



ORIGINAL RESEARCH PAPER

Psychiatry

SOCIAL MEDIA SITES ADDICTION AND BEHAVIOUR PROBLEMS ASSOCIATED WITH IT IN YOUNG ADULTS: A STUDY FROM NORTH INDIA

KEY WORDS: Social media sites, Young's internet addiction scale, Facebook addiction. No financial aid was taken from any agency. There is no conflict of interests.

Dr. Parth Singh Meena

Assistant Professor, JLN Medical College, Ajmer

Dr Anubhuti Sharma*

Resident, JLN Medical College, Ajmer* Corresponding Author

Dr Ruchi Soni

Assistant Professor, Government Medical College, Bhopal

BACKGROUND

Our world and life is changing drastically day by day due to development of science and technology, one of its miracle is social media. The easy availability of social media sites is raising the need for focusing on its overuse in young adults and its consequences as mental health problems.

AIM

The aim of the study was to explore the prevalence of social media sites addiction and behaviour problems associated with it in young adults.

METHODS

A cross-sectional study was done on 200 medical students at Jawahar Lal Nehru Medical College-Ajmer after taking approval and permission from Institutional Ethics Committee and the concerned authorities. Assessment was done using a semi-structured proforma and Young's internet addiction test modified for social networking sites (YIAS) which was administered by the students themselves after explaining instructions, to find out social media dependency. Depression Anxiety Stress scale-21(DASS-21) was applied to study associated behaviour problems in students, simultaneously general health questioner (GHQ-12) was used to assess their current status.

RESULTS

Out of 197 participants who attempted the whole questionnaires 42.13% (n=83) were affected mildly, (n=108) 54.82% moderately and (n=6) 3.05% were severely addicted to Social media sites as estimated by YIAS. Students who were using Social media site excessively had high scores on DASS-21 in terms of depression, anxiety and stress scores.

CONCLUSION

In present era vogue use of social media is making youths to spend large time on Social media sites hence leading to addiction liability. The study tells that youths are not only addicted to social media sites but are also suffering from behaviour problems because of excessive use of social media.

ABSTRACT

INTRODUCTION

Our world and life is changing drastically day by day due to the development of science and technology. In the present era it is very difficult to avoid the technology and one of its common example is Social media.

"Social Networking Sites are virtual communities where users can create individual public profiles, Interact with real-life friends and meet other people based on shared interests". SNSs are "web-based services that allow individuals to: (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system" (I). In the last few decade SNSs have recorded phenomenal growth rates not only in India but also worldwide, recent trends indicate that in 2009, an average online social-network user spent more than 5^h per month on social networking sites, which was triple the time spent on other online activities. From April 2008 to April 2009, the total minutes spent on Facebook in U.S., in particular, has increased from 1.7 billion minutes to 13.9 billion minutes (700% annual growth) (II). These statistics alone indicates the exponential rise of SNSs and also suggests a reason for risk of SNSs addiction.

In the first decade of 21st century, mental health care professionals began to recognize problematic use of SNSs as psychological disorder all over the world. Young adults are unaware of how much time they really spent on SNSs and their negative correlates such as decline in academic performance, decrease in real life social community participation as well as relationship problems. Each of these may be indicative of potential addiction. It is now justified to label SNSs addiction as behavioural addiction because addiction criteria, such as neglect of personal life, mental preoccupation, escapism, mood modifying experiences, tolerance, and concealing the addictive behaviour appear to be present in

some people who use SNSs excessively (III).

Therefore, it was very useful to study the concept of the pattern of technological dependency of Social media usage in young adults and its consequences on their mental health. That's why, we did this study to have a close look on the issue.

METHODS

A cross-sectional study was done at Jawahar Lal Nehru Medical College, Ajmer during June -July 2018. The sample for study consisted of 200 medical students aged between 21-25 years; the participants were choosed using simple random sampling technique among all medical students who were using the internet for last one year. We considered that medical students of above mentioned age group represent college going young adults so we considered them as a representative sample. Semi-structured proforma along with the scales were distributed randomly in classes of all academic years and instructions were given.

The study was done after taking approval from the Institutional Review Board and permission was obtained from the concerned college authorities. Of the total 200 students, 3 could not be included in the study as they did not attempt all the questioners. Therefore, a total of 197 students were finally included in the study.

