

The relationship between addictive use of social media and students' study efficiency: A cross-sectional study on BSMRSTU students.

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ABSTRACT

Over the last few years social media have played a prominent role in academic performance. These media have many advantages and disadvantages for students in terms of academic performance. The aim of this study was to investigate the association between addictive use of social media in psychiatric disorders and learning effectiveness in Bangabandhu Sheikh Mujibur Rahman Science and Technology University (BSMRSTU) students. This cross-sectional study included 200 undergraduate students and used a stratified sampling technique. Research tools included a personal information form and the Bergen Social Media Addiction Scale. The overall performance of the students in the previous semester was also used as an indicator for study performance. There is no statistically significant difference in social media addiction between male and female college students. Student addiction to social media was moderate, with male students being more addicted than female students. There was a significant negative association between overall social media use and student academic performance. Relationship between addictive use of social media and academic achievement. As online interactions become more prevalent than face-to-face interactions, social media is beginning to have a profound impact on individuals' lifestyles, communication, language, interests, and psychology. In this study, we used bivariate analysis and binary logistic regression on a sample ($n = 200$) of BSMRSTU students aged 18–24 years. Binary logistic regression also reveals significant results related to these variables, including the impact of study time on the SNS, searching for an internet connection, dissatisfaction with not using MS, etc. The study advances our knowledge of the symptoms of mental disorders and their role in the convincing use of modern technologies. The study explored the potential of using SNS as an innovative way to increase student engagement in learning. The majority of students (about 98%) think that using the Internet is very important in their daily life for educational purposes. About 42 percent and 45 percent were connected educational and informational communities in SNS respectively.

Key words: Social Media, Addictive Use, Psychiatric Disorders, Academic performance, Statistical analysis.

1. INTRODUCTION

The internet is a global media connecting and interacting millions of peoples. More than 190 countries are attached into exchanges of data, news, opinions, culture etc. thru internet. According to internet live stats, as of March 2020 there were an allotted 37912000 internet users in Bangladesh (www.internetlivestats.com). Generally human beings connect with each other via internet and do their necessary works like gossiping, shopping and many other social and academic tasks. Now, academic and social life is dependent partially or fully on the internet.

Using social networking sites (SNS) is very common in the present world. Among the SNSs, facebook is very common and extensively used site in the internet. Facebook has different significant options that negate the users to add various applications, play games with friends, add photos, videos, watching and listening music videos in real time. Moreover, it has become the significant media to form various online communities of the same interest. Presently, facebook is a good media of communication in the areas of education, politics, family affairs, economics, world issues, sports, health etc.

In this study, we have taken Facebook, Twitter, Instagram, Swarm, What's app, Linkedin, Blog etc. into consideration as social media platforms. These mediums are familiar to most people, as their subscribers are constantly increasing. In today's world, the fact that billions of people visit social mediums on a regular basis is normal behavior. The purpose of this project is to examine some of the factors that may be involved to find out the relationship between addictive use of social media and academic efficiency of students. This study utilizes the primary data collected from Bangabandhu Sheikh Mujibur Rahman Science & Technology University (BSMRSTU), Gopalganj. This paper would presents information as well as relationship of social media addiction and academic performance. SM addiction are disaggregated by some factors, SNS affect study time, looking for internet connectivity everywhere to go on SM, feel unhappy when don't go on SM, express better on SM, can't give up using SM even family frown upon, being on SM excites, like using SM to keep information, felt an urge to use SM more and more, become restless if have been prohibited on SM, update present situation on SNS etc. which may be used to identify segments of the population requiring special attention. People think that addiction usually involves substances use such as drugs or alcohol. Uncontrollable habits or practices are also referred to as addiction (Harris, Nagy & Vardaxis, 2014).

