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SOCIAL MEDIA ADDICTION AMONG GRADUATES OF AGRICULTURAL SCIENCES

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Abstract: Social media usage is the new fad among the new generation students. Their means and purpose of using the social media though are different, the power of social media to influence the young generation is well acknowledged. The social media, besides offering several advantages poses several challenges to students as it is being considered as major cause of student's poor academic performance. The present study was undertaken with the purpose of developing the methodology and a scale to measure the social media addiction among the students. Two constructs, social media dependency and social media obsession were developed to represent the broad construct of social media addiction. A theoretical model was conceptualised to measure the social media addiction among the respondents. The results showed that the social media addiction is observed almost uniform among different groups of students. On the social media addiction scale, most students belonged to very low addicted, followed by moderately addicted. There were very few students who were highly addicted to social media. Some items of the social media obsession scale were tested for Griffiths' non chemical addiction behaviour of six components.

Key words: Agricultural graduates, Media addiction, Social media usage, Social media obsession.

1. Introduction

The power of internet to educate, entertain, influence and connect with the surrounding and the outer world are well exploited by the younger generation. Internet and mobile penetration among the youngsters in recent years has augmented its use by them. The internet users' increasing number in owning a social media account is evident from the number of subscribers of the popular networking sites. In 2004, the most successful social media Facebook was established as a closed virtual community for Harvard students. The site expanded very quickly and Facebook currently has more than 500 million users, of whom fifty per cent log on to it every day. Furthermore, the overall time spent on Facebook increased by 566% from 2007 to 2008. This statistic alone indicates the exponential appeal of Social networking sites (SNSs) and also suggests a reason for a rise in potential social media addiction [Nielsen Company (2009)]. At the end of March-2013, Facebook alone had 78 million active users in India, a growth of 50% from a year ago [Anonymous (2013)]. During the same time, LinkedIn

has 20 million Indian Users and the Industry estimate puts the Twitter accounts at 33 million [Anonymous (2013a)].

Social media is continuing to grow exponentially based on the wants of the user. The highest percentage of social media users are Generation Y, also referred to as the 'net generation,' who have grown up understanding the power of the Internet. Generation Y is unconsciously addicted to social media and as a result they feel constant societal pressure to be connected with their peers through maintaining a continuous connection with technology [Jaclyn Cabral (2011)].

However, the growth of social networking is associated with raised concerns of parents and teachers for the amount of time the young students spend on the social media. Several studies also revealed the detrimental effects of too much activity on the social media. Considering these facts, a study was conducted on social media addiction among the students of agricultural sciences at the University of Agricultural Sciences, Bangalore, India.

2. Methodology

Social media addiction in the study refers to addiction among the students towards different forms of electronic social media. Social media addiction (SMA) was theoretically defined as the combination of two constructs *viz.*, 'social media dependency' and 'social media obsession' resulting into a habit or practice to such an extent that its absence causes discomfort and in severe cases resulting into mental unrest and trauma.

'Social media dependency' is defined as an act through which the students meet their communication and interaction needs with friends, peers and family members. It is operationalized as the combination of preferential contact, time spent on social media, communication through chatting, sharing photos and videos on the social media.

'Social media obsession' is the students' preoccupation with social media, feeling difficulty to stay away from it and the absence of social media for a considerable time leading to psychological unrest. It is operationalized as combination of number of social media accounts, social media applications on their gadgets, compulsive log-ins and extended sessions on social media. Correlation coefficient was calculated to know the joint association between social media dependency and social media obsession. Descriptive statistical methods were used to present the results of the study.

Based on the theoretical and operational definitions, a scale was developed to measure the social media addiction among the undergraduate and post graduate students of agricultural sciences. Items of the scale were short-listed based on the experts' opinion for their relevance to measure the social media addiction. Based on the scale, the theoretical model was conceptualised for measuring the social media addiction mostly keeping the facebook topography and features in mind. Level of social media addiction is measured by cumulative scores received on all the responses for each of the labels on 5 point continuum for the construct, social media dependency and on 4 point continuum for the construct social media obsession. Each label was measured in such a way that, higher dependency received four points and no activity on the social media indicates zero point. Similarly, the higher activity received 3 points and no activity received zero point on the obsession scale. Thus the maximum possible score was 48 and 42 for the two constructs, social media dependency and social media

obsession respectively. The range of score for social media addiction ranges from 0-90 on the continuum. The respondents were categorised into five groups as very low addicted, low addicted, moderately addicted, highly addicted and very highly addicted to social media based on the equal class interval. The scale was pretested by introducing it to non sampling subjects in the same campus prior to actual study.