Tools

The tools used in the study were as follows:

1. Semi-structured proforma containing details of demographics, purpose of using Social media, place of access and average duration of use per day.
2. Young's internet addiction test modified for SNSs is a 20-item 5-point likert scale that measures the severity of self-reported compulsive use of the social networking sites on internet.

Total SNSs addiction scores are calculated, with possible scores for the sum of 20 items ranging from 20 to 100. The scale showed very good internal consistency, with an alpha coefficient of 0.93 in the present study. According to Young's criteria, total YIAS scores 20-39 represent average users with complete control of their SNSs use, scores 40-69 represent over-users with frequent problems caused by their SNSs use, and scores 70-100 represent SNSs addicts with significant problems caused by their SNSs use (IV).

3. DASS 21 is a 21 item self-report questionnaire designed to assess the severity of core symptoms of Depression, Anxiety and Stress. It is rated on a four-point likert scale, 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 sum of relevant 7 items multiplied by 2 for each scale constitutes the participants' scores for each of Depression, Anxiety and Stress. The reliability scores of the scales in terms of Cranach's alpha scores rate the Depression scale at 0.91, Anxiety scale at 0.84 and Stress scale at 0.90 in the normative sample (V).

The General Health Questionnaire (GHQ) 12 item version was applied for screening of possible presence of psychological distress among participants. It has good internal consistency in terms of Cranach's alpha scores of .82 to .86 (VI).

Fisher's exact test for significance, unpaired t-test and Pearson's correlation coefficient were used to analyse the data.

RESULTS

In the study, out of 200 students to whom the questionnaire was distributed 197 students completed and returned to the investigators. Thus, a total of 197 students were finally included in the study, of which 122 (61.9%) participants were male and 75(38%) were females. Mean age of participants was 21 years (SD= 1.4).

Using YIAS, the users were divided into groups: It was found that

Table 1 Social networking site addiction severity based on YIAS scores

| Total (%) | Sex | Mild n (%) | P value | Moderate n(%) | P value | Severe n (%) | P value | Mean YIAS score | SD | T value | P |
|------------|-----|------------|---------|---------------|---------|--------------|---------|-----------------|------|---------|-----|
| 122(61.9%) | M | 54(44.2%) | P= .65 | 63(50.8%) | P= .23 | 6(4.91%) | P= .08 | 51 | 17.2 | 1.4 | .16 |
| 75(38%) | F | 30(38.6%) | | 45(60%) | | 0 | | 54.3 | 15.4 | | |

n(%)=percentage of total, M-male, F-female

*No significant difference between YIAS scores modified for SNSs of male and female students. (Using Fisher's exact test)

*No significant difference was found between mean male and female scores [p=.16]

Table 2 Depression, anxiety and stress among students based on DASS sub scores

| DASS | Sex | N n(%) | P value | Mild | p value | Moderate | p value | Severe | p value | V severe | p value | mean DASS | SD | T value | P value |
|----------|-----|------------|---------|------------|---------|------------|---------|------------|---------|----------|---------|-----------|-----|---------|---------|
| DASS (D) | M | 8 (6.5%) | P=.003 | 29 (23.7%) | P=.24 | 58 (47.5%) | P=.24 | 27 (22.1%) | P=.01 | 0 | P=1 | 15.3 | 5.2 | 3.5 | .0004 |
| | F | 16 (21.3%) | | 24 (32%) | | 29 (38%) | | 6 (8%) | | 0 | | 12.8 | 5 | | |
| DASS (A) | M | 6 (4.91%) | P=.0007 | 29 (23.8%) | P=.47 | 52 (42.6%) | P=.65 | 29 (23.8%) | P=.21 | 6(4.9%) | P=1 | 18 | 4.1 | 2.6 | .01 |
| | F | 16 (21.3%) | | 14 (18.7%) | | 29 (38.6%) | | 12 (16%) | | 4(5.3%) | | 16.4 | 3.8 | | |
| DASS (S) | M | 21 (17.2%) | P=.5 | 50 (41%) | P=1 | 37 (30.3%) | P=.28 | 14 (11.8%) | P=.0011 | 0 | P=1 | 13 | 4.5 | 2.3 | .02 |
| | F | 16 (21.3%) | | 31 (41.3%) | | 28 (37.3%) | | 0 | | 0 | | 11.4 | 4.2 | | |

n(%)=percentage of total ,M-male, F-female, Mod-moderate, n(%)=percentage of total

