

DIGITAL DEVICE ADDICTION EFFECT ON LIFESTYLE OF GENERATION Z IN BANGLADESH

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Abstract : Recently, digital technology has a major impact on various aspects of our life. Specially lifestyle of generation Z is heavily dependent on digital devices, internet service availability and innovative digital products for entertainment, interpersonal relationships, social networking, economic transactions, and overall information and knowledge gathering. However, this over dependence on digital devices seemingly results in addiction and has an effect to a great extent on their psychology and lifestyle. In this regard, several researches have been conducted in the western countries, but a very limited study has been done in emerging countries considering active university students and none has been done in Bangladesh. Hence, the aim of this study is to analyze the effects of digital device addiction (DDA) on the lifestyle of generation Z. A structured survey was conducted using 330 students of generation Z in Bangladesh. The hypothesis was tested using SEM-AMOS package 25.0 based on personality theory of addiction and theory of generation. This study has exposed that DDA has a significant effect on lifestyle of generation Z student in Bangladesh. This study extends the body of knowledge in the DDA, lifestyle of generation Z students in emerging country and recommend doing further research on the generation Z's competencies in real life social interactions than virtual social life as well as monitoring should be employed to safeguard mental and physical health of generation Z.

Keywords : Digital Device Addiction (DDA), Generation Z, Internet Service, Lifestyle, SEM-AMOS

Introduction

History of humanity is divided into several periods and each period has its own features (Kesici & Tunc, 2018). It has been established by numerous researchers that humanity is in a new era today and which is known as digital era (Kesici & Tunc, 2018). The most precise feature of this current era is the development of technology and its effects on human life. This digital era started during the 1980s through digital revolution and technological transformation (Parry, 2016, Muduli, 2014). This technological transformation led to experiencing the process of digitalization from mechanical and analogue devices to the digital devices & services (Parry, 2016; Techopedia.com, 2016) such as mobile phone, smartphone, desktop computer, laptop computer, smart-TV, tablet, internet services, and so on. Digital devices (DD) are broadly used in education, media, banking, trading, child-games, art & culture, social-networking, and formal & informal communication (Kesici & Tunc, 2018). Hence, in this era, information getting has become simpler than ever before and geographic proximity around the world are getting closer virtually (Muduli, 2014). Henceforth, digital technology is progressing at an enormously fast rate as a mean for social

connectivity (Goswami & Singh, 2016). Nevertheless, digital devices save time by easing human life, and help to spend time enjoyably (Kesici & Tunc, 2018) and undeniably, digital devices have started to be used extensively at home and work in the last two decades (Bolle, 2014; Temel, Onurmen, & Kopru, 2014; Park & Lee, 2011). On the other hand, the overuse of digital devices causes several problems and these problems named as addiction that lead to physiological and psychological problems among children and the youth (Kesici & Tunc, 2018; Arslan, Kirik, Karaman, & Cetinkaya, 2015).

Bangladesh is largely dependent on youths or Generation Z (Gen Z) for the transformation as a developed country, as youths represent a potential, and maximum number of human resources (i.e. more than 50% of the Bangladesh population of 166.7 million is under the age of 24) (UN, 2018). However, a large percentage of Gen Z in Bangladesh are less-educated or uneducated, less skilled as unemployable and majority of them appear distracted by digital devices & technologies which may occur to grow physiological and psychological problems as well as hinder their motivation to lead a normal social-life. Though, at present, digital devices are a part and parcel of people's life but Bangladeshi Z generation is extremely tech-savvy since they are referred as digital-natives, dotcom-children, net-generation, i-Generation, connection-generation, digital-generation (Hoque, Awang, & Siddiqui, 2018). This could upshot in addictive behaviors, together with panic when DD being beyond reach (Haverlag, 2013). Youths are particularly vulnerable when it comes to digital device addiction (DDA) (Parry, 2016, Muduli, 2014). Simmons (2008), claimed that many youths may become as possessed with gaining the latest in technology as operating or exploiting it becomes a symbol of status to them. Hence, numerous teenagers of these days pass countless time using technological gadgets (Parry, 2016, Muduli, 2014) without having specific ground or work and from the past experience it is evident that not all technology has been used for harmonious endeavors (Muduli, 2014). In this regard, Van Deursen & Van Dijk (2012), mentioned that less-educated people have a tendency to pass more time online than higher educated people more explicitly, while higher-educated people use more time in quest of information relevant for their career, whereas, less-educated people exploit the internet more for entertainment and mere socializing.

Subsequently, this study is to scrutinize the DDA effects on lifestyle of Generation Z (i.e. 1995 to present and who are less than 25 years old now) students in Bangladesh empirically. In this regard, a gap has been seen in literature and that is present research tends to focus on youths more specially on generation Y (i.e. 1977 to 1995 and now above 25-years age) who is the first to come of age with cable-TV, Internet services and mobile phones. As a

results, the research into DDA in individuals who are less than 25 years old or belongs to Gen Z tends to be ignored though they are well known as a digital generation (Hoque *et al.*, 2018a). Furthermore, there are several research associated to this study area accomplished mostly in western countries and the countries having a developed society as well as the accessibility of the digital devices & services are huge in those countries not in underdeveloped or developing countries (Parry, 2016, Muduli, 2014). However, surprisingly as a citizen of underdeveloped country, Bangladeshi Gen Z is heavily dependent on digital devices and there is not a single research has been conducted on the topic of Gen Z student's DDA (Hoque *et al.*, 2018a). Hence, this researcher expected to minimize the research gap particularly on Gen Z students' DDA in emerging country such as Bangladesh.

