

Use of Facebook and Its Impact on the University students in Dhaka:
An Exploratory Analysis

By

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Master of Development Studies

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Declaration

It is hereby declared that

1. The thesis submitted is my/our own original work while completing degree at Brac University.
2. The thesis does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The thesis does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
4. I have acknowledged all main sources of help.

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Approval

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Abstract

With the recent technological revolution internet and social networking sites have come to the fingertips of to the world citizens. which is the most widely used social network, which has been used for recreational, leisure and communication purposes with the surrounding people of the world. This study examines the usage pattern, advantage, disadvantage, and addiction of Facebook among the students of Master of Development Studies (MDS) of BRAC University. This study gives an overview of the use of Facebook, for what benefits they use it, what kind of problems they face while using Facebook. A structured questionnaire was used to collect information from 79 respondents. The most frequent users of Facebook users age ranges from 18 to 24 years old thus target people for this research has been fixed from 18 to 28 years old University students in Dhaka. Target group (18-28 years old university students) responses were 55 people. Findings of this study reveal that the duration of usage per day of the respondents is 167.4 minutes. The average logins per day was found 9.35 times. They spent on an average 27 minutes on Facebook per session of logins. Most observed Facebook advantages are: networking, news source, information and educational help, whereas disadvantages are: wasting of time, health issues, reduced family time, bothered by fake profiles. It was found that 40% of the respondents are severely addicted to Facebook whereas 27% of them are moderately addicted. After running a Pearson correlation test it was found that there is a significant positive correlation between the higher duration in Facebook with higher levels of addiction.

Keywords: Facebook usage, Facebook addiction, advantage and disadvantages of Facebook, Facebook usage pattern, Use of Facebook by the University students in Dhaka

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CHAPTER ONE: INTRODUCTION

Over the recent decade faced a new phenomenon called social networking which is the use of dedicated websites and applications to interact and socialize with other users or people with similar interests. Technology has been upgraded in recent years and Internet has become cheaper day by day and smart phones are available to almost everyone. Following this the vast majority of people around the world started using the Internet and got acquainted with social networking. Facebook is the most used platform of social network that people around the world use for various purposes. But over time the usage of Facebook now ranges for a number of hours, which indicates that there is a form of addiction or dependence on Facebook. This study explores if significant usage of Facebook might consider as an addiction level among the University students of Dhaka city. By understanding the duration of usage, advantages and disadvantages of Facebook, this study finds out how Facebook affects their everyday life.

1.1 Background of the Study

In the recent years' internet has been made available to more and more people of the world. People are embracing new technologies like smartphones and it has changed their way of life considerably. Social networking such as Facebook allows people to connect all over the world and avails instant communication with them by click of a button. Helping people to communicate via calling, text messages, video call, image sharing. This virtual meetup and contact with other people substitute many face-to-face relationships and promises. Facebook is the most popular social network globally. Over 2.38 billion monthly active users (MAU) as of March 31, 2019 (Source: Facebook 24th April 2019). In Bangladesh amongst all the internet users 94.32% uses Facebook (Source: Social Media Stats Bangladesh | StatCounter, GlobalStats. 25th May 2019). Researchers are already studying the consequences of its excessive use. (Guedes et al., 2016).

According to BTRC's Annual report of 2017-2018, in June 2018 among the 150.95 million mobile subscribers in Bangladesh 87.79 million people uses internet. The majority of the users spend their time in social networking sites. Facebook is the most common among them. Approximately 25-30 million Facebook users in Bangladesh. Which gives similar data as Internet World Stats where it states that 28 million internet users are in Bangladesh. 72% of them are male and 28% are female. Majority of the users are aged between 18-24. They are more likely to use it for the purpose of pursuing undergrad degree or working blue collar jobs. 86% of Facebook users use Facebook from mobile phones.

According to Aminul Hakim, President, Internet Service Provider's Association of Bangladesh, 88GB out of country's total four hundred and thirty-six (436) Gigabytes Bandwidth is used for Facebook. (Dhaka Tribune, 2017). On an average most professionals spend Taka 300-400 per month on internet connections to use

Facebook. The outlay is slightly higher for Wi-Fi users. An intriguing statistic is Dhaka has the highest number of Facebook users in Bangladesh, which is 65% of total users of Bangladesh. Dhaka city is even ranked number one as the most populous city of Facebook users in the whole wide world. This is a mirage of Facebook craze in Bangladesh (Digiology, 2018).

A study performed in Sweden showed that 85% of the 100 candidates log into Facebook at least one time every day and 70% log in whenever they bootup their computer. Another significant finding of the study was that the participants spent 75 minutes on an average on Facebook (Men 64 minutes and Women 81 minutes every day). In this study, the average user logs in on Facebook 6.1 times/day and almost half the participants mentioned that they feel it is hard to keep up socially without Facebook (Guedes et al. 2012).

1.2 Rationale

Today's life is practically impossible to imagine without the use of Internet. Our lives now circle around the internet. While people use it in different aspects of life, the most popularly used domains are the social networking sites. Amongst all the social networking sites (SNS), the most prominent and widely used SNS is Facebook. Studies have found significant harm done by Facebook addiction. Spending a lot of time on Facebook means there are a lot of exposure to the blue light of the Smartphones which affects the vision as well as the lack of communication with surrounding real-life people triggers the socio behavioral issues for them. Study findings will help people decide if there is a need for intervention to reduce or control usage behavior.

The SNSs now allow immediate communication with just a click of a button. So, the SNSs facilitates virtual contacts and meetings with other people, replacing many personal relationships and commitments. Even though many researchers depend the idea that the excessive use of the internet and social networks as Facebook can cause addiction, the concept is still controversial. Thus, this study only examined the usage pattern and the behavioral aspects of Facebook use.

1.3 Research Objective

The main objectives of this study are to explore:

1. The usage pattern of Facebook amongst the graduate students of BRAC university
2. The effects of Facebook usage on everyday life as understood and explained by the students
3. The advantages, disadvantages and addictive nature of the use of Facebook.

1.4 Research Questions

The main objective of this research was to find the duration of Facebook use of University students of Dhaka city through a quantitative approach by a survey questionnaire. This study aimed to

- i) Usage pattern related questions:
 - a) Identifying the duration of Facebook use of University students of Dhaka city
 - b) Identifying the effects of Facebook on their daily life
 - c) Determine whether the users lose sleep due to excessive Facebook use
- ii) Social Capital related questions:
 - a) Identify the advantages of Facebook that impacts the users
 - b) Identify the disadvantages of Facebook that impacts the users
- iii) Facebook addiction related questions:
 - a) Determine their level of addiction to Facebook
 - b) Determine in which aspects the users are most vulnerable

1.5 Significance of the Study

This study will increase awareness on the issues that can be initiated by excessive use of Facebook among the graduate level students of Bangladesh. It will contribute to understand the pattern of Facebook usage amongst students while focusing on understanding how Facebook influence their daily life. The study will help the Addiction and Psychiatry Researchers understand the needed intervention for Facebook usage in daily life.

This study provides enough information that Facebook is used excessively and for a group of people who uses Facebook excessively will need rehabilitation to reduce the usage. Just like substance addiction Facebook addicts also face withdrawal symptoms which is very hard for them. Adequate researches may help the administrations strategize in the systematic distribution of internet and data instead of unlimited cheap vast amount of free internet.

This research focused on the Target group of people who are in between 18-28 years old. However, with the exponential growth of technology and cheap internet, the younger generation even children are getting more and more exposed to both internet and Facebook. Thus, we need immediate intervention and researches that can help make the next generations stable both physically and mentally.

