

**THE PREVALENCE OF SOCIAL MEDIA ADDICTION AND ITS
RELATIONSHIP WITH DEPRESSION, ANXIETY AND STRESS AMONG
YOUTH: NORTH-EAST INDIA PERSPECTIVE**

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ABSTRACT

Social media usage is associated with psychological variables almost in every population. The present study aimed to investigate the extent of social media addiction among college going youth and to assess the relationship between social media addiction, depression, anxiety and stress. The present study was a cross-sectional survey design conducted among college going youth. Purposive sampling technique was used to select the students from different colleges of Guwahati, Assam. Four hundred students were randomly selected from the different colleges using simple random sampling technique as per inclusion and exclusion criteria. Semi- Structured tool, Bergen's Social Media Addiction and Depression, Anxiety and Stress (DASS) were administered. The study revealed 14.0 percent prevalence of social media addiction among college youth. Depression ($r=.205, p=0.01$), anxiety ($r=.181, p=0.01$) and stress ($r=.195, p=0.01$) has a significant positive correlation with social media addiction. In the overall score it also indicated that Bergen's Social Media Addiction Scale was positively correlated with the total score of DASS ($r=.218, p=0.01$). There is a need to explore interventions to deal with social media addiction among the college going population.

Key words: social media addiction, depression, anxiety, stress, youth

INTRODUCTION

Social media usage in the present scenario is found to be controlling the modern minds. The computer-mediated technologies facilitate creativity, sharing of ideas, information and many

other forms of expression via virtual communities and networks. With advent of internet people started using Social networking sites (SNSs). Social networking sites (SNSs) used to create public profiles to interact with friends and also meet people based on shared interests of each other (Kuss & Griffiths, 2011). With easy access to the internet and mobile phone technology, social networking seems to a phenomenon of unprecedented proportions and is expanding the concept of a social network. In terms of the inhabitants the virtual forest of social media is unstoppable. According to the Global Digital Report (goodfirms.co/resources/social-media-usage-trends-research) from 'We Are Social', the figures of active social media users have reached 3.196 billion which is 42% of the total population of the world. This shows an increase by 13% as compared to the previous year. It also shows that 2.958 billion that are 39 % of the total population access social media through mobile devices. The social media statistics in India is 2019 (goodfirms.co/resources/social-media-usage-trends-research) shows Facebook as the most popular social networking site in India with a highest percentage of 88.51% followed by printest with 4.11%, Youtube users are 2.98%, Instagram is followed by 2.55%, Twitter leads with 1.55% and less of 0.14% in linkden. The effect of the internet and the study of modern sociology have changed the backdrop of social networking from face to face to online networks. The introduction and increased use of online social networking sites (SNSs) such as Facebook, Twitter, WhatsApp, Hike, Orkut, Tumblr, etc., have become a global phenomenon of the last decade and have revolutionized the way of communication. More than the older generations the social networking sites are embraced by the adolescents and young adults to connect with their peers, share information, reinvent their personality, and showcase their social lives. More exposure and usage of the social networking sites are more prone to develop addictive behaviors to SNS, as they are habitually alert to what happens in these virtual environments. Stress, anxiety and depression among medical undergraduate students and their socio-demographic correlates found the prevalence as 51.3%, 33.1%, and 53.0% in a study conducted by Iqbal, Gupta & Venkatarao (2015). Buyukyilmaz and Aydoganand (2017) reveal that frequent social media usage increases students' anxiety levels. At the same time study determines that levels of anxiety vary by social network type.

Many studies in India reveal that social media addiction group had higher general mental health problems whereas the severely addicted group was at high risk of abnormal mental health (Shettar et al., 2017). Ali et al. (2019) also found that depression, anxiety and stress were significantly higher in the potential internet addiction group than the non-addicted group. Social media addiction can inflict a lot of damage on psyche and mental health issues such as depression, anxiety, social interaction problems and much more which can lead to long-term effects on confidence as well as on personality as revealed by Masthi et al. (2018).

Despite the increasing significance of the social media as well as the rising number of problems resulting from its usage, there have been limited studies on the nature of social media use and its consequences in north-east India. There is a scarcity of information regarding the prevalence of social media addiction and its relationships with depression, anxiety, and stress among college going youth. Hence, it is important to study the effect of social media addiction among the college going youth in northeast India as this could provide valuable insights into the nature of social media usage among them and the relationship with their mental health. The present study aims to assess the prevalence of social media addiction and to see its relationship with depression, anxiety and stress among higher secondary school students.

MATERIALS AND METHODS

Study sites and population

The present study was a cross-sectional survey conducted among college going youths; six colleges were selected using purposive sampling technique from Guwahati, Assam. Out of the total student population, a total of 400 respondents were included in the current study using the sample calculator at 95% confidence level and class interval of 4. The sample size calculator is presented as a public service of Creative Research system (Creative Research System, 2012). Students those who were using the social networking sites were included in the study.