Literature Review

Generation Z - According to Randstad (2014), Generation Z can be denoted as post-millennials, facebook-generation, homeland-generation, digital-natives, dotcom-children, net-generation, i-generation, digital-generation, and generation of human being starting with the birth year 1993 (Hoque *et al.*, 2018a). Australia's McCrindle Research Centre (2018) defines generation Z as those born between 1995 or later. Randstad (2014), describes generation Z as those born from and after 1995 (Oster, 2014). Whereas, Digital natives or gen Z are actuality raised by gen X (Ensari, 2017). They born into an ecosphere facing defies such as technology and ecological concerns perceived extensive use of electronic appliances and digital technologies like the Internet and social networking sites (Tayfun and Yuksel, 2015). Whereas, Bangladeshi generation Z represents youths who are aged less than 25 years currently (Hoque *et al.*, 2018a) and they are about 85 million which is slightly above than 50% of the total population in Bangladesh (UN, 2018). They are characterized as tech savvy, prematurely mature, pampered, empowered, risk taker, globally connected, smarter and flexible (Ensari, 2017; Tayfun and Yuksel, 2015; Singh, 2014; Singh, 2014). Gen Z is growing up with an extremely sophisticated digital media environment and they are proficient than the gen Y (Singh, 2014). However, society as a whole is not even concern of gen Z lifestyle yet but it will be swayed by them extremely (Hoque *et al.*, 2018a; Singh, 2016; Singh, 2014).

Bangladeshi Gen Z - Bangladeshi Gen Z is described as an individual or a person who is having following qualities such as tech-savvy, pro-active, innovative, creative, risk-taker, opportunist and leveraging-resources into the current technological as well as cyber business environment. According to Hoque *et al.* (2018a), and Randstad (2014), this explanation

representing three major things- (i) Gen Z will develop and make full use of their own abilities, (ii) Gen Z will define their own problems, identify solutions and find resources to realize their vision; specially using technology or digital technology and (iii) Gen Z will realize their own potential and vision, growing in confidence. The inclusion or incorporation of computers into households in Bangladesh has also endorsed Gen Z people to keep contact with family members and friends at different places of the world with just the click of the mouse (Lanigan, 2009). While digital technology in Bangladesh has gave prompt access to family members, it has lead to seclusion from face to face communication (Hoque *et al.*, 2018a) and conversations that were once held at the dinner table are now being substituted by cold text messages (Hoque *et al.*, 2017c). While the medium effectively relays the message, it lacks the substance that a face-to-face conversation provides (Rugai & Hamilton-Ekeke, 2016). According to Begum (2011) two million young people are added to the Bangladeshi labor force every year along with their digital technology knowledge while only 600,000 young people find real jobs. Commonwealth youth program (CYP) report (2013), presented that Bangladesh is in the top list of employment generation criteria but the worst part is thirty-five percent young people of Bangladesh are fully unemployed but a disciplined, organized, and educated young generation can make substantial contribution to the development process by tumbling unemployment and maximizing socio economic uplifts (Hoque *et al.*, 2018a; CYP, 2013). However, for using digital devices excessively, DDA became a serious problem for the people of Gen Z not only in Bangladesh but also all over the world. AS a result, it is important to explore DDA in its different aspects to protect Bangladeshi Gen Z student from its negative effects.

Addiction, Behavioral addiction, and Digital Device Addiction - In recent times, every other day digital technology and/or digital devices or services are drawing a core attention of the present Z generation. As a susceptible crowd, the adolescence turns into the major consumer of such devices and services, which in turn at some point of time makes them addicted. Hence, to understand what is DDA, first we are explaining addiction and behavioral addiction.

Basically, addiction denotes the higher degree of likeness to a specific subject or object. Thus, if anybody is addicted to something then he fails to govern his own mind and faces complications to get rid of the claws of that object. Hence, addiction is a compulsive repeating behavior at the cost of everything in life. Angres & Angres (2008) define addiction as a persistent behavior or consistently growing a recurring activity which resulting to the adverse or negative consequences. American Society for Addiction Medicine (2012),

mentioned that addiction can be a neurological impairment which leads to hostile behaviours. According to Young, Yue, & Ying (2011), addiction is defined as desire of a material which has vicious effects on emotional, and mental health, physical health of a person as well as his/her financial state of affairs (Kesici & Tunc, 2018). Morse & Flavin (1992), claimed that addiction is the psychological less control over a substance or behaviour, and too much preoccupation with the subject as well as continuance of activities forgetting the negative significances.