Academic performance measured by SSC, HSC score, current CGPA of students, average hours of study per day, primary purpose of using SNS, whether they use SNS for study purposes, whether they use SNS to inform about things related to courses etc. Frequent use of media for social purposes does not necessarily indicate dependence on social media (Griffiths, 2010) and therefore does not always have a negative impact on individuals' mental health (S. Hargittai, 2009). The main difference between the normal social media over-preoccupation that

many sometimes experience and social media addiction is that the latter has negative consequences when online social networking gets out of hand and becomes compulsive (Andreassen, 2015). Facebook addiction is positively associated with depression, anxiety and insomnia (Bányai et al., 2017; Shensa et al., 2017; van Rooij, Ferguson, van de Mheen & Schoenmakers, 2017) and negatively associated with subjective well-being, subjective strength and life satisfaction (Błachnio, Przepiorka & Pantic, 2016; Hawi & Samaha, 2017; Uysal, Satici & Akin, 2013). Research also suggests a negative impact of social media addiction, and facebook addiction in particular, on academic achievement (Huang, 2014; Nida, 2018). There are several studies conducted abroad that are also similar to this study Addictive Use of Social Media in Academic Achievement and Mental Disorders. However, the context of the countries where the research was conducted differs from that of Bangladesh. The literature indicates that no detailed studies have been conducted on university students to determine the impact of social media use on academic performance.

2. OBJECTIVE

The general objective of this study is to explore the relationship between the effects of social networking and students' study efficiency.

The specific objectives of the study are:

- (i) To investigate the advantages of students' use of social networking for study.
- (ii) To investigate the disadvantages of students' use of social networking for study.
- (iii) To investigate the associations between addictive use of social media with narcissism, loneliness, shyness and impulsivity that directly or indirectly affect the study efficiency.

3. DATA COLLECTION AND METHODOLOGY

This study was based on cross-sectional data collected using a stratified sampling technique. Our list of units includes eight faculties of Bangabandhu Sheikh Mujibur Rahman Science & Technology University (BSMRSTU), Gopalganj, which were used as eight strata. Using a lottery system, the necessary sample is selected from each stratum. According to the proportion of students, we selected 55% male students and 45% female students, and we asked a structured questionnaire. A total of 200 students (aged 18 to 24 years) were selected. SPSS 26 statistical software was used for data analysis. Various statistical tools such as summary measures and logistic regression analysis were used to meet the objectives of the study.

4. RESULTS AND DISCUSSION

4.1 Background Information of the Respondents

The Gender is very important demographic variables in the analysis of our study. We studied 200 respondents of whom 90 (45.0%) are females and 110 (55.0%) are males. Most of the students, about 79.5 percent have no own earnings and they had collected their expenditure from their parents. From the following figure it is found that most of the students (about 98%) thought internet using is very important in regular life for study purpose. It is noted that

majority of the respondents about 49% most likely to use SNS in online, about 23% liked news, very few about 5% use liked Blogs and so on. From the table it is found that about 98% students are the registered member on Facebook. From the figure it is found that 32% students used SNS for chatting. On the other hand, it is found that about 23% of the students used SNS for study purpose. Mainly they used SNS for recreation. From the table it is evident that about 62 percent students are connected with entertaining communities in SNS. On the other hand, about 42 percent and 45 percent were connected educational and informational communities in SNS respectively. It is very important to know whether the social networking site has any adverse effect on study time. From the table it is found that about 62 percent students mentioned that SNS affect their study time, on the contrary 38.5% percent students mentioned that SNS did not affect their study time.

Table1. Background information of the students of BSMRSTU:

Variable	No. of respondents	Percentage
Gender		
Male	110	55
Female	90	45
Having own earnings		
Yes	41	20.5
No	159	79.5
Average own monthly income		
No income	159	79.5
1000-3000	11	5.5
3000-4000	13	6.5
≥ 4000	17	8.5
Opinion about importance of internet use		
Yes	98	98
No	2	2
Average sleeping hours per day		
≤ 6	64	32
6-8	119	59.5
≥8	17	8.5
Average Study hours per day		
1-3	115	57.5
3-6	64	32
≥6	21	10.5
Average spend time on the internet		
1-3	109	54.5
3-6	58	29
≥6	17	8.5
Main purposes of using Social Network Site (SNS)		
Chatting / Roaming		
Study	65	32.5
Recreation	46	23
Downloading music / vedio	75	37.5
Others purposes	6	3
	8	4
Using SNS for study purpose		