There're numerous researches of "Facebook Addiction Disorder" or "SNSs Addiction Disorder" which bases on six criteria of a) neglect of personal life b) mental preoccupation c) escapism d) mood modifying experiences e) tolerance f) concealing addictive behavior. Particularly, this study has importance in understanding for the behavioral patterns of prominent Dhaka city's youth as well as related negative consequences. The related communities such as: Education sector, Telecommunication Departments can strategize their projects accordingly for the betterment of the future generation. In the social context, today's

youth are the backbone of the nation's future and this study will help saving the nation's next generation from becoming paralyzed.

1.6 Hypothesis

As an integral part of life Facebook is much needed for different reasons. Young generations are using it for connectivity amongst peers as well as for searching blue collar jobs. As it is available at a cheap rate in Bangladesh, Facebook can also be addictive. Varying from student to student the usage pattern maybe mild to severe. As age-group of grad level students (18-28) uses Facebook mostly, so We assume that there is a significant percentage of students who unintentionally became addicted to Facebook.

In order to find the usage pattern of Facebook, some demographical questions were asked along with the duration of use, whether they frequently check Facebook while working. Whether or not they get benefit from using it and if they lose sleep at night because of it. As SNS solely rely on attracting more users and more usage time these SNS are making their products more addictive. This study attempted to figure out the young generation of this country who has easy and cheap access to these sites are becoming more or more involved and spending greater time on it than before. This study explored if SNSs are helping them increase their social capitals (broader network, communication, invited to social events, job circulars, job switch, job promotion, awareness, building community). Apart from the advantages Facebook has quite a number of disadvantages (hacking, cyberbullying, fraud and scams, security issues, relationship issues, sleep issues). This study explored if those disadvantages are common in them.

This study also explored the average daily duration of Facebook use and the level of Facebook addiction that actually exists in the University students in Dhaka, and then the daily duration of Facebook use was tested with Facebook addiction level to find out if there are any correlation. In this case, null hypothesis is that the sample correlation coefficient is not significantly different from zero. There is not a significant linear relationship (correlation) between daily Facebook use duration and Facebook addiction level in the sample. From this null hypothesis we analyzed the data to test this theory.

CHAPTER TWO: LITERATURE REVIEW

Use of Social Networking Sites (SNSs) has risen exponentially everywhere throughout the world in the last decade. Boyd, Ellison and Nicole depicted Social Networking Sites (SNS) as " web-based service " that enable people to develop an open or semi-open profile inside a limited framework articulate a rundown of different users with whom they share an association and view and navigate their list of associations and those made by others inside the framework. Among the different SNSs, Facebook is the most the prominent one. Stats given by Facebook uncovered that as of March 2014, there were 1.28 billion active users on the site every month, and at any rate 802 million of these users signed into Facebook consistently. And around 81.2% of Facebook active clients were outside the United States and Canada (Sorson, 2015).

Kuss and Griffiths (2011) assessed that somewhere in the range of 55% and 82% of adolescents and youthful grown-ups use SNSs all the time. The rate has unquestionably expanded in the ongoing years because of wide accessibility of web and quick improvement of advanced mobile phones. Individuals are utilizing informal communication destinations for their extremely private issue to political and social points. Individuals of all age are utilizing the SNSs. Be that as it may, young adults, especially youngsters would in general be uninformed of exactly how much time they truly spent on SNSs, and its impact on their scholarly exhibition and social cooperation. The inordinate utilization of SNSs is turning into a matter of worry for the guardians, educator and strategy producers. It has brought the discussions of SNSs addiction. SNS enslavement has been characterized by LaRose et al. (2010) as an inability to manage use, which prompts negative results. Nevertheless, the idea of addiction isn't anything but difficult to characterize and the use of the term has been considered as controversial. Although, as per Widyanto and McMurrin (2004) addiction is the reliance on a substance or activity. The definition is not restricted to substances it currently additionally incorporates certain practices. An increasing number of scientists acknowledge the likelihood that the utilization of online applications can wind up addictive; the idea is hostile. SNS addiction might be seen from a biopsychosocial point of view. Much the same as substance-related addictions, SNS compulsion fuses the experience of the 'Classic' addiction side effects, to be specific mood swing (for example commitment in SNSs prompts a great change in emotional states), salience (for example behavioral, cognitive, and emotional distraction with the SNS use), tolerance (i.e., consistently expanding use of SNSs over the long haul), withdrawal indications (i.e., encountering upsetting physical and emotional side effects when SNS use is confined or halted), conflict (i.e., relational and intrapsychic issues result due to SNS use), and relapse (i.e., addicts rapidly return in their extreme SNS use after a forbearance period). (Kuss, 2011; Meena, 2012; LaRose, 2010; Widyanto, 2004 & Griffiths 2005 as cited in Sorson, 2015)

2.1 Excessive use of Facebook:

According to Facebook newsroom (2015) uncover that, around the world, there are over 1.44 billion monthly active Facebook consumers and in any event 936 million individuals sign in consistently. Among those daily users, 745 million check the site by their cell phones. As per a current survey by Nadkarni and Hofmann (2012), there are social and socio-statistic contrasts in Facebook use: females appear to utilize Facebook more than guys. A current report of Denti (2012) on 100 Swedish students demonstrates that 85% of them sign in Facebook in any event once consistently and 70% accepted that they signed on Facebook whenever they start their PC. Moreover, the members spent a normal of 75 minutes every day on Facebook, with men going through 64 minutes and ladies 81 minutes consistently. According to Guedes et al. (2016) users of Facebook logs in 6.1 occasions/day and practically a large portion of the members referenced that they feel it is difficult to keep up socially without Facebook. In one other US survey which was conducted on a sample of 1,605 adults aged between 18-54 years old, shows that one-third of girls aged between 18-34 open Facebook every time they wake up in the morning before freshening up, 21% checks their texts waking up from sleep and 39% acknowledged themselves as Facebook addicts (Abhijit, 2012). Furthermore, according to Hofmann et al. (2012) surveying 205 German people it was found that adult users of Facebook and Twitter wants to be on social networks more than their wish for sleep. The researchers then settled that addiction of social networking platforms are more damaging than substance related addiction since social media are readily accessible & inexpensive (Facebook, 2015; Nadkarni, 2012; Denti, 2012; Abhijit, 2012; Hofmann, 2012 as cited in Guedes, 2016). This study explored if the wish for using social networks more than the wish for resting or sleep. We could determine the need for being in social media is higher in the graduate level students of Dhaka city. From the existing studies it can be seen that the daily Facebook use duration is ranging from 1 hour to 1.5 hours in the age group of 18 to 54 years, here in this study we tried to determine if the young generations uses it more.

2.2 Is Facebook Addictive?

Undeniably, even with an increasing proof of SNS addictions and a couple of studies showing that the Facebook addiction ranges from 8.6% to 41.9%, few researches have been done to find out how Facebook can be addictive. Griffiths's (2005) "biopsychosocial system" for the etiology of addictions and Shaffer's (2004) "syndrome model of dependence" express that individuals of Facebook addiction feel similar symptoms of substance addiction. Xu and Tan (2012) suggested shift from regular use to SNS abuse emerges when SNS is considered as a significant (or even exclusive) instrument to adapt to pressure, depression and loneliness. For Internet Addiction (IA), Griffiths (2014) contended that it isn't proven that the users become dependent on the SNS platform or to the contents of the web. Addicted users on the web can't surrender a few parts of online use. Accordingly, the author proposes three subtypes of web addicts, based on the