42.1% (n=83) of all participants (44.2% males & 38.6% females) were average users (scores 20-49). 54.8% (n=108) of the participants (50.8% males and 60% females) were over users (Scores 50-79). 4.9% (n=6) of study participants were addicts (scores 80-100). No Significant usage differences were evident based on the gender of users in all 3 groups (p=.6, p=.2 and p=.08 respectively).

GHQ scores depicts 23.8% (n=47) of participants (20.5% males & 29.3% females) were having evidences of distress (scores > 15) while 6.5% (n=8) of participants (6.5% males) were having severe psychological distress (scores > 20) and difference between male and female participants were significant (p=0.02) suggesting that male participants were having more psychological distress.

On analysing depression sub-scores of DASS-21 we found that 26.9% (n=53) of participants were having mild depression while 21.8% (n=87) and 8.1% (n=32) of participants has moderate and severe depression respectively. Mean depression sub scores of male participants were significantly higher than that of females (t=3.5, p=0.0004). Anxiety sub scores of DASS-21 indicates 21.8% (n=43) participants has mild anxiety while 41.1% (n=81), 20.2% (n=41) and 5 % (n=10) fall into moderate, severe and v severe anxiety respectively. Mean anxiety sub scores of male participants were significantly higher (t=2.5, p=.01). Stress sub scores of DASS-21 indicates 41.1 % (n=81) participants has mild stress while 32.9 % (n=65) & 7.1 % (n=14) has moderate and severe stress respectively. Mean stress sub scores of male participants were significantly higher (t=2.22, p=.02).

Pearson's correlation coefficient was applied to find out correlation between YIAS scores and scores of GHQ and DASS sub scores. A strong correlation was found between the mean YIAS scores and GHQ scores (r=0.56) and between the YIAS scores and DASS depression sub score (r=0.51), while very strong correlation was found between YIAS scores and DASS anxiety and stress sub scores (r=0.69, r=0.74 respectively).

*Mean DASS(S) score of male participants is significantly higher (p=0.02).

DISCUSSION

Only few studies have been done among young adults in context to Social media addiction. This study is a initial step for exploring the level of Social media addiction among college going students in India.

In previous study conducted by Machold C et al on social networking patterns/hazards among Irish teenagers (VII), the findings of this study is comparable with our study concerning Social media overuse and its risk addiction risk which have significant problems, which are going largely unaddressed. Another study conducted by Parth Singh Meena et al found out that a large number of school going teenagers are using the Social media excessively to the extent of being considered as 'problematic use. The problem was more common and significant

in boys as compared to girls (VIII) which is similar to results from our study although the difference in our study was not statistically significant ($p=.16$). In 2014 a study by Pantic LC et al investigated association between online social networking and depression in high school students. Statistically significant positive correlation was found between BDI-II score and the time spent on social networking (IX). Findings of our study corroborates with this study stating that participants who were addicted (4.9%) to Social media are facing statistically significant behaviour problems (depression, anxiety and stress) due to their excessive Social media usage. Jelenchick LA et al calculated the association between social networking site use and depression in older adolescent's and found no evidence supporting a relationship between Social media use and clinical depression (X) which is contradictory to findings in our study where we found statistically significant correlation between participants with excessive Social media usage and depression ($r=.51$).

Our results delineates huge psychological distress prevailing among medical students although these results could not be directly attributed to over usage of SNSs but our study managed to correlate SNSs addiction with psychological distress as indicated by positive Pearson co-relational coefficient.

CONCLUSIONS

With increasing use of Social media, the advantages are there but simultaneously we have to determine between its use and overuse from addiction and stay conscious about its leading psychopathology.

LIMITATIONS

Social media addiction is a large problem with high prevalence so a sample of 200 cannot be generalized directly to whole of young adult's population. Another limitation to our study is that due to hectic medical studies and curriculum psychological distress is expected to be more among medical students so it cannot be attributed to excessive use of Social media.

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