No	10	5
Sometimes	110	55
Yes	80	40
Mostly doing on online (Multiple response)		
Blog	18	9
News	88	44.2
SNS	193	97
Internet	36	18.1
Others	55	27.6
Registered member in SNS (Multiple response)		
Facebook	196	98
Twitter	28	14
LinkedIn	25	12.5
Instagram	51	25.5
What's app	82	41
Others	45	22.5
Type of connected communities (Multiple response)		
Educational	120	61.5
Entertaining	82	42.1
Informational	87	44.6
Others	18	9.2
Average monthly cost for Internet use		
0-100	94	47
100-200	66	33
200-400	25	12.5
≥ 400	15	7.5
Opinion about internet use increase creativity		
Yes	182	91
No	18	9

4.2 Student's involvement with social network sites

Now a day Social Media become one of the most important medium through which students can easily cope up updated information and they have easy access to online universal education storehouse. Students could take advantages from social media as infinite source of gaining knowledge. There are advantages as well as disadvantages to social media. The use of social media to a certain extent is important for students. In one hand, social media is helping them to get information and renovated information in their studies, on the other hand addictive use of social media can lead him astray. To check the involvement of students with social network sites, we used 5-point Likert type scale SMA-SF (Sahin. C, 2018). This consists of 29 items within virtual tolerance, virtual communication, virtual problem and virtual information. The 29 items are measured against a 5 point Likert scale, 1 for "Strongly disagree" to 5 for "Strongly agree."

Table 2. Percentage distribution of respondents according to their involvement with social network site.

Variables to check the social media addiction level	Strongly disagree (%)	Disagree (%)	Neither agree nor disagree (%)	Agree (%)	Strongly agree (%)
Eager to go on Social media (SM)	6.5	22.5	26.0	28.5	11.5
See SM as an escape	6.5	22.5	17	45	9
Look for internet connectivity to go on SM	16.5	33	13	28.5	9
Going on SM first wake up in the morning	11	18.5	16.5	42	12
Without SM life is meaningless	25.5	27	16.5	23	8
Prefer to use SM even somebody around	19.5	39.0	18	20.5	3
Prefer friendship on SM to real life friendship	54	35	7	3	1
Express better on SM	41	35	8	11	5
Prefer to communicate via SM	19	31	19.5	24	6.5
Can't give up using SM even family frown upon	24.5	30.5	19	21.5	4.5
Spend time on SM when feel alone	6	9	7.5	58.5	19
SM activities lay hold on everyday life	10	18.5	10	45	16.5
Pass over homework because of spending time on SM	15.5	41	16	19.5	8
Feel unhappy when are not on social media	19	37	17.5	20	6.5
Being on SM be excited	3	13.5	28.5	42	13
SM always captivates you	6.5	19.5	17.5	48	8.5
Being on SM don't notice hungry & thirsty	25	35.5	10.5	19	10
Productivity has diminished due to SM	11	25.5	14.5	36.5	12
Have physical problems because of social media use	8.5	19.5	15	41.5	15.5
Like using SM to keep information	25	38.5	9.5	19.5	7.5
Surf on SM to keep informed about SM groups share	9.5	21.5	17	41.5	10.5
Staying on SM to keep course related information	2.5	10.5	11.5	55	20.5
Spend more time on SM to see announcements	6.5	22.5	17	45	9

From the table 2 it is found that about 24 percent students looking for internet connection to go on social media everywhere despite of connecting peoples of their surroundings. Sometimes respondents felt unhappy if internet connection was very poor. From the table it is found that 26% students can't give up using social media after prohibiting from parents or other family members. From the table it is noted that 26% students feel unhappy when they don't use social media and it's very harmful for them. That's a comforting thing that the percentage of disagree respondents (56%) are higher than the agreed. From the table it is found that total of 76 % students are disagree and strongly disagree that they felt happy on social media. About 71 percent students agreed and strongly agreed that they stayed on social media to kept course related information. About 57 percent students agreed that they faced physical problem due to used of SNS. About 56 % students disagreed and strongly disagreed that they passed over homework because of spending time on SM.

4.3 Student’s Social Networking Addiction Scale

The use of social media is essential in universities. University students are particularly attracted to social media. The positive effect of social media is that students can utilize them for study assistance and medium. Due to the ability of social media to enhance connections by making them easily reachable, social media can yield much assistance for the students, including supposing a virtual space for them to explore their interests or problems with similar individuals, academic support, while temper online communication skills and knowledge. Students who may be hesitating to communicate with teacher in class are participating in book discussion blogs and searches different course related topics on relevant sites. There are new Web tools emerging all the time that are enhancing knowledge.