Definitions of different concepts and selective measuring labels

- Preferential contact is defined as the students'
 preference of electronic social media sites over
 other means of communication and interaction
 to be in touch with friends, peers and family
 members
- Time spent on social media is the combination of total time spent on the electronic social media and proportion of time spent out of time spent other means of communication and entertainment.
- Communication through chatting is defined as number of times the student involves in exchanging instant messages through chatting, tweeting or other means in different electronic social media.
- Sharing, viewing and uploading photos and videos is defined as frequenting the electronic social media sites for seeing, viewing and uploading the videos and photos as means of pasttime, entertainment, knowledge and learning.
- Numbers of social media accounts are the total number of accounts held by the student in different social media networking sites.
- Compulsive log-ins is defined as the temptation among the students to keep logged in or repeated log-ins in a day for the purpose of status update, likes, sharing, uploads etc.
- Social Media application on gadgets is defined as the number of applications installed on mobiles, laptops and other electronic gadgets for day to day usage.
- Extended session on social media is defined as the deliberate or non deliberate continuation of using electronic social media sites for various activities such as chatting, surfing videos, profile dressing, status updates etc.

For each of the concepts, various labels were identified, which are depicted in the theoretical model. Different labels identified for social media dependency are number of friends, number of groups subscribed, preference of social media over phone, e mail, number of times per day, minutes per day, average number of chattings per week, number of photos and videos viewed, shared and uploaded etc. The labels for social media obsession are status update anxiety, checking the likes for posts, time between each log-in, posting comments, games and fun sites, number of applications on gadgets, profile dressing, hooked to advertisements etc.

- Hooked to adds is defined as the tendency to search for online advertisements and offers on social sites on various products and items.
- Fun sites and gaming, it is defined as the tendency among students to keep searching and playing games online
- **Profile dressing** is defined as the frequent changing of profile photos, status update, sharing photos and videos on timeline etc.

3. Results and Discussion

The theoretical model conceived based on the scale developed to measure the social media addiction is presented in Fig. 1. Final items on the scale to measure the social media addiction are listed below under two constructs of the concept.

3.1 Statements to measure Social media dependency

- 1. How frequently you use the social media sites (At least any one site)
- A) Almost every day
- B) Once in 2-3 days
- C) Once in a week
- D) Once in a month
- E) Never
 - **2.** Average number of times you log in to one or the other social site account in a day?
- A) More than 5 times
- B) 4-5 times
- C) About 2-3 times
- D) Once in a day
- E) Never
 - **3.** Average time you spend per day on social media sites.
- A) More than 1 hour
- B) 30 min 1 hour
- C) 10-30 minutes
- D) 10 minutes or less
- E) Never
 - **4.** How do you access the social media sites on most occasions?

- A) Mobile phone
- B) Personal Lap top
- C) College or Library
- D) Internet cafe
- E) Never
 - **5.** How many friends do you have in your social networking sites (Approximate number in recent times)
- A) Above 1000
- B) 501-1000
- C) 251-500
- D) 101-250
- E) < 100
 - **6.** How many groups / communities you have subscribed to?
- A) More than 20
- B) 11-20
- C) 6-10
- D) 1-5
- E) None
 - 7. How frequently do you prefer social media sites for contacts and chatting over e mail and mobile?
- A) Almost every time
- B) Most times
- C) Few times
- D) Rarely
- E) Never
 - **8.** How often do you find friends and chat on social media?
- A) Mostly on every log-in
- B) Most times
- C) Few times
- D) Rarely

- E) Never
 - **9.** How often you peek into friends list to initiate the chatting on your own.
- A) Mostly on every log-in
- C) Few times
- D) Rarely