Whereas, according to Kir & Sulak (2014) and Gununc & Kayri (2010), behavioral addiction is a type of addiction which arises because of the frequent repetition of a habit without being dependent on any substance, and the individual goes on doing the behavior though he/she recognizes that he/she is affected (You, Kim, & Lee, 2007). Griffiths (1999), stated that a behavior or activity should exhibit the characteristics below to be considered as a behavioral addiction: 1. grabbing all attention of an individual's life; 2. affects the individual's mood; 3. fail to understand the effect of continuous repetition of an activity; 4. unpleasant emotions or physical symptoms occurring for interruption; 5. occur conflict and interference between the individual and the people around him/her repeatedly, 6. relapse a certain action though it was avoiding last long years (Kesici & Tunc, 2018).

Whereas, numerous psychiatrists claimed that DDA is not poles apart from any other kind of addiction (e.g., drug addiction, Internet addiction) and DDA has converted one of the most dominant non-drug addictions ("Mobile phones becoming," 2003). Hence, numerous scholars have identified that some digital device users are so hooked on their digital devices than they themselves are aware (Park, 2005). According to Jiang, Phalp, Ali (2015) and Cover (2004), DDA is a construct which indicates addiction through advance digital devices such as video-game addiction, social-networking addiction, smart-phone addiction, Internet addiction, and so on. So, DDA can be described as desire which leads to going on using digital devices or tools although it is known that overusing such devices will create physical, emotional, mental, and social problems for an individual (Muduli, 2014).

On the other hand, digital addict is referring to an individual whose contact with digital technology is moving on extreme, intimidating to engross their attention above all else and subsequently having an undesirable impact on the wellbeing of the user (Ozkan & Solmaz, 2015). DDA is so a behavior-oriented addiction and maybe illustrated as the physical and mental craving on the exercise of digital devices. According to Young (1998), most of the youths currently pass excessive time with their faces buried in technological gadgets. CBS News (2012) claimed that DDA will instigate similar impairment in the brain at the receptors

as a drug will do. Hence, long term DDA can lead to psychological disorder such as insomnia, irritability, miss out on relationships, social interactions, having poor health & well-being (Senol, 2010; Bull, 2005; Cover, 2004; Ross, 2001; Kubey *et al.*, 2001; Greenfield, 1999; Young, 1998; Kraut *et al.*, 1998).

Digital Device Addiction of Z Generation - Currently, using digital device is comprehended broad-spectrum among Gen Z people more than others. Because of many features, digital device is used generally at optimum level by young people. Hence, they accepted digital devices as indispensable tools for every step of their life and Gen Z people used digital devices for communication with others; send text messages, send e-mail, do chatting, do blogs, to discuss through boards, develop web pages, download/upload information, facebook, to do twit, playing games, listen to music, to chill out and so much more (Leena, Tomi & Arja, 2005) and it became a creating source of entertainment for them (Choiz, 2012).

Moreover, Gen Z is known as the i-generation or Internet generation. The individuals in this generation are the social-networking youth and so different from their past generation. Since they are tech-savvy and can communicate digitally hence, they able to develop their multitasking skills (Adiguzel & Batur & Eksili, 2014). Moreover, Gen Z can also be recognized as the first smartphone mavens. They choose wireless, touch-operated screen, iPhone, iPad, laptop, and smart-TV rather than the ones that without touch-operation and connected with wires. Digital devices are extensively used within the Gen Z like as an addiction, or a habit, or an impulsive disorder. However, it is very difficult to classify that DDA is a staid pathological disorder (Ozkan, & Solmaz, 2015). In DDA, impulsivity and materialism act an important role and this ascends when it starts to alienate people of Gen Z from the rest of the society (Jones, 2014).

Generation Z Lifestyle - The concept lifestyle generated from the disciplines of sociology and psychology (Hoque *et al.*, 2018a). Hoque *et al.* (2018a); Hoque *et al.* (2016); Yu, Li, & Chantatub (2015); Lin, Shih, & Lin (2012); and Kaynak & Kara (2001), claimed that lifestyle is generally indicates the people's living patterns as well as time and money spending patterns and it is frequently applied to ascertain the connection between behavioral models and demographic variables for technology-enabled products, services and persons (Lee, Lim, Jolly, & Lee, 2009). Moreover, according to Yu (2011), lifestyle is a living, spending as well as working patterns of people's using internet and electronic or digital mediums. As a result, currently lifestyle has been allied with communication & information technology, and digital technology aided products and services (Hoque *et al.*, 2018a; Hoque

et al., 2016; Chanaron, 2013; Yu, 2011). Ma (2004), mentioned that the most popular lifestyle structures that have been built are activities, interests and opinions (AIO), list of values (LOV), and values and lifestyles (VALS). According to Giuffrae & DiGeronimo (1999), the aspects like views on politics, society, health, intimacy and many more perform a key part in determining the lifestyle of a person and it is hooked on both seen and unseen factors. Analysis of lifestyle has been evidenced extremely valuable in psychology, sociology, and marketing literature as well as competent of conveying a competitive edge (Hoque *et al.*, 2018a; Hoque *et al.*, 2016; Pandey and Chawla, 2014; Brengman, Gevens, Weijtjers, Smith, & Swinyard, 2005), Consequently, gen Z lifestyle has currently been anticipated as a more useful variable to analyze (Hoque *et al.*, 2018a; Adnan, 2017). As a result, the number of studies related to gen Z lifestyle has boosted recently (Yu *et al.*, 2015; Pandey and Chawla, 2014). On the other hand, Addiction to digital device has a negative impact on mental health and it also affects the social behaviour of the people of Gen Z by being the cause of change in lifestyle.