From the table 3 it is found that about 24 percent students used SM to forget personal problems and 22 percent students spent lot of time thinking about SM. Young generation are addicted and they also share their personal information. About 67 percent students denied that using of social media has negative impact on Job / Studies.

Table 3. Percentage distribution of respondents according to Bergen Social Media Addiction Scale (BSMAS).

Variable to check the social media addiction	Very rarely (%)	Rarely (%)	Sometimes (%)	Often (%)	Very often (%)
Spent lot of time thinking about SM	27	36	14.5	19	3.5
Felt an urge to use SM more & more	20.5	20.5	34.5	16.5	8
Used SM to forget personal problems	24	25	27.5	17	6.5
Become restless if prohibited from using SM	38.5	22	26.5	8	5
Using social media has negative impact on Job / Studies	8.5	31.5	26.5	21.5	12
Tried to cut down on the use of social media without success.	41.5	17.5	25	9	7

To check the social media addiction level of the students we used Bergen Social Media Addiction Scale (BSMAS). The Bergen Social Media Addiction Scale is straightforward and short, with an accurate social media addiction assessment. The 6 items are measured against a 5 point Likert scale, 1 for “very rarely” to 5 for “very often.” All of the items in the scale are positive. The higher scores indicate that agent perceives himself as a “social media addict”. Then scores of each item are added to get the overall score of the BSMAS. The total score of BSMAS ranges from 6-30.

Table 4. Percentage distribution of respondents according to Bergen Social Media Addiction Scale’s (BSMAS) score.

Addiction Level	Frequency	Percent
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Lower addiction (Score: 6-12)	62	31.0
Moderate addiction (Score: 12-18)	93	46.5
Higher addiction (Score: 18-24)	34	17.0
Extremely higher addiction (Score: 24-30)	11	5.5
Total	200	100.0

From the table 4 it is found that about 47 percent students' have moderated addiction level and 31 percent students' addiction level is low. It is alarming that about 6 percent student's addiction is extremely higher.

4.3 Academic Performance of the respondents

Academic achievement or efficiency is the outcome of the instruction provided to the student in institution which is determined by the grades, marks secured by the students in the examination. Education is the most important weapon that brings change in society by removing orthodoxy and superstition and makes people wise and rational. Academic performance or achievement of a student's is very much influenced by numerous factors like Socio-economic status of the parents, residential locality of the students, gender, age, class room environment and many more.

Table 5. SSC result of the respondents

Gender of the Respondents and SSC GPA Cross tabulation				
Gender	SSC GPA			Total
	3.50-4.00	4.00-4.50	4.50-5.00	
Male	1 (0.9)	10(9.1)	99(90.0)	110
Female	3(3.3)	13(14.4)	74(82.2)	90
Total	4(2.0)	23(11.5)	173 (86.5)	200(100)

It is very important to build the initial academic performance better that's why we considered the SSC GPA performance indicator in our study. From the table 5, we see that most of the students (about 87%) GPA was between 4.50 and 5.00 of them 99 was males and 74 females.

Table 6. HSC result of the respondents

Gender of the Respondents and HSC GPA Cross tabulation				
Gender	HSC GPA			Total
	3.00- 4.00	4.00-4.50	4.50-5.00	
Male	12 (10.9)	34 (30.9)	64 (58.2)	110
Female	12 (13.3)	17 (18.9)	61 (67.8)	90
Total	24 (12.0)	51 (25.5)	125 (62.5)	200 (100)

In general sense we measure the quality of the students by their GPA. To create high academic carrier students should build an excellent academic performance. Table 6, represent the GPA wise academic performance of the respondents. From the table it was noted that majority of the students that is about 62.5% (125) student obtained GPA between 4.50 and 5.00 of them 64 males and 61 females.

For university students CGPA is an important factor that determines how qualified he/she in his/her academic performances. Table 7 it is found that about 16% students secured CGPA below 3.00 of them 18 are males and 14 are female and very few of the students about 5.5% students secured highest CGPA from 3.75 to 4.00 of them 6 are males and 5 are females.