Respondents were explained about study and written informed consent was obtained before administrating tools. For ethical consideration confidentiality was assured and informed consent was taken.

Tools:

Semi-Structured Interview Schedule

The semi structured interview schedule was developed for the present study to assess different variables such as the gender, age, educational status, etc of the respondents. Duration of internet usage, different social networking sites used by the respondents, time spent over social media, the purpose of its usage etc were seen through the semi-structured tool.

Bergen Social Media Addiction Scale (BSMAS):

The Bergen Social Media Addiction Scale (BSMAS) is an adaptation of the Bergen Face book Addiction Scale (BSAS) developed by Anderson Fagan, Woodnutt and Chamorro-Premuzic (2012) and contains six items reflecting core addiction elements as given by Kuss and Griffiths (2011). Each item is answered on a 5-point Likert scale ranging from very rarely (1) to very often (5); thus, yielding a composite score from 6 to 30, concerning experiences during the past year (e.g., “How often during the last year have you tried to cut down on the use of social media without success?”). In the present study the respondents who responded “often” or “very often” in four or more of the six items were included in the category of Social Media addiction group.

Depression Anxiety Stress Scale- DASS 21 (Lovibond & Lovibond, 1995): DASS is a 21 item self-report questionnaire designed to measure the severity of a range of symptoms common to both Depression and Anxiety. In completing the Depression, Anxiety Stress Scale (DASS 21), the individual is required to indicate the presence if a symptom over the previous week. Each item is scored from 0 (did not apply to me at all over the last week) to 3 (applied to me very much or most of the time over the past week). The essential function of DASS is to assess the severity of the core symptoms of depression, anxiety and stress.

Statistical Analysis:

Data were analyzed using SPSS version 20. Descriptive statistics like frequency, the percentage was used to assess the socio-demographic data, social media addiction, depression, anxiety, and

stress. Correlation between social media addiction and depression, anxiety, and stress was described using Pearson correlation by keeping p-value of less than 0.05 as significant.

RESULTS AND DISCUSSION:

A total of 400 colleges going youth were selected for the study among which majority 70 percent were female and 29.5 percent were males. The mean age of the respondents was found to be 19.75 (table 1). Out of 400 respondents 32.8 percent were found to spend 1 to 2 hours, 27.0 percent spent more than 3 hours, 23.5 percent spent around 2-3 hours and only 16.8 percent were found to spent less than 1 hour over the use of social media (table 2).

Table 3 indicates that 90.8 percent participants were found the users of WhatsApp, followed by 76.0 percent YouTube users, 62.5 percent preferred using Facebook. Instagram was used by 55.8 percent i.e. almost half of the participants. Google plus users were found to 29.8 in percent. Few of the participants preferred using Hike, Twitter and Skype (16.5%, 11.3% and 4.8% respectively).

Table 4 highlights the various purposes for usage of internet and social media. Findings indicate that almost all the participants makes use of internet for social networking such as Facebook, Instagram, WhatsApp, twitter, etc. 72.5 percent uses for online shopping, 72.5 percent uses for surfing various information, 64.3 percent for finding worldwide news, 76% made the use for downloading movies, music, etc. It also highlights that 73.3% of the total population used internet for going through pornography sites. A less percent only of 27 made the internet use for distance education.

Table 5 signifies social media addiction among the participants in the study. It shows that majority of the participants 342 (85.5%) were found to be non addict to social media where as rest 58 (14.5%) were found to be addicted to social media based on Bergen social media addiction scale. In the current study the prevalence of social media addiction was found to be 14.5 percent.

Table 6 shows that in the domain of depression 41.8 percent reported with extremely severe level of depression followed by 21.0 percent with mild depression level. In the study 13.3 percent of them had severe depression while 12.3 percent were reported to normal and 11.8 percent had moderate level of depression. In the domain of anxiety, the finding indicates that 67.5 percent had severe anxiety level and 9.3 percent had severe anxiety. Rest 10.8 percent had mild anxiety level and 7.5 had moderate anxiety. In the domain of stress 30.8 percent reported to have extremely severe level of stress followed by those who had severe level of stress that consisted of 24.0 percent while 15.3 percent had moderate stress level. It was also found that 15.0 percent had mild stress and 15.0 percent were found with normal stress. The table 7 signifies that there were significant positive correlation between the social media addiction with depression ($r=.205$, $p=0.01$), anxiety ($r=.181$, $p=0.01$) and stress ($r=.195$, $p=0.01$). In the overall score it also indicated that Bergen's Social Media Addiction Scale was positively correlated with the total score of DASS ($r=.218$, $p=0.01$).