Effects of Digital Device Addiction on Generation Z Lifestyle - In fact, the use of the digital devices and services by the Gen Z has a progressive impact on digital technology markets and thus it is advantageous for the economy. Walker (2014) claimed that digital technology also empowers better sources for learning and inspires youth specially Gen Z to enjoy learning and it has conveyed chances for students all over the world to obtain education online, while still continuing work schedules and family normally. Moreover, digital devices are the bottoms of fun and entertainment which support them distract from daily strains of life.

Actually many researchers claimed that the utilization of any technology has an effect on the lifestyle indirectly or directly and the effect may be negative or positive. When the usage takes the pattern of addiction then the effect may be negative upon both. Muduli (2014), claims that the digital addiction as the source of depression, disrupted sleep and social isolation of the Gen Z. He also claims that there are savior negative effects on their health.

Psychologist, Young (1998), explain the comparison between DDA and drugs or alcohol and claimed that digital device provides the addicted people with the same kind of high leading the dependency on it to feel normal. Connelly (2010) conversed the magnitude of adverse effects experienced by Americans due to the extensive use of digital technology in his study. He found that almost one- third of his study sample said the use of digital devices made it harder to focus, and one- third of those polled said that they couldn't get along with life without their computers. Similarly, Muduli (2014), found in a study that when the addicts

are not able to use digital devices or come offline, they get negative mood swings, increased levels of depression and impulsivity.

Parker-Pope (2010) in her article said that excessive use of smart phones and internet caused one to become more impatient, impulsive and an individual's ability to lay down new memories and remember things becomes hindered. Whereas, Greenfield (2010) in her article says that modern world is seen as a potential threat to our identity as it can completely alter the human brain functions. Many people chose to inhabit a screen-based two dimensional world that is producing changes in behaviour. The result was shorter attention spans, reduced personal communication skills and a marked reduction in the ability to think abstractly. Hence, Boothroyd (2014) says that countries like US, China, Australia, Singapore, Japan, and South Korea have expressed the cautions that DDA characterizes as a significant health threat.

Whereas, Tapscott (2006) argued that as peoples of Gen Z are exposed to digital stimulation from a very early age, their brain becomes rewired to react to digital stimulation hence they absorb more information when presented with visual images than when it is offered in straight text. They learn to become better scanners as they learn to filter what they need on the net when they are presented with a vast amount of data on their screen. The good effects of digital technology can be included especially since technology depends on the success of an individual in the modern world. However, by the help of digital devices peoples of Gen Z want to do things faster, easier, cheaply and failing in which they become anxious and face to face communication is avoided by the people of Gen Z which is also not good for the society (Erickson, 2012).

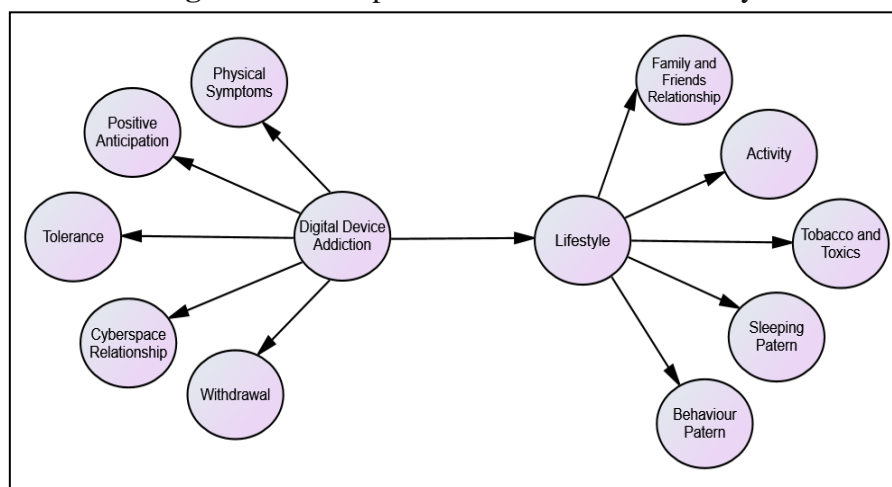
Moreover, it is also seen that peoples of Gen Z are in the habit of multitasking, that is, they can manage e-mails, messages, viewing their favorite program and looking up things for their homework all at the same time through digital devices. This may sound like a good thing as they can shift their focus to many things in a short span of time, but such heavy taxing of the brain deprives it of its needed downtime. This in turn causes them to become more impatient, impulsive, forgetful and even more narcissistic. Even when such multitasking ends, fractured thinking and lack of focus persists and they grow up timidly (Scelfo, 2010, Richtel, 2010). Furthermore, Young (2004) claimed that the addictive use of digital devices has serious negative impacts on mental health and interrupt academic performance, relationships, and general development among youth. He also claimed that there is a positive relationship between DDA and psychiatric syndromes like attention deficit disorder, bipolar disorder, depression, obsessive-compulsive disorder, etc.