Table 7. Current CGPA of the respondents

Gender	Gender of the Respondents and CGPA Cross tabulation					Total
	CGPA					
	<3.00	3.00-3.25	3.25-3.50	3.50-3.75	3.75-4.00	
Male	18 (16.4)	36 (32.7)	30 (27.3)	20 (18.2)	6 (5.5)	110
Female	14 (15.6)	21(23.3)	21(23.3)	29 (32.2)	5 (5.6)	90
Total	32 (16.0)	57 (28.5)	51 (25.5)	49 (24.5)	11 (5.5)	200 (100)

4.4 Test the equality of mean and variance of different academic variables between male and female students

We tested whether there have any significant difference between male and female student according to some selected academic and SNS related variables. The equality of mean values and variances of the variables predicted the difference between the two groups.



Table 8. Test of equality for mean and variance between male and female students.

That is, $H_0: \mu_1 = \mu_2$ and $H_0: \sigma_1^2 = \sigma_2^2$

Variables	Levene's Test for Equality of Variances				z-test for Equality of Means			
	Variance		F	p value	Mean		Z	p value
	Male	Female			Male	Female		
S.S.C result (GPA)	0.0703	0.1345	7.341	.007	4.82	4.75	1.573	.117
H.S.C result	0.1783	0.202	0.17	0.895	4.47	4.54	1.235	0.218
Current CGPA	0.114	0.096	0.025	0.875	3.23	3.31	1.764	0.080
Average sleeping hours	1.50	2.23	0.582	0.446	7.12	7.03	0.441	0.659
Study hours per day	5.68	5.56	0.105	0.747	3.65	3.76	0.300	0.765
Average spend time on the internet	5.92	12.31	5.175	0.024	4.09	4.39	0.707	0.480

Spend hours on SNS per day	3.21	10.09	7.827	0.006	2.80	3.13	0.923	0.007
SNS Addiction Score	25.33	17.26	4.460	0.036	15.74	14.16	2.387	0.018

It is showed from the 8 that the average GPA of SSC result for male student is 4.82 which is very close to female students which is 4.75 and there is a no statistically significant difference in SSC result between male and female students, ($z = 1.573, p = 0.117$). The Levene's test for equality of variance revealed a statistically reliable difference in SSC result between male and female students ($p = 0.007$). We also found a statistically significant difference in the variance of the average spend time on the internet; spend hours on SNS per day and SNS addiction score between male and female students. We got a statistically significant difference in the average spent time on SNS and SNS addiction score between male and female students.

We asked various questions from students to know the effect of social network addiction on their academic performance, schedule, and overall impact on studies. Also, we asked if they found social media of any help regarding academics and curricular activities.

The students who used SNS, among them about 37.5 percent mentioned that their main purpose of using SNS is study. A majority (95%) agreed that social networking sites be helpful regarding academics as they provide information and data regarding different topics. About 91 percent mentioned that SNS increased their creativity as it keep them updated, and through online learning and teaching practices provide greater scope.

However, 48.5% of students agreed on the fact that excessive and purposeless use of social networks has negatively affected the study schedule and time table by decreasing the net time for studies. More time spent on social networking sites affects the study timings in a negative sense, thus affecting the study outcome and academic performance. So overall, 33.5% of students agreed upon the fact that social networking addiction harms studies as it decreases the net time of studies and also, produces poor results.

4.5 Test of association between addictive use of SNS and academic efficiency of the respondents

It is necessary to find whether social network site use make deterioration in academic performance. The table represents the P value, Pearson χ^2 values for bivariate analysis in the study. The test of association showed that there are a strong significant association between the dependent variable eager to go on SM and independent variables SNS affect study time, Looking for internet connectivity everywhere to go on SM, Feeling unhappy when don't go on SM, being on SM excites, like using SM to keep information, felt an urge to use SM more and more, become restless if have been prohibited on SM etc.