Youth are accustomed to the use of social media for social networking, making social contacts, online shopping, downloading videos, movies etc. The more time they spent over the use of social media its consequences are coming to be negative. This study based on college going youth revealed that 14 percent of the population out of the total sample is prone to social media addiction. Similar studies conducted on social media by Masthi et al. (2018) to assess the mental health status of undergraduates showed prevalence of addiction among 36.0 percent of the users. The findings by Raj, Bhattacharjee and Mukherjee, (2018) showed 70.7 percent prevalence of social media addiction among the age group of seventeen and above. A study conducted on adolescents in Tezpur, Assam by Ali et al. (2019) among the adolescents found that 34.0 percent were severely addicted to internet and its usage. The findings of the present study reveal that as compared to other Indian studies the prevalence is low The study involves more girl respondents than boys may be for this the prevalence is found to be low in this study.

The result of the present study shows a positive association between social media addiction, depression, anxiety and stress. There were significant positive correlation between the social media addiction with depression ($r=.205$, $p=0.01$), anxiety ($r=.181$, $p=0.01$) and stress ($r=.195$, $p=0.01$). In the overall score it also indicated that Bergen's Social Media Addiction Scale was

positively correlated with the total score of DASS ($r=.218, p=0.01$). A Croatian study by Pantic et al. (2012) on association between online social networking and depression in high school students found that time spent on Facebook by high school students was positively correlated with depression. This study comes in accordance to the results of the present study. More intense Face book use predicted increased loneliness in students as stated by Lou et al. (2012). Similarly, a study by Labrague (2014) using the DASS among students identified that time spent online correlated significantly with depression. Labrague's study (2014) using the DASS among students identified that time spent online correlated significantly with anxiety. Similar results were found by in a study of adolescent social media use and mental health from adolescent and parent perspectives and it signified positive correlation between use of social media and anxiety by Barry et al. (2017). Similarly, findings in the study of the effect of social media usage on students' stress and anxiety by Aydogan and Buyukyilmaz (2017) reveals that frequent social media usage increases students anxiety levels. At the same time study determines that levels of anxiety vary by social network type. A study by Kumar and Akoijam (2018) on Depression, Anxiety and Stress among higher Secondary School Students of Imphal, Manipur reveals the presence of higher level of stress among the participants due to assess to social media. This study comes in accordance with the results of present study. The approach of the present research was on quantitative basis therefore it was limited within quantifying attitudes, opinions of students with limited outcome and thus fails to get an insight of the problem which can be solved through using qualitative method. The research was based on purposive sampling to select the colleges as well as the students therefore nothing can be generalized with confidence as the sample remain no longer representative of the population. The present research shows that social media addiction is present among the chosen population who are the college going youth. It also highlights that social media usage has a positive relation with depression, anxiety and stress. To deal with the social media addiction among the youth there is a need to explore the interventions strategies.

Table 1: Sex of the participants

Sex	Frequency (N=400)	Percentage (%)
Male	118	29.5
Female	282	70.5

Table 2: Time spent in usage of Social media by participants

Time (hours)	Frequency (N)	Percentage (%)
Less Than 1 hour	67	16.8
1-2 hours	131	32.8
2-3 hours	94	23.5
More than 3 hours	108	27.0

Table 3: Social media sites that are used daily by the participants

Social media sites	Frequency (N)	Percentage (%)
Face book	250	62.5
Instagram	223	55.8
Twitter	45	11.3
WhatsApp	363	90.8
Linkedin	15	3.8
Hike	66	16.5
YouTube	304	76.0
Googleplus	119	29.8
Skype	19	4.8

Table 4: Main Purpose of using social media

Purpose		Frequency (N=400)	Percentage (%)
Social networking (Facebook, Twitter, Instagram, WhatsApp, etc.)	Yes	400	100
	No	0	0
Online shopping	Yes	295	73.8
	No	105	26.3
Information surfing	Yes	290	72.5
	No	108	27.0
Worldwide news	Yes	257	64.3
	No	143	35.8
Downloading movies/music	Yes	304	76.0
	No	96	24.0
Playing web game	Yes	139	34.8
	No	261	65.3
Watching videos/ songs on YouTube	Yes	293	73.3
	No	107	26.8
Pornography	Yes	293	73.3
	No	107	26.8
Distance education	Yes	108	27.0
	No	292	73.0

Table: 5. Prevalence of social media addiction among the college going youth

Social media addiction	Frequency (N)	Percentage (%)
Addicted	58	14.5
Non-addicted	342	85.5

Table 6: Prevalence of psychological distress (depression, anxiety and stress) among college youth

	Depression		Anxiety		Stress	
	Frequency (N)	Percentage (%)	Frequency (N)	Percentage (%)	Frequency (N)	Percentage (%)
Normal	49	12.3	20	5.0	60	15.0
Mild	84	21.0	43	10.8	60	15.0
Moderate	47	11.8	30	7.5	61	15.3
Severe	53	13.3	37	9.3	96	24.0
Extremely severe	167	41.8	270	67.5	123	30.8

Table 7: Correlation (Pearson) between social media addiction and psychological distress (depression, anxiety, stress)

Variables	Total Score of BSMAS
Depression	.205**
Anxiety	.181**
Stress	.195**
Total score of DASS	.218**

** . Correlation is significant at the 0.01 level

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