"object" of the fixation: online amusements, sex, and email or instant messages. And among these three subtypes this study tried to corroborate with two of the subtypes such as online recreations and instant communication. As Internet addiction has a broader range and Facebook addiction is a bit narrowed domain, we explored if respondents get enough incentives to use instant messaging and online recreation which eventually makes them addicted to Facebook. SNS are an online program wherein emailing or messaging are predominant, notwithstanding being used for game playing and even sex-related purposes. As indicated by the model proposed by Nadkarni and Hofmann (2012), Facebook use is mostly determined by two fundamental social needs: (1) feeling of having a place to belong, and (2) self-presentation. We explored that the respondents feel the urge to be in a community or similar interest groups. The "need to belong" emerges from the fundamental drive to be involved with others and get social acknowledgment, while the requirement for self-presentation is consistently required for the procedure of impression management. We only analyzed here the sense of belonging as the other social needs of self-presentation can only be clinically diagnosed. Although, in the qualitative part of the study showed that respondents believe that there are enough signs for self-representation. It was felt by them with the amount of likes and comments given by the other user on the respondents public Facebook posts. These motivations co-exist and could clarify the Facebook use. A few statistic and social components are related with the need to belonging, though character attributes, for example, neuroticism, narcissism, shyness, confidence and self-esteem are related with the requirement for self-presentation. Tamir and Mitchell (2012) depicted that an increased brain activity influences related with the satisfaction after discussing about themselves. Utilizing fMRI, the authors investigated how cerebrum movement while individuals talked about themselves was identified with a "feeling of happiness" encounter, in contrast with other normal rewards, for example, sex or sustenance. Authors contended that children aged 9 months attempt to grab other's attention to the pieces of the condition that they see as the most significant, which could be viewed as the main type of self-presentation; for grown-ups, they need to give forward information to others about themselves. Subsequently, individuals have an inherent drive for self-presentation, and this personal conduct standard is constrained in SNS as a result of the cerebrum's reward system (Cam, 2012; Nadkarni, 2012; Ryan, 2014; Griffiths, 2005; Griffiths, 2012; Griffiths, 2014; Wolniczak, 2013; Lee, 2015; Khumsri, 2015; Shaffer, 2004; Echeburúa, 2010; Xu, 2012; Tamir, 2012; as cited in Guedes, 2016).

Numerous authors (see for example, Young, 2009; Spada, 2014; Li, 2015; as cited in Guedes, 2016) tried to describe IA as a condition with a set of indications that includes:

- a) Getting distracted by the activities of Internet;
- b) Rising level of acceptance;
- c) Developing dependency and showing indications of withdrawal;
- d) Incapability to decrease the use of Internet;
- e) Using Internet to manage stress reduction and bad mood;
- f) Substituting chores and avoiding relationship problems with repeated use of Internet regardless of being aware of the negative consequences.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction to the Study Area

According to World population review (2019), the population density of Bangladesh is 1,115.62 people per square kilometer and its capital Dhaka has a population density of 19,447 people per square kilometer. Due to the lack of entertainment, parks and recreation citizens of Dhaka city mostly keep themselves confined at work or home where they feel most comfortable thus making them exposed to Facebook or other SNSs to spend their leisure time. Apart from this, even to get information and news, along with job- and business-related info people use mostly Facebook.

This research has attempted to find the Facebook use trend and the advantages and disadvantages that are faced by the university students of Dhaka city. For the convenience of research, the researcher selected Master of Development Studies (MDS) students as the respondents for this research. Along with pattern of Facebook use the researcher tried to find the addiction to Facebook through a developed questionnaire. The addiction category questions has been given different scores and later the addiction level has been calculated from the final scores. As the most of the Facebook users ranges from 18 to 24 years old this research targeted the population of the University students in Dhaka, in this study the sample age has been fixed from 18 to 28 years as the undergrad and Masters level student represents the population holistically. And this age group showed a trend in use of duration either increased or reduced over time.

3.2 Research Methodology

- Research method: Quantitative
- Data Collection: Developed survey questionnaire
- Question type: Close ended questions, LIKERT Scale
- Possible variables: Duration of use, Severity of Use, Advantages, Disadvantages.
- Data analysis: An analysis was done after the data were collected.

3.2.1 Research Design

This research was designed in order to find the duration, advantages, disadvantages and addiction of Facebook use among the university students of Dhaka city. The questionnaire sequentially asks for the duration of use along with three category of LIKERT scale, which helped us determine the advantages, disadvantages and addiction. This research was designed to perform and execute under a very short period of time. Thus, the researcher mostly surveyed the students through online link. The data then was used in Stata12 to find out the statistically significant findings.

3.2.2 Sample

i) Target Population:

- The sample of the study was the graduate level (18-28 years old) students.
- The sampling was done purposively according to the convenience of access.
- The sample size was 79 students consisting both male and female participants. Among that 55 respondents are from the target group of 18-28 years old. The rest 24 respondents are more than 28 years old. We used different age group in this study to check if there is a correlation between Facebook use duration and age.

ii) Demography:

- Age: 18-28
- University Location: BRAC University, Dhaka City Corporation.
- Representation of population: As this research intends to find out the Facebook usage pattern among the university students of Dhaka. A quantitative study requires a sample which contains different aged students. Master of Development Studies Students of BRAC University contains student who are fresh graduates also students who are currently employed and have 2-5 years job experience. This helped a diversified analysis of Facebook usage amongst students.
- Reason of selection: Researcher has ease of access to the MDS Departments Students which helped in collecting the data both by hardcopies and online survey questionnaire. As there is a limited time to collect the data, online questionnaire helped in attracting more participants because they were be able to complete the survey at their convenient time.

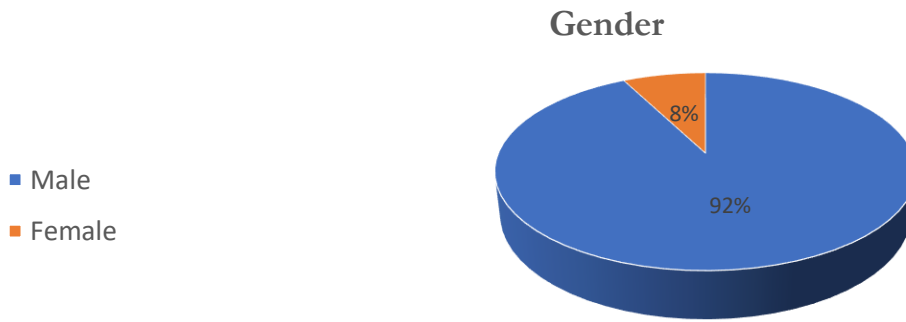
3.2.3 Data Collection Procedure

The researcher created an online questionnaire and distributed it to the students of MDS of BRAC University. The data was collected in google docs. After the collection of data, the total responses were 89 and after the redundant data cleaning there were useful 79 responses. After that the target group responses were 55 who were in the 18-28 years old category. However, for data analysis we kept all 79 data for some analysis as to see if there were some similarities in other age groups. The responses then were coded and analyzed by Stata12 to find the frequency of significant findings.

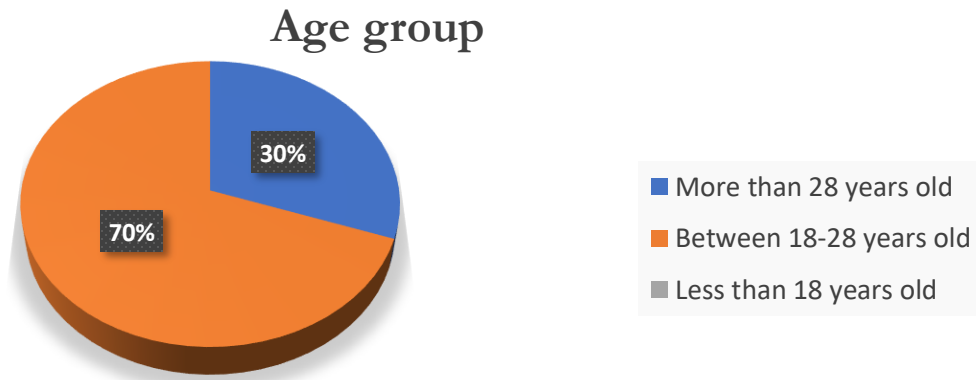
CHAPTER FOUR: DATA ANALYSIS & FINDINGS

4.1 Demographic Data:

In this study basic information of Facebook use was collected to get general form of usage pattern. The questionnaire has a set of preliminary questions which were related to these. As there are already researches that concluded that the females spend more time in the Facebook than men, in this study researcher focused on mostly men's usage behavior. From the responses we found that the 92% of the respondents were male and 8% of them were females.