Although there are two facets to digital technology, their negative effects seem to offset the positives but future shows the sign of taking a softer line to a digitally dominated world (Thenu & Keerthi, 2013). So, a complete suspension cannot be put to the use of digital devices and technologies, whereas scholars can conduct research on the effects of DDA on current Z generation lifestyle. Hence, the hypothesis of this study is as follows:

H1: There is a significant direct effect of digital device addiction on lifestyle of Bangladeshi Generation Z student.

Underpinning Theory - This study used Personality Theory of Addiction and Theory of Generation and this theory indicate that every generation has its own working behaviors as people who were born in the same time-frame were influenced by similar technological, economical, and political developments, show resemblances with each other which indicates sharing similar values, behavior and lifestyles (Hoque *et al.*, 2018a; Chen, 2010; Delahoyde, 2009). Therefore, there is a great prospect for this study to examine the effects of digital device addiction on Z generation lifestyle in Bangladesh grounded on Theory of Generation.

Figure 1: Conceptual Framework of the Study



Research Methodology

Sample and Data Collection - The objective of this research is to explore digital device addiction effects on life style of generation Z in Bangladesh. Therefore, survey was accomplished as well as perceptions of Bangladeshi Gen Z students were collected to analyze the causal effect. The Gen Z students live in Dhaka, and Chittagong were targeted from Bangladeshi peninsula and a self-administered questionnaire was distributed to the randomly selected Bangladeshi Gen Z students from these two cities. A total of 330 usable

questionnaires were received back and rounded on gender, male constituted 51% while female represented 49% of the sample population.

Instrumentation - This survey included two constructs i.e., digital device addiction and lifestyle. DDA construct has five sub-constructs (i.e., physical symptoms, positive anticipation, tolerance, cyberspace relationship, and withdrawal). On the other hand, lifestyle construct has five sub-constructs (i.e., family & friend relationship, activity, tobacco & toxics, sleeping pattern, and behavior pattern). DDA instrument was adapted from the work of Rozgonjuk, Rosenvald, Janno, & Taht (2016). Whereas, lifestyle instrument was adapted and customized from the work of Rodriguez Anez, Reis, & Petroski (2008). The items of DDA construct and lifestyle constructs were measured using a five-point Likert interval scale from 1 (strongly disagree) to 5 (strongly agree).

Method of Analysis - SEM is a second generation method of multivariate analysis technique and thus the researchers employed SEM in this study. (Hoque, 2019; Hoque 2018a; Hoque, 2018b; Hoque, Awang, Muda, & Salleh, 2018b; Siddiqui & Hoque, 2018; Hoque, Awang, Siddiqui, & Sabiu, 2018c; Hoque *et al.*, 2018d; Hoque *et al.*, 2018e; Hoque and Awang, 2016a; 2016b; 2016c; Awang, 2017b; Awang, 2015; 2014; Awang *et al.*, 2015a).

Results

This research needs primarily to achieve validity, reliability, and unidimensionality of the measurement model by achieving the minimum value under Confirmatory Factor Analysis (CFA) procedure (Hoque and Awang, 2019; Awang *et al.*, 2017a; Awang *et al.*, 2017b; Hoque *et al.*, 2017a; Hoque *et al.*, 2017b; Hoque *et al.*, 2017d; Awang 2015). The Fitness Indexes shown in Figure 2 (i.e. P-Value=.000; RMSEA=.059; GFI=.903; IFI=.952; CFI=.952; TLI=.934; ChiSq/df=1.968) indicated the measurement model of the two latent constructs (i.e. Digital Device Addiction and Lifestyle of Bangladeshi Gen Z) have fulfilled the requirement and signifies a satisfactory fit to the data and result of all indexes was good. So, this study achieved the construct validity (Awang 2015; Awang *et al.*, 2015a).