Table 9. Test of association between addictive use of SNS and academic efficiency

Variables and their Categories	Pearson χ^2	P value
SNS affect study time		
Yes	4.377	0.036
No		
Looking for internet connectivity		
Disagree	11.462	0.001
Agree		
Express better on SM		
Disagree	5.343	0.021
Agree		
Can't give up using SM even family frown upon		
Disagree	3.519	0.071
Agree		
Feel unhappy when are not on social media		
Disagree	4.330	0.037
Agree		
Being on SM be excited		
Disagree	11.249	0.001
Agree		
Like using SM to keep information		
Disagree	5.879	0.015
Agree		
Felt an urge to use SM more & more		
Disagree	15.855	0.000
Agree		
Become restless if prohibited from using SM		
Rarely	13.115	0.000
Often		
Update your present situation on SNS		
Rarely	10.904	0.000
Often		

Bivariate analysis suggested that a considerable relationship between the dependent variable eager to go on SM and independent variables that shows the symptoms of psychiatric disorders and we observed that the calculated value of the chi-square and the p value at the chosen level of significance.

Therefore, we may conclude that there is association between eager to go on SM and SNS affect study time because the p value is less than the level of significance under consideration. Looking for internet connectivity everywhere to go on SM, feeling unhappy when don't go on SM are very important variable significantly impact on this dichotomous dependent variable. In bivariate analysis the other variable express better on SM, even family frown upon but can't give up using SM, feel unhappy when not on SM, being on SM excites, like using SM to keep information, felt an urge to use SM more and more, become restless if have been prohibited on

SM, update present situation on SNS to be influential impact of addictive use of social media because having large chi-square standards and $p < .05$ for every case.

A chi-square test for independence with $\alpha = 0.05$ is used to assess whether the looking for internet connectivity is related to addictive use of social media .The chi-square test was statistically significant, $\chi^2(1, N = 200) = 11.462, P < 0.05$, with Phi (ϕ) coefficient of .239, indicating a small to medium relationship. Express better on SM is also related to addictive use of SM. The chi-square test was statistically significant, $\chi^2(1, N = 200) = 5.343, P < 0.05$,with Phi (ϕ) coefficient of .163, indicating a small to medium relationship.. In this analysis the other variables feel unhappy when not on SM, being on SM excites, like using SM to keep information, felt an urge to use SM more and more, become restless if have been prohibited on SM, update present situation on SNS to be influential impact of addictive use of social media because having large chi-square standards and $p < .05$, with Phi (ϕ) coefficient of .147, .237, .171, .282 etc respectively, indicating a small to medium relationship.

4.6 Factors that showed addictive use of social media and make effect on academic performance

Social networking addiction refers to the mental preoccupation with using social media and allocating time to social media in such a way that it affects an individual's other social activities, such as work and professional activities. In identifying explanatory variables for insertion in the binary logistic regression 7 variables were considered, namely SNS affect study time, looking for internet connectivity everywhere to go on SM, even family frown upon but can't give up using SM, feel unhappy when don't go on SM, being on SM excites, like using SM to keep information and felt an urge to use SM more and more. These variables were initially tested via chi-square test with binary categorized **eager to go on SM as the dependent variable**. Only those showing significance were integrated in the logistic model.

Table 4.5.1: Factors that showed addictive use of social media and make effect on academic performance (Binary Logistic Regression Analysis)

Factors	Coefficient	Std. Error	Wald	Odd Ratio	P value
SNS affect study time	0.759	0.370	2.636	2.137	0.040*
Looking for internet connectivity	1.033	0.373	7.749	2.809	0.006*
Can't give up using SM even family frown upon	-1.074	0.409	7.388	0.342	0.009*
Feel unhappy when are not on social media	0.813	0.399	4.271	2.254	0.042*

Being on SM be excited	1.295	0.483	5.481	3.652	0.007*
Like using SM to keep information	0.818	0.384	3.871	2.266	0.033*
Felt an urge to use SM more & more	1.046	0.379	7.316	2.845	0.006*
Constant	2.418	0.457	28.011	11.225	0.000*

Binary logistic regression is performed to assess the impact of several factors on the likelihood that respondents would report that students have addicted on using SM .The model contains seven independent variables (SNS affect study time, Looking for internet connectivity, Can't give up using SM, Feel unhappy when don't go on SM, being on SM excites, like using SM to keep information, felt an urge to use SM more and more). The full model containing all predictors is statistically significant we see from result $\chi^2(12, N = 200) = 51.530, P < .001$, indicating that the model is able to distinguish between respondents who are addicted on SM or not .This model also shows that which variable represent the symptoms of psychiatric disorders. The model as a whole explained between 22.9% (Cox and Snell R square) and 31.7% (Nagelkerke R square) of the variance in psychiatric disorders status and correctly classified 76.3% of cases. We also see the Hosmer and Lemeshow test result, $\chi^2(8, N = 200) = 14.584, P > .05$, Here p value is greater than 0.05 indicated good fit of the model and this model is correctly better predicted model.