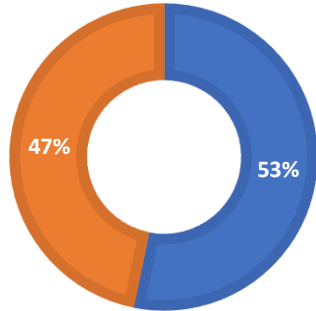
The data showed that the age group that the respondents belong to are as followed: none of the respondents were less than 18 years old. 70% of them were in the target group of 18-28 years old and the rest 30% of students are more than 28 years old. The following pie chart shows the percentage of age group.



The respondents consisted of both employed students and unemployed students. However, the total data showed that 53.2% respondents were employed and rest are only students whereas, in the target group data only 40% are employed and 60% them are unemployed. The following doughnut charts demonstrates the employment percentage of the respondents.

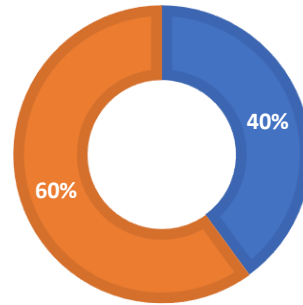
EMPLOYMENT PERCENTAGE OF TOTAL RESPONDENTS

■ Employed ■ Unemployed

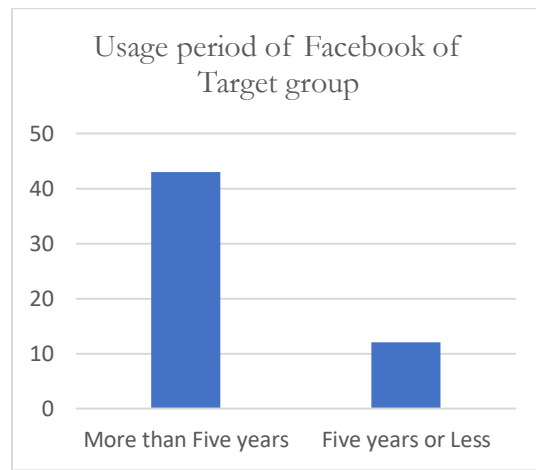
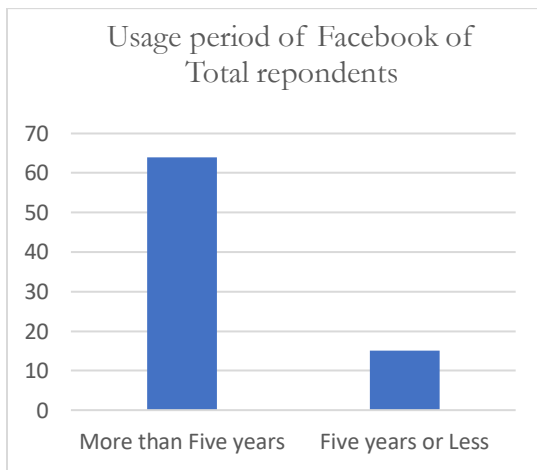


EMPLOYMENT PERCENTAGE OF TARGET GROUP

■ Employed ■ Unemployed

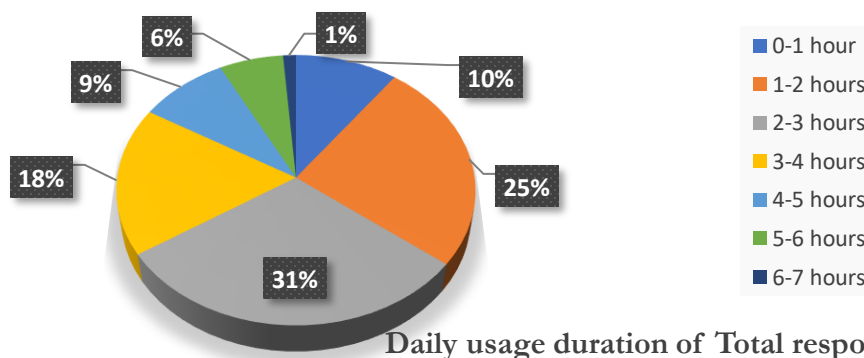


All of the 79 respondents have a Facebook account. Although there was a difference in the years of Facebook use.

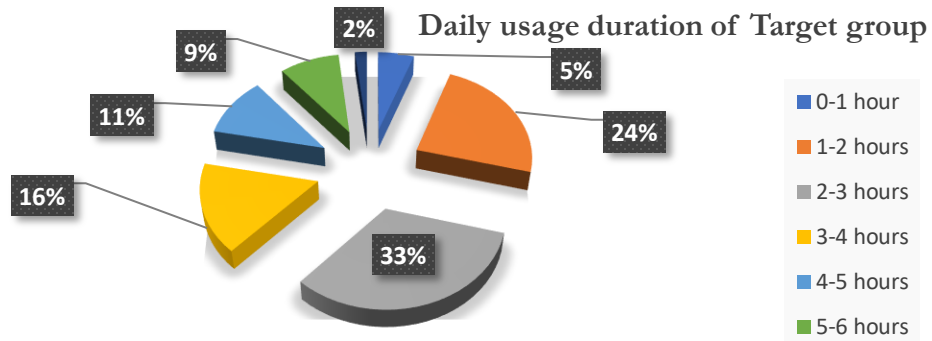


4.2 Duration of daily use:

The respondents were asked how many hours do they spend on Facebook now and the following graph shows the number of hours they spend on Facebook.



From these grouped data we calculated the duration of usage per day of total respondents and we got **162.9 minutes or 2 hours and 42 minutes**. And From these grouped data we calculated the duration of usage per day of target group respondents and we got **167.4 minutes or 2 hours and 47 minutes**. We can conclude that the daily use is somewhat quite similar to different age groups although the target group actually uses more than other age groups. Denti (2012) found the Facebook usage time 75 minutes per day whereas our value of daily use significantly higher than that.



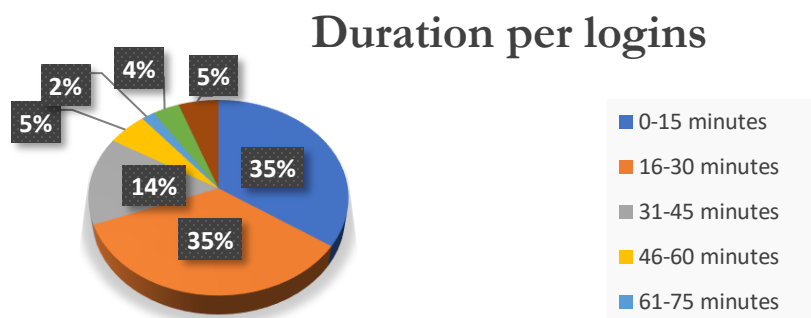
In the same way calculations were done for previous years use of Facebook and it was found that for duration of use of Facebook in the previous years is **158 minutes** for total respondents and **172 minutes** for the target group. Thus, we can say that the target group are spending less time in Facebook now than previous years.

4.3 Average friends on Facebook:

The average friend count of the target group of is 1,108.

4.4 Logins per day and Session per logins:

The average logins per day was found **9.35 times/day**. And they spent on an average 27 minutes on Facebook per session of logins. Guedes et al. (2016) found that the daily logins were 6.1 times/day. So, in this study we found an increase in the number of logins per day.