Figure 2: The Pooled CFA Output

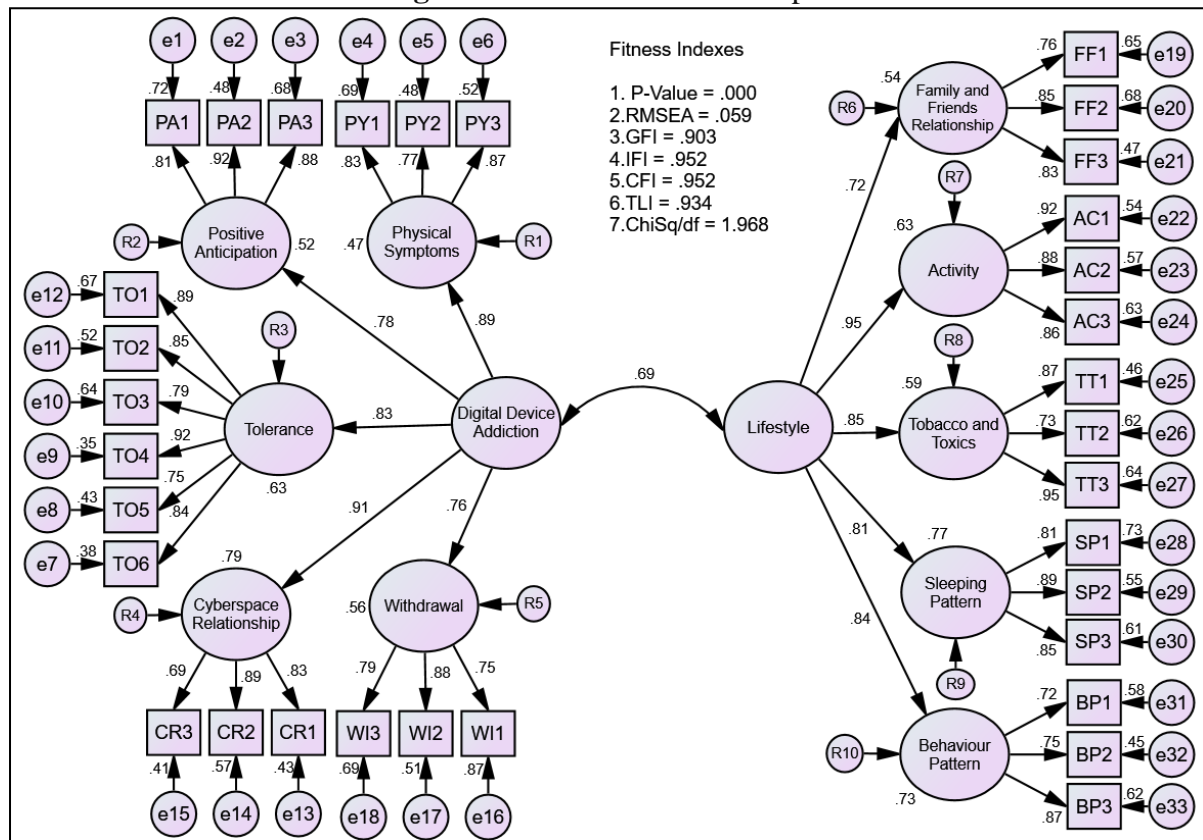


Table 1: Measurement Model - CFA Results

| Constructs & Dimensions | Dimensions & Items | Factor Loading | Composite Reliability (CR) (> 0.6) | Average Variance Extracted (AVE) (> 0.5) |
|--------------------------|-------------------------|----------------|------------------------------------|--|
| Digital Device Addiction | Physical Symptoms | .89 | .920 | .699 |
| | Positive Anticipation | .78 | | |
| | Tolerance | .83 | | |
| | Cyberspace Relationship | .91 | | |
| | Withdrawal | .76 | | |
| Physical Symptoms | PY1 | .83 | .864 | .680 |
| | PY2 | .77 | | |
| | PY3 | .87 | | |
| Positive Anticipation | PA1 | .81 | .904 | .759 |
| | PA2 | .92 | | |
| | PA3 | .88 | | |
| Tolerance | TO1 | .89 | .936 | .709 |
| | TO2 | .85 | | |

Digital Device Addiction Effect on Lifestyle of Generation Z in Bangladesh

| | | | | |
|-------------------------------|--|------------|-------------|-------------|
| | TO3 | .79 | | |
| | TO4 | .92 | | |
| | TO5 | .75 | | |
| | TO6 | .84 | | |
| Cyberspace Relationship | CR1 | .83 | .848 | .652 |
| | CR2 | .89 | | |
| | CR3 | .69 | | |
| Withdrawal | WI1 | .79 | .849 | .654 |
| | WI2 | .88 | | |
| | WI3 | .75 | | |
| Lifestyle | Family & Friends Relationship | .72 | .921 | .701 |
| | Activity | .95 | | |
| | Tobacco & Toxics | .85 | | |
| | Sleeping Pattern | .81 | | |
| | Behaviour Pattern | .84 | | |
| Family & Friends Relationship | FF1 | .76 | .855 | .663 |
| | FF2 | .85 | | |
| | FF3 | .83 | | |
| Activity | AC1 | .92 | .917 | .787 |
| | AC2 | .88 | | |
| | AC3 | .86 | | |
| Tobacco & Toxics | TT1 | .87 | .890 | .731 |
| | TT2 | .73 | | |
| | TT3 | .95 | | |
| Sleeping Pattern | SP1 | .81 | .887 | .724 |
| | SP2 | .89 | | |
| | SP3 | .85 | | |
| Behaviour Pattern | BP1 | .72 | .825 | .613 |
| | BP2 | .75 | | |
| | BP3 | .87 | | |

The values of factor loading for every item of two constructs including sub-constructs with CR and AVE for every shown in Table 1 which specified both latent constructs (i.e., Digital Device Addiction and Lifestyle of Bangladeshi Gen Z student) have carry-out convergent validity, unidimensionality, and construct reliability by meeting the minimum value of AVE 0.5 for convergent validity, factor loading for all items for sub-constructs and constructs are positive with minimum value 0.6 for unidimensionality, and CR 0.6 and AVE

0.5 for construct reliability (Awang *et al.*, 2017a, Awang *et al.*, 2017b; Awang 2015; Awang 2014).