On the average, the predictor SNS affected study reporting addictive use of SM and symptoms of psychiatric disorders, recording an odds ratio of 2.137.This indicated that respondents who think SNS affected study time having the odds ratio 2.137 more likely to report addiction problem than those who don't think SNS affected study .

The addictive use of Social media and symptoms of psychiatric disorders of respondents who are looking internet connectivity to go SM having odds ratio 2.809 higher than those respondents who aren't interested to look internet connection and the effect is significant at 5% level of significance (p-value = 0.006).

The predictor feel unhappy when are not on social media are reporting addictive use of SM and symptoms of psychiatric disorders, recording an odds ratio of 2.254. This indicated that respondents who feel unhappy having the odds ratio 2.254 more likely to report addiction problem than those who don't feel unhappy.

Felt an urge to use SM more & more have great impact in addictive use of Social media.So from table the factor having odds ratio 2.845 higher than those who don't felt urge.

5. CONCLUSION

In the modern age, we are in the stage of fast development in all aspects of life but we are becoming unfit psychologically day by day probably because of addiction on SNS, Internet etc. As a result of this study, a relation has been found to exist for social media addiction and symptoms of psychiatric disorders. In addition, a significant difference has also been detected for social media addiction according to demographic criteria such as number of followers on social media. Since social networking deeply affects the daily lives of students, it reveals the necessity of a measurement tool to determine social media addiction. The aim of this study was to develop a relationship between “social media addiction” and academic performance. As a result of a survey at Bangabandhu Sheikh Mujibur Rahman Science and Technology University (BSMRSTU), Gopalganj, it was observed that social media is widely used among students aged 18-24 years. It turns out that the increasing expansion of social networks has provided opportunities and unique conditions for the growth and improvement of students' academic status, but they should be used sensitively and properly managed, because the attractiveness of various social networks can lead to addiction and have a negative impact on academic performance. The etiology of social media addiction is complicated and consists of biological, psychological etc. factors.

It is very important to concern about use of Internet, SNS, Facebook etc. Because most of the addiction is associated with those factors that shows symptoms of psychiatric disorders. In bivariate analysis we observed the association between different independent variables and the dependent variable. In the binary logistic regression we observed the odds ratio. By the odds ratio is a statistic and this statistic attempts to quantify the strength of the association between two variable. From the binary logistic regression analysis, I considered seven variables, SNS affect study time, Looking for internet connectivity, Can't give up using SM, Feel unhappy when don't go on SM, being on SM excites, like using SM to keep information, felt an urge to use SM more and more. The odds ratio who are looking internet connectivity to go SM having odds ratio 2.809 higher than those respondents who aren't interested to look internet connection. Here the Binary Logistic Regression shows significant result of SNS affect study time, Looking for internet connectivity, Can't give up using SM, Feel unhappy when don't go on SM, being on SM excites, like using SM to keep information, felt an urge to use SM more and more.

Now a days SNS, Social media gives us update news that's are helpful for people. Students also get educational information. But people are not aware that how much time they spend on SNS. In fact people look internet everywhere, feel unhappy when are not on SM, prefer SM even there are somebody around them and also use SNS when feel alone that's why they are depressed and stress.

Creating awareness in those students and adolescents whose personalities are still in a stage of development is especially important. Before recommending any inhibiting interventions, social media addiction needs to be accepted as an issue of concern by authorities and users. Social media users should assess whether their behaviors are excessive or addictive. Several interventions exist that can be recommended after assessment. They may choose to cope with their addictive usage with self-help interventions such as preventing apps, relaxation techniques, and more. pharmacological methods are also applicable for intervening in their behaviors.

An intervention program effectively reduced social media addiction and improved students' mental health and learning efficiency. This has important practical implications by showing that social media addiction can be mitigated through cognitive reconstruction and the supporting techniques.

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