4.5 Advantages of Facebook:

The questionnaire was set as a LIKERT scale to find out if the students find Facebook as a useful tool. Thus, the mean was calculated and then it was found that most of the students indeed find Facebook advantageous. The main questionnaire was set to find the 10 aspects of Facebook and how frequent they find it useful in relating to use.

The frequencies were coded from 0-5 from never found it useful to always find it useful. And as we can see from the following Stata output the mean for all the advantages are at least 3.5 and ranges to 4.2. So, we can conclude that as a whole, student users find often or always Facebook helpful in these 10 aspects.

Variable	Obs	Mean	Std. Dev.	Min	Max
adv_info	55	3.890909	1.31477	0	5
adv_ntwrkng	55	4.2	1.095445	0	5
adv_edu	55	3.963636	1.104932	0	5
adv_cmnty	55	3.618182	1.433603	0	5
adv_evnts	55	3.254545	1.680148	0	5
adv_grp	55	3.690909	1.438527	0	5
adv_noble	55	3.581818	1.436185	0	5
adv_news	55	4.127273	.9823356	1	5
adv_oldfrnd	55	3.836364	1.424178	0	5
adv_job	55	3.545455	1.561317	0	5

Now, looking at them individually we get frequency tables. We did analysis of individual aspects and found the followings:

1) Facebook as a mean to get updated information or awareness:

This following table shows that most students around 42% always rely on Facebook as a mean to get updated information or awareness on different issues. And consecutively 33% students Often finds Facebook helpful in this regard.

adv_info	Freq.	Percent	Cum.
0	1	1.82	1.82
1	3	5.45	7.27
2	6	10.91	18.18
3	4	7.27	25.45
4	18	32.73	58.18
5	23	41.82	100.00
Total	55	100.00	

- 2) Facebook for networking & connectivity (Messaging, Audio and Video Call) over other social networking sites:

This following table shows that most students around 47% always rely on Facebook as a mean networking & connectivity over other SNSs. And consecutively 40% students Often finds Facebook helpful in this regard. Griffiths (2005) found out that one of the three subtypes of fixation or “objects” were that people use Internet and gets addicted due to instant messaging or instant communication which is free. From this data we can conclusively say that almost more than 87% of respondents use Facebook for communication purpose. Thus, if the use gets uncontrolled the users become Facebook addicts.

adv_ntwrkng	Freq.	Percent	Cum.
0	1	1.82	1.82
1	2	3.64	5.45
2	1	1.82	7.27
3	3	5.45	12.73
4	22	40.00	52.73
5	26	47.27	100.00
Total	55	100.00	

- 3) Facebook for educational help:

This following table shows that most students around 38% always rely on Facebook as a mean educational help. And consecutively 35% students Often finds Facebook helpful in this regard.

adv_edu	Freq.	Percent	Cum.
0	1	1.82	1.82
2	5	9.09	10.91
3	9	16.36	27.27
4	19	34.55	61.82
5	21	38.18	100.00
Total	55	100.00	

- 4) Facebook for community help & advices:

This following table shows that most students around 35% always rely on Facebook as a mean to get community help & advices. And consecutively 31% students Often finds Facebook helpful in this regard.

adv_cmnty	Freq.	Percent	Cum.
0	1	1.82	1.82
1	6	10.91	12.73
2	6	10.91	23.64
3	6	10.91	34.55
4	17	30.91	65.45
5	19	34.55	100.00
Total	55	100.00	

5) Facebook for invitation to social events:

This following table shows that around 27% of the students always finds Facebook as a mean to get invited to social events. And consecutively 31% students Often finds Facebook helpful in this regard.

adv_evnts	Freq.	Percent	Cum.
0	5	9.09	9.09
1	8	14.55	23.64
2	2	3.64	27.27
3	8	14.55	41.82
4	17	30.91	72.73
5	15	27.27	100.00
Total	55	100.00	

6) Facebook helpful in community group buildup of people with similar interest:

This following table shows that around 35% of the students always finds Facebook helpful in community group buildup of people with similar interest. And consecutively 33% students Often finds Facebook helpful in this regard. This part falls into the sense of belonging subtypes. We can see from the data that more than two thirds of respondents use Facebook for community buildup with people with similar interest which eventually leads them to addiction if the use gets uncontrolled.

adv_grp	Freq.	Percent	Cum.
0	4	7.27	7.27
1	1	1.82	9.09
2	4	7.27	16.36
3	9	16.36	32.73
4	18	32.73	65.45
5	19	34.55	100.00
Total	55	100.00	

7) Getting help related to noble causes (charity / blood donors) through Facebook:

This following table shows that only around 67% of the students always or often finds Facebook helpful in relation to noble causes (charity / blood donors).

adv_noble	Freq.	Percent	Cum.
0	3	5.45	5.45
1	5	9.09	14.55
2	1	1.82	16.36
3	9	16.36	32.73
4	22	40.00	72.73
5	15	27.27	100.00
Total	55	100.00	

8) Prefer Facebook as a source of News:

This following table shows that around 44% of the students always uses Facebook as mean to get news over other SNSs. And consecutively 35% students Often finds Facebook helpful in this regard.

What is significant in this aspect is there was not any respondent who does not prefer Facebook as a source of news.

adv_news	Freq.	Percent	Cum.
1	1	1.82	1.82
2	3	5.45	7.27
3	8	14.55	21.82
4	19	34.55	56.36
5	24	43.64	100.00
Total	55	100.00	

9) Finding lost and old friends:

This following table shows that around 42% of the students always finds lost and old friends through Facebook. And consecutively 29% students Often finds Facebook helpful in this regard.

adv_oldfrnd	Freq.	Percent	Cum.
0	3	5.45	5.45
1	3	5.45	10.91
2	1	1.82	12.73
3	9	16.36	29.09
4	16	29.09	58.18
5	23	41.82	100.00
Total	55	100.00	

10) Finding job circulars / job opportunities:

This following table shows that more than two-thirds of the students always finds job opening or circular through Facebook.

adv_job	Freq.	Percent	Cum.
0	5	9.09	9.09
1	3	5.45	14.55
2	3	5.45	20.00
3	7	12.73	32.73
4	20	36.36	69.09
5	17	30.91	100.00
Total	55	100.00	

4.6 Disadvantages of Facebook:

The questionnaire was set as a LIKERT scale to find out if the students find Facebook as problematic. Thus, the mean was calculated and then it was found that most of the students do indeed find Facebook disadvantageous in some aspects. The main questionnaire was set to find the 9 aspects of Facebook and how frequent they find it disadvantageous in relating to use.

The frequencies were coded from 0-5 from never found it problematic to always find it problematic. And as we can see from the following Stata output the mean for all the advantages are at least 2.03 and ranges to 3.87.

So, we can conclude that as a whole, student users find moderately frequently to often or always Facebook problematic in these 9 aspects.