Moreover, according to Hoque & Awang (2019), Siddiqui & Hoque (2018), Awang *et al.* (2017b), and Awang (2015), one way of achieving Discriminant validity is the correlation between independent variables must be less than 0.85. Second criterion of Discriminant validity is when the diagonal values (i.e. \sqrt{AVE} for the respective construct) in the table will be higher than any values in their rows, and columns respectively then Discriminant validity will be achieved (Fornell & Larcker, 1981). The correlation value of latent constructs (i.e. digital device addiction and lifestyle) is 0.693 and as the value in diagonal is higher than any values in its row and column in Table 2, therefore this study has achieved the discriminant validity for the model.

Table 2: Discriminant Validity Index Summary

| Construct | Digital Device Addiction | Lifestyle |
|--------------------------|--------------------------|--------------|
| Digital Device Addiction | 0.836 | |
| Lifestyle | 0.693 | 0.837 |

As shown in Figure 3, digital device addiction has a significant positive direct effect on Lifestyle of Bangladeshi Generation Z student ($\beta=0.864$, $P=.001$) and hypothesis H_1 is supported as well as the structural model explains 74.4% variance in Lifestyle.

Table 3: Squared Multiple Correlations (R^2)

| Variable | Estimate (R^2) |
|-----------|--------------------|
| Lifestyle | 0.744 |

The above Table 3 indicates that the predictor of Gen Z lifestyle explains 74.4% of its variance. In other arguments, the error variance of Gen Z lifestyle is about 25.6% of the variance of Gen Z lifestyle.

Table 4: Standardized Regression Weights of digital device addiction on lifestyle

| Variable | Path | Variable | Estimate |
|-----------|------|--------------------------|--------------|
| Lifestyle | ← | Digital Device Addiction | 0.693 |

Table 4 base on Figure 3 showed that the influence of digital device addiction on lifestyle of Bangladeshi Gen Z was 69.3% while 30.7% does not influence lifestyle.

Figure 3: Standardized Regression Path Coefficient

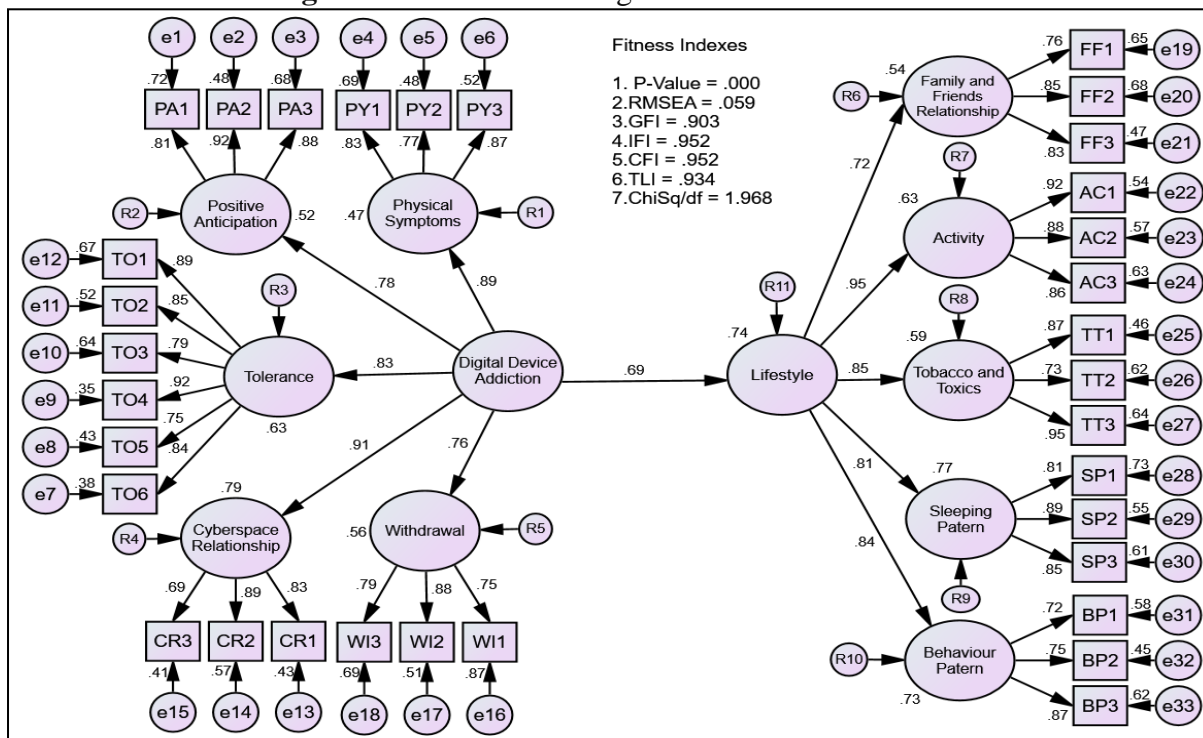
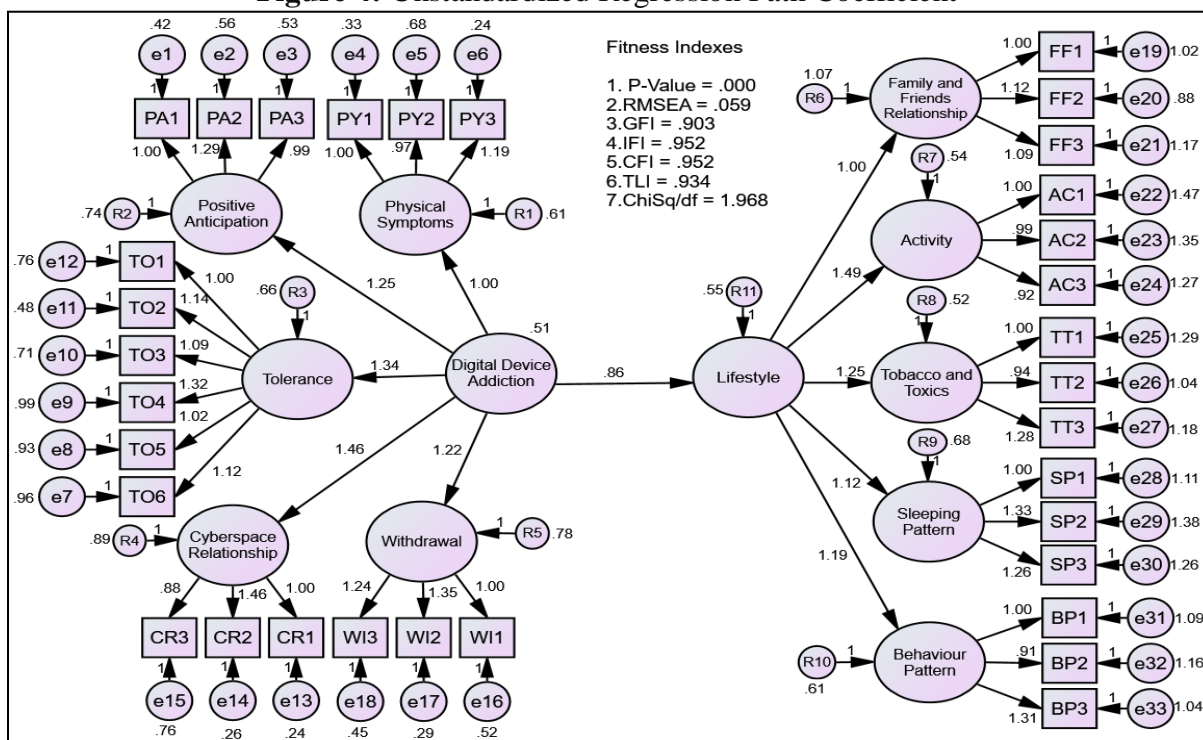


