smartphone Addiction in Korea: Diverse Dimensions of Smartphone Use and Individual Traits", *Media Information Research*, 51(1): 100-132.
- Patwardhan, P. & Yang, J. (2013) "Internet Dependency Relations and Online Consumer Behavior: A Media System Dependency Theory Perspective on Why People Shop, Chat and Read News Online", *Journal of Interactive Advertising*.
- Polland, R.J. (2005) "Essentials of Survey Research and Analysis". Retrieved from: http://www.pointk.org/resources/files/Guidelines_on_Essentials_of_Survey_Re search.pdf
- Potter, W.J. (2016) "Introduction", in *Media Literacy* (eighth edition). Angeles Los, London, New Delhi, Singapore, Washington DC: Sage Publications Limited.
- Rabbi, A.R. (2017) "DMP Commissioner: We will now go after drivers on their phones", *Dhaka Tribune*, 27th September. Retrieved from https://www.dhakatribune.com/bangladesh/dhaka/2017/09/27/dmpcommissioner-will-now-go-drivers-phones
- Sarwar, M. & Soomro, T.R. (2013). Impact of Smartphone's on Society. *European Journal of Scientific Research*, 98(2): 216-226.
- Tangmunkongvorakul, A., Musumari, P.M., Thongpibul K., Srithanaviboonchai K., Techasrivichien T. & Suguimoto S.P. (2019) "Association of excessive smartphone use with psychological well-being among university students in Chiang Mai", Thailand. PLOS ONE, 14(1): DOI.
- Thompson, R.L. (2012) "Radicalisation and the Use of Social Media", Journal of Strategic Security 4(4): 167-190.
- Wimmer, R. and Dominick, J. (2011) "Sampling", *Mass Media Research: and Introduction*, 9th edition. Boston: Wadsworth.
- Wimmer, R & Dominick, J. (1994): *Mass Media Research: An Introduction*. (4thedition) Belmont: Wadsworth.
 - World Population Review (n.d.) "Dhaka Population 2019". Retrieved from: http://worldpopulationreview.com/world-cities/dhaka-population/