Variable	Obs	Mean	Std. Dev.	Min	Max
dadv_bully	55	2.090909	1.745605	0	5
dadv_hck	55	2.036364	1.79468	0	5
dadv_fraud	55	2.218182	1.760586	0	5
dadv_hlth	55	3.2	1.637523	0	5
dadv_prvcy	55	2.836364	1.64163	0	5
dadv_twaste	55	3.872727	1.3479	0	5
dadv_tfmly	55	3.290909	1.706987	0	5
dadv_fake	55	3.218182	1.571634	0	5
dadv_rpttn	55	2.490909	1.793741	0	5

Now, looking at them individually we get frequency tables. We did analysis of individual aspects and found the followings:

1) Victim of cyberbullying or blackmailing while using Facebook:

This following table shows that around 33% of the students always or often became victim of cyberbullying and blackmailing while using Facebook. And 47% students never or rarely were a victim of cyberbullying or blackmailing while using Facebook.

dadv_bully	Freq.	Percent	Cum.
0	14	25.45	25.45
1	12	21.82	47.27
2	6	10.91	58.18
3	5	9.09	67.27
4	14	25.45	92.73
5	4	7.27	100.00
Total	55	100.00	

2) Victim of Facebook account hacking:

This following table shows that around 31% of the students are always or often victims of Facebook account hacking while using Facebook.

dadv_hck	Freq.	Percent	Cum.
0	15	27.27	27.27
1	12	21.82	49.09
2	7	12.73	61.82
3	4	7.27	69.09
4	11	20.00	89.09
5	6	10.91	100.00
Total	55	100.00	

3) Victim of fraud or scams on Facebook:

This following table shows that around 35% of the students always or often became victim of fraud or scams on Facebook. And 44% students have never or rarely became victim of fraudulent activities on Facebook.

dadv_fraud	Freq.	Percent	Cum.
0	13	23.64	23.64
1	11	20.00	43.64
2	6	10.91	54.55
3	6	10.91	65.45
4	14	25.45	90.91
5	5	9.09	100.00
Total	55	100.00	

- 4) Facing health issues (laziness, obesity, disorder in routine life) because of excessive Facebook use:

This following table shows that around 20% of the students always faces health issues due to excessive use of Facebook. And 40% students have often faced health issues due to Facebook use.

dadv_hlth	Freq.	Percent	Cum.
0	6	10.91	10.91
1	6	10.91	21.82
2	3	5.45	27.27
3	7	12.73	40.00
4	22	40.00	80.00
5	11	20.00	100.00
Total	55	100.00	

- 5) Faced privacy issues (other persons finding information about the user and user's family/ stole user's images and videos / stalking) while using Facebook:

This following table shows that around only 16% of the students always faces privacy issues on Facebook. And 29% students have often faced privacy issues due to Facebook use.

dadv_prvcy	Freq.	Percent	Cum.
0	6	10.91	10.91
1	8	14.55	25.45
2	9	16.36	41.82
3	7	12.73	54.55
4	16	29.09	83.64
5	9	16.36	100.00
Total	55	100.00	

- 6) Wasting valuable time because of Facebook:

This following table shows that around 38% of the students always feels that they are wasting their valuable time on Facebook. And 40% students have often felt that they are wasting their time on Facebook.

dadv_twaste	Freq.	Percent	Cum.
0	2	3.64	3.64
1	3	5.45	9.09
2	4	7.27	16.36
3	3	5.45	21.82
4	22	40.00	61.82
5	21	38.18	100.00
Total	55	100.00	

7) Reduced time for family because of Facebook:

This following table shows that more than 58% of the students always or often feels that the time for their family has been reduced due to Facebook use.

dadv_tfmlly	Freq.	Percent	Cum.
0	7	12.73	12.73
1	4	7.27	20.00
2	3	5.45	25.45
3	9	16.36	41.82
4	16	29.09	70.91
5	16	29.09	100.00
Total	55	100.00	

8) Bothered by fake profiles on Facebook:

This following table shows that more than 56% of the students has always or often been bothered by fake profiles on Facebook.

dadv_fake	Freq.	Percent	Cum.
0	2	3.64	3.64
1	9	16.36	20.00
2	9	16.36	36.36
3	4	7.27	43.64
4	17	30.91	74.55
5	14	25.45	100.00
Total	55	100.00	

9) Reputation has been ruined due to a spread of false story / information leaked to user's friends or colleagues on Facebook:

This following table shows that around 16% of the students has always felt that their reputation has been ruined on Facebook. And 22% students have often have felt the same thing.

dadv_rpttn	Freq.	Percent	Cum.
0	10	18.18	18.18
1	11	20.00	38.18
2	6	10.91	49.09
3	7	12.73	61.82
4	12	21.82	83.64
5	9	16.36	100.00
Total	55	100.00	

4.7 Facebook Addiction:

Internet Addiction (IA) is different from the Facebook Addiction or SNS Addiction. According to Young's 8 question Internet Addiction Diagnostic Test (IADQ) which later was modified as Internet Addiction Test (IAT) is a method of assessing addiction level by a scoring method. Despite many researchers depend on the fact that IA is real and it exists, it is still considered highly controversial and diagnostic and statistical manual of mental disorders (DSM) 5th Edition did not include them as addiction disorders. However, even though IADQ is controversial it was developed by adapting DSM-4 criteria for pathological gambling diagnosis of impulse control disorder. And this instrument of measurement has been widely used by variety of researchers with regards to assessing Internet Addiction. In this study, a 10 self-report questionnaire was developed from different reports which relates to the addiction was given to the respondents to assess according to frequency.

To assess the level of addiction, users answered the following questions using this scale:

- 0 = Not Applicable
- 1 = Rarely
- 2 = Occasionally
- 3 = Frequently
- 4 = Often
- 5 = Always

After administering the questions and receiving answers, numbers were added for each response to obtain a final score. The higher the score range, the greater the level of addiction, as follows:

- Normal Range: 0–15 points
- Mild: 16–24 points
- Moderate: 25–39 points
- Severe: 40–50 points

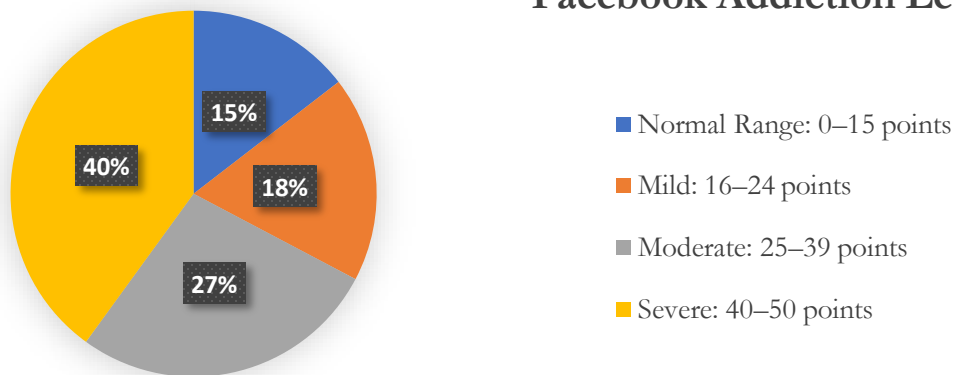
This above matrix of addiction score was set by Dr. Young’s Internet Addiction Test (IAT) questionnaire which was for a 20 self-report questionnaire for her Clinical Assessment of Internet Addicted Clients. In this study the scores were converted for a 10 self-report questionnaire which was also taken from IAT but used here for Facebook Addiction.

After calculating the addiction levels the following level of Facebook addiction was found in the students.

Addiction Level	Number of Students
Normal Range: 0–15 points	8
Mild: 16–24 points	10
Moderate: 25–39 points	15
Severe: 40–50 points	22

So, we can see from this table that 40% of the respondents are severely addicted to Facebook and 27% respondents are moderately addicted to Facebook.

Facebook Addiction Level



IA and excessive SNS use are already important issues for research and treatment. Facebook is the most frequently used SNS, some people could develop addictive behavior constructing on the sensation to feeling better or self-assurance (increased level of excitement or escape) by navigating SNSs. Facebook addiction or excessive Facebook use needs to be considered as a specific online addiction disorder or IA subtype. This study found that almost 67% respondents are moderate and severely addicted to Facebook.

If we analyze their behavior towards Facebook, we find that as mentioned by LaRose (2010) the inability to manage the use of Facebook was seen on the data that more than half of the respondents always or often struggled to cutdown the use of Facebook.