Figure 4: Unstandardized Regression Path Coefficient



The unstandardized regression weight (i.e. shown in Figure 4) indicated that the estimate of the beta coefficient that measures the effects of the digital device addiction construct on the Bangladeshi Generation Z's lifestyle construct.

Table 5: Regression Weight for Path Estimate

| Variable | path | Variable | Estimate | S.E. | C.R. | P | Result |
|-----------|------|--------------------------|-------------|--------------|--------------|------------|--------------------|
| Lifestyle | ← | Digital device addiction | .864 | 0.132 | 6.539 | *** | Significant |

Note: *** P<0.01

The hypothesis of this study was spelt out as: digital device addiction has a positive and significant effect on lifestyle of Bangladeshi Gen Z. Table 5 showed that the level of significance for regression weight which indicates that the probability of getting a CR as large as 6.539 in absolute value is 0.001. In other words, the effects of digital device addiction on Bangladeshi SME performance is highly significant. Consequently, the beta coefficient for the effect of digital device addiction on lifestyle of Bangladeshi Gen Z was .864 that means that for each unit increase in digital device addiction, lifestyle of Bangladeshi Gen Z increased by .864. Therefore, the hypothesis was supported.

Conclusion

Digital device addiction is seen commonly nowadays specially among the Generation Z students. Addiction arises when a person is feeling of missing digital device constantly. Therefore, if digital device is using heavily as a part of the life instead of necessary, then the students of Gen Z will slog away because addiction affects people at mentally and physically too. It is found in this research that to the Gen Z digital device is an important part of their life and the digital device addiction effect significantly on the lifestyle of Gen Z students in Bangladesh. This is also supported by the study of Sheopuri and Sheopuri (2014), Subba, Mandelia, and Nagraj (2013); and Cagan, Unsal, and Celik (2014). Moreover, Goswami and Singh (2016) mentioned that youths are more persuaded towards using digital device for activities other than communication than older generation as in teen stage, people are more predisposed to changing fashion trends and style, building them more tech-savvy which also creates certain behavioral disorders. The excessive usage and high attraction of the digital device is giving us an alarm towards the detrimental effects of digital device radiation which can create headache, decreased concentration, local irritation and burning and so on. Hence,

this research suggested that there is an upfront need to give more attention on digital device addiction research for the better lifestyle of Bangladeshi Gen Z.

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