It was also found that, 60% of them generated the behavior of convincing themselves by saying “a few more minutes” to use Facebook for a longer period of time. This data corroborates with Widyanto and McMurrans (2004) certain behavioral practices which depicts that the Facebook addiction can be similar to the substance abuse and even more as it is cheap and available. Among those behaviors, another one is neglecting the chores because of Facebook use and 45% respondents always or often neglect household chores to spend more time on Facebook.

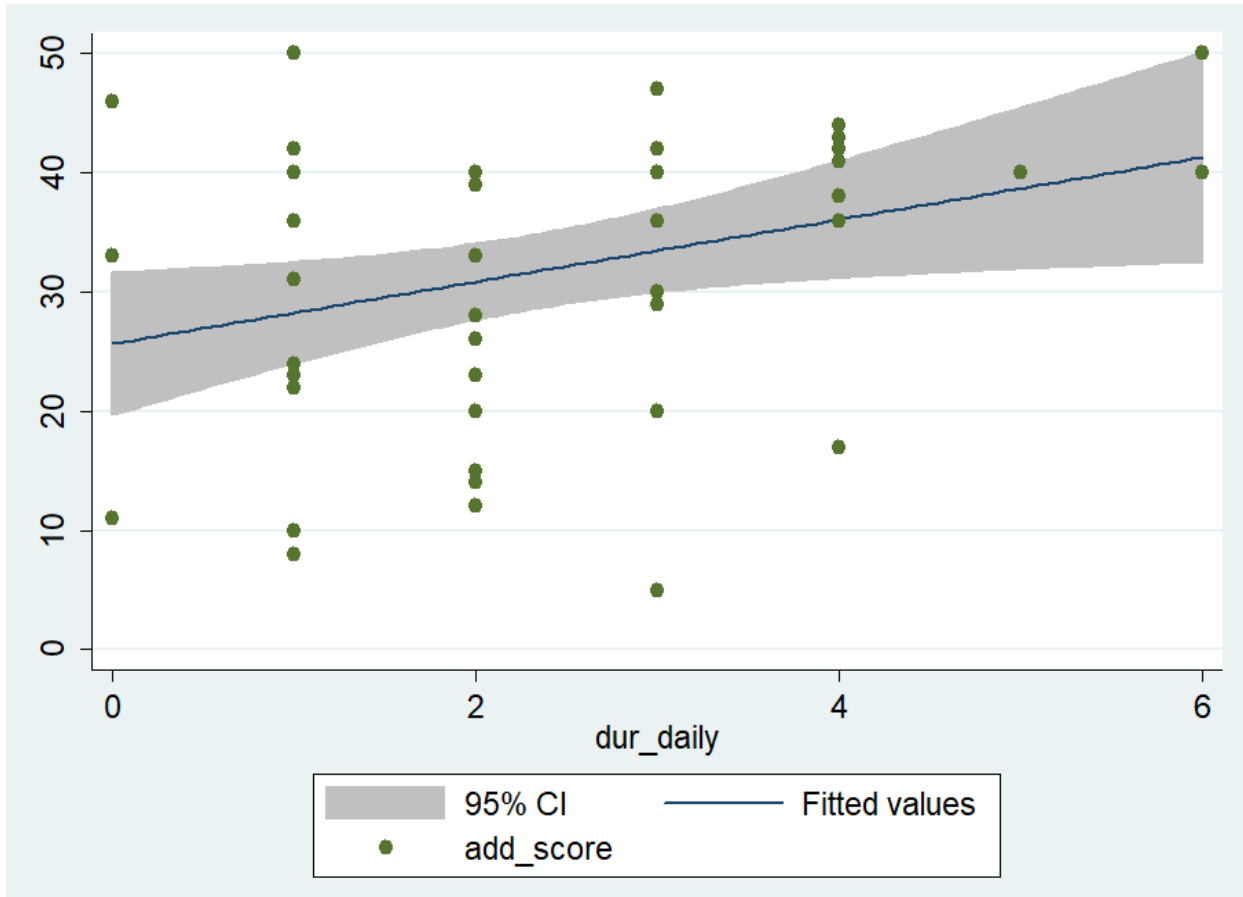
Hofmann (2012) demonstrated that the respondents showed a significant sign of preferring to be on a social networking site more than their desire to sleep. It is clear from our data that 65% of the respondents always or often miss sleep because of using Facebook at late night.

Finally, the symptoms mentioned by many authors are also existing in the respondents of this study. Among them, the mentionable ones are, 64% respondents always or often stay on Facebook longer than they had planned. 52% of the respondents always or often use Facebook as a mean to avoid their personal problems. 47% of the respondents always or often prefers to socialize in Facebook than meeting them in real life. 50% of the respondents always or often felt that they use Facebook so much that it hampers or has a negative impact on their job/studies.

```
. pwcorr add_score dur_daily, sig
```

	add_score	dur_daily
add_score	1.0000	
dur_daily	0.3086	1.0000
	0.0219	

After running the Pearson correlation coefficient test with the two variables Daily Facebook use duration with the Addiction level score we find that, p value of the test is 0.022 which is less than 0.05 (at 95% Confidence Interval) thus, we can conclude that, there is sufficient evidence to conclude there is a significant linear relationship between Daily Facebook use duration with Addiction level because the correlation coefficient is significantly different from zero. So, we reject the null hypothesis. The following two-way graph shows the correlation with best fit line plot with 95% Confidence interval.



4.8 Qualitative analysis:

Apart from above LIKERT scale questionnaire for advantages and disadvantages there were open ended questions to understand respondent's view of Facebook from both advantages and disadvantages. From those responses some are quite important that should be taken into account if there were to further researches done on this topic.

- a) Artistic Videos
- b) Cheapest way of communication
- c) Mode of recreation or spending leisure time
- d) Contacting distant family and friends living abroad
- e) Experiencing cultural diversity
- f) Instant or Realtime news
- g) Mode of language skill development
- h) Making new friends
- i) Verifying news and information
- j) Online shopping

- k) Platform for running online businesses
- l) Unlimited source of knowledge
- m) Updates of work
- n) World news

In one of the respondent's words, "It's the best place where we can get in touch with old, new and also native friends. It gives us all types of unique news which makes us aware and lot more which cannot be expressed in words. It helps me lots of times."

There are also some notable disadvantages that were found from the responses. They are:

- a) Time waste
- b) Addiction for likes and comments on post
- c) Depression and Feeling of loneliness after excessive use
- d) Reduced physical socialization due to ease of accessibility / Living a virtual life
- e) Excessive ads / Vulgar ads
- f) Eye health / Fatigue in eyes
- g) Spread of fake news
- h) Harassment
- i) Scrolling without any reason
- j) Becomes uncomfortable when trying to avoid contact with some people

In another respondent's words, "Facebook is nothing but addiction for young generation to kill their valuable time. Also, it becomes the medium for making virtual relationship"

Lots of respondents mentioned that their times are wasted in Facebook. This actually relates with the concerns of guardians that the use of Facebook has become somewhat uncontrolled as mentioned by Kuss and Griffiths (2011). Even if the use is mainly for education, news and job related. The general use is becoming more uncontrolled which is why it is making the users feel that their time is being wasted by Facebook use.

Another behavior that is the addiction of likes and comments on the posts on Facebook correlates with the self-presentation mentioned by Nadkarni and Hofmann (2012) as a social need. The post individuals share on

Facebook is a form of self-presentation. So, eventually users also get addicted to the likes (the number of people liked that post) and comments (the number of people commented on that post) which is a form of acknowledgement by other users that approve their presence or existence.

Another noticeable point found out in this study was depression due to excessive use Facebook. Xu and Tan (2012) mentioned that SNS addiction becomes prominent when the use is related to cope with depression and loneliness. So, from this study it can be said that the respondents also feel that excessive use of Facebook can be shifted from regular use in order to cope with depression and also can cause depression and loneliness.

The reduced physical socialization was felt by the respondents. The data already showed that 47% prefers this virtual form of life. This means that the reduced physical socialization can also health issues along with many forms of virtual relationships. This falls under the sex-related purpose subtypes of fixation as mentioned by Griffiths (2014) which has the potential of creating Facebook addiction.

Eye related health issues was felt by the respondents. Different types of fatigue and stress on eyes felt at late night Facebook use. Most of the respondent felt they just scroll through Facebook without reason.

CHAPTER FIVE: SUMMARY, LIMITATIONS AND CONCLUSION

5.1 Summary

The key findings of this study have been given below:

- Duration of usage per day of target group respondents **167.4 minutes or 2 hours and 47 minutes.**
- Duration of use of Facebook in the previous years is **158 minutes or 2 hours and 53 minutes** by the target group.
- The average friend count of the target group of is **1,108.**
- The average logins per day was found **9.35 logins per day.**
- They spent on an average **27 minutes** on Facebook per session of logins.
- Top four observed advantages of Facebook are:
 - **Networking, News source, Information and Educational help.**
- Top four observed disadvantages of Facebook are:
 - **Wasting time, Health issues, Reduced family time, Bothered by fake profile.**
- Top four observed addictive symptoms are:
 - **Losing sleep, Spending time longer than planned, thinking about the next time login, Uncontrolled use by saying ‘a few more minutes’**
- **40% of the respondents are severely addicted** to Facebook and **27% respondents are moderately addicted** to Facebook
- There is a significant correlation between the **daily duration of Facebook use** with their **addiction level.**

5.2 Research Limitations and Way Forward

As this study was conducted in a short period of time, it involved a very small sample size comprising of only 55 individual student respondents who falls in the target group. The respondents of the study were purposively selected by the researcher on the basis of convenience and accessibility. A study with a larger sample size consisting of randomly selected individuals who fulfill the criteria would be more representative.

As the study was based on purposive sampling with the convenience of access, Researchers can further study by taking another type of sampling method. Also, there's the fact that other SNSs such as YouTube, Instagram, Snapchat etc. which are also becoming more prominent day by day. So, there's need to be inclusion of other SNSs in order to find out overall SNS addiction. YouTube is becoming the next media, where everything now is available such as, news, dramas, sports, even TV channels live etc. So, most people

are shifting the spending time of SNS from Facebook to YouTube. Researchers should include these other prominent SNSs in consideration to find the SNS addiction.

It was found that a significant correlation between the daily use time with addiction level. Further conclusive research is needed to find the actual relationship between them in order to strategize a systematic guideline for SNS use or Facebook use.

5.3 Conclusion

All over the world the use of SNSs are becoming more common. Researches already showed significant levels of addiction of excessive Internet use and SNS addiction. The implementation of regulated usage of SNSs for addicted users are already being provided in some rehabilitation centers. Even though the methods are still controversial, proper importance should be given on this field which will eventually help protect our future generations to become a healthy backbone of the nation.

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APPENDIX: SURVEY QUESTIONNAIRE

This is a research survey questionnaire on the use of Facebook among the university students of Dhaka.

Please circle/check a response for each question.

<u>Questions</u>	<u>Response</u>
1. Are you:	<input type="radio"/> Male <input type="radio"/> Female
2. Which age group do you belong?	<input type="radio"/> Less than 18 years old <input type="radio"/> Between 18-28 years old <input type="radio"/> More than 28 years old
3. What are you doing currently? [Employment Status]	
4. Do you currently have a Facebook account?	<input type="radio"/> Yes <input type="radio"/> No
4.a. If you answered “Yes”, please state for how long have you using Facebook?	<input type="radio"/> Less than 5 years <input type="radio"/> More than 5 years
4.b. If you answered “No”, please explain why:	
5. How many friends do you have in Facebook? Please insert a number	
6. Specify the average duration of your daily Facebook use:	<input type="radio"/> 0-1 hour

	<input type="radio"/> 1-2 hours <input type="radio"/> 2-3 hours <input type="radio"/> 3-4 hours <input type="radio"/> 4-5 hours <input type="radio"/> 5-6 hours <input type="radio"/> 6-7 hours
<p>7. Specify the average duration of your previous years daily Facebook use:</p>	<input type="radio"/> 0-1 hour <input type="radio"/> 1-2 hours <input type="radio"/> 2-3 hours <input type="radio"/> 3-4 hours <input type="radio"/> 4-5 hours <input type="radio"/> 5-6 hours <input type="radio"/> 6-7 hours
<p>8. How many times do you open / log on to Facebook through your Computer and Smartphone each day? Please insert a number</p>	
<p>9. What is the average duration you spend in Facebook per session or per login?</p>	<input type="radio"/> 0-15 minutes <input type="radio"/> 16-30 minutes <input type="radio"/> 31-45 minutes <input type="radio"/> 46-60 minutes <input type="radio"/> 61-75 minutes <input type="radio"/> 76-90 minutes <input type="radio"/> 91-105 minutes <input type="radio"/> 105-120 minutes

10. Please answer the below questions based on the following scale. Put the number (0/1/2/3/4/5) in the empty box beside the question based on the frequency that is applicable to you.

5 = Always	4 = Often	3 = Frequently	2 = Occasionally	1 = Rarely	0 = Not Applicable
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<u>Questions</u>	<u>Response</u>
How often do you use Facebook as a mean to get updated information or awareness?	
How often do you prefer Facebook for networking & connectivity (Messaging, Audio and Video Call) over other social networking sites?	
How often do you find educational help by using Facebook?	
How often do you find community help & advices by using Facebook?	
How often do you get invited to social events (hangout / gathering / wedding)?	
How often do you find Facebook helpful in community group buildup of people with similar interest (colleague / classmates / gamers)?	
How often do you find help related to noble causes (charity / blood donors) through Facebook?	
How often do you prefer Facebook as a source of News?	
How often do you find Facebook helpful in finding lost and old friends?	
How often do you find Facebook helpful in finding job circulars / job opportunities?	

Please mention in any other advantages of Facebook that you found:

5 = Always	4 = Often	3 = Frequently	2 = Occasionally	1 = Rarely	0 = Not Applicable
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<u>Questions</u>	<u>Response</u>
How often have you been a victim of cyberbullying or blackmailing while using Facebook?	
How often have you been a victim of Facebook account hacking?	
How often have you been a victim of fraud or scams on Facebook	
How often do you feel you have health issues (laziness, obesity, disorder in routine life) because of Facebook use?	
How often have you faced privacy issues (other persons finding information about you and your family/ stole your images and videos / stalking) while using Facebook?	
How often do you feel using Facebook is wasting your valuable time?	
How often do you feel that spending time with your family has been reduced due to Facebook?	
How often have you been bothered by fake profiles on Facebook?	
How often do you feel that your reputation has been ruined due to a spread of false story / information leaked to your friends or colleagues?	

Please mention in any other disadvantages of Facebook that you found:

5 = Always	4 = Often	3 = Frequently	2 = Occasionally	1 = Rarely	0 = Not Applicable
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<u>Questions</u>	<u>Response</u>
How often do you lose sleep because stay logged in Facebook till late at night?	
How often do people in your life complain about the time you spend on?	
How often do you catch yourself thinking about next time you will log on?	
How often do you catch yourself saying "a few more minutes" when you are logged into Facebook?	
How often do you try to spend less time on Facebook and not succeeding?	
How often do you neglect house hold chores to spend more time on Facebook?	
How often do you feel that you use Facebook so much that it has a negative impact on your job/studies?	
How often do you prefer the excitement of Facebook to meeting friends in real life?	
How often do you use Facebook in order to forget about personal problems?	
How often do you stay logged in Facebook longer than planned?	

Please provide your comments on this topic:

---Thank you for taking time to conduct this survey---