B) Most times

- E) Never
 - **10.** How frequently do you find yourself chatting with multiple friends?
- A) Mostly on every log-in
- B) Most times
- C) Few times
- D) Rarely
- E) Never
 - **11.** How often do you log in to see photos and videos on social sites?
- A) Almost every time
- B) Most times
- C) Few times
- D) Rarely
- E) Never
 - **12.** How often do you log in to post and share photos and videos on social sites?
- A) Almost every time
- B) Most times
- C) Few times
- D) Rarely
- E) Never

3.2 Statements to measure social media obsession

Sl. No	Statement	Most times	Few times	Rarely	Never
1	Are you anxious to update repeatedly about yourself on social media sites?				
2	Do you eagerly log in to see as how many have liked your posts or responded to your updates?				
3	Do you find difficulties to spend time without using social sites for a long time?				
4	Do you make repeated log-ins to post comments on friends' activities and updates?				
5	How frequently Do you keep logging in to play the games on social media?				
6	Do you keep searching new applications to use social media on mobile phone and laptop/ computer?				
7	How often do you spend more time than intended on Social Media while chatting?				
8	How often do you spend more time than intended on Social Media while surfing for interesting videos?				
9	How often do you spend more time than intended on Social Media for the purpose of profile dressing?				
10	How often do you spend more time than intended on Social Media as you are hooked to keep seeing the advertisements?				
11	How often do you spend more time than intended on Social Media while playing games and plays?				
12	How often do you spend more time than intended on Social Media to post comments and to see others comments on your profile?				
13	Do You use social media so much that it has had a negative impact on your job/studies				
14	Do you feel that, you have tried to cut down on the use of social media but without success?				

The respondents were selected from third and fourth year students of undergraduate degree programme and postgraduate students of UAS, Bangalore. Sixty students each from undergraduate and post graduate degree programmes were selected randomly for the study.

3.3 Profile characters of the students

The students profile was studied with respect to sex, medium of instruction during their primary and secondary education, Back ground of their education during primary (Village/ town/ city/ Metro), period from which they started using internet. The result of the students profile is presented in Table 1.

Most of the respondents were female (47.21%) and had their primary education in Kannada (Other Indian language as their mother tongue in few cases). With respect to their background, 40% came from rural background, 30% from town and remaining 30% from Urban areas. Nearly half of the students were the users of either computer or internet from their primary school level, followed by 32.5% using them during their secondary or high school education. Nearly 10% of the respondents used the computer/ internet only after entering the graduate degree programme.

3.4 Social media addiction level among different groups

The level of social media addiction indicated by cumulative scores on social media dependency and social media obsession for different groups are presented in Table 2.

The results of the sample respondents showed that, boys were slightly more addict to social media networking than the girls. The detailed observation of the survey indicated that boys had more number of friends and groups subscribed to groups and communities on the social sites. Researchers have a unanimous decision about the type of gender specific activities adolescents are using on the web. Cherly et al. (2007), Gary and Vorgan (2009), Mark (2000) and Lawrence (2009) all agree that males have increased odds of acquiring an Internet addiction. Men tend to use the Internet more often per week and for longer sitting periods than females. As Gordon explains, men tend to be online in order to e-mail friends, listen to music and get help with schoolwork, and talk with friends. In contrast, females use the web to e-mail friends, get help with schoolwork, talk with friends, e-mail family. Overall, females use the Internet for social networking and reinforcing pre-existing relationships whereas males

Table 1 : Profile characters of students (N = 120).

Sl. No.	Criteria	Class	Number	Percentage
1	Sex	Male	52	43.33
		Female	68	56.67
2	Degree	Under Graduate	60	50.00
		Post Graduate	60	50.00
3	Medium of instruction in	Kannada/ other Indian language	70	58.33
	primary education	English	50	41.66
4	Background	Village	48	40.00
		Town	36	30.00
		City	22	18.33
		Metro	14	11.66
5	Starting regular use of computer and internet.	Primary	53	44.16
		Secondary/ high school	39	32.50
		PUC/ +2	17	14.16
		Undergraduate degree	11	9.16

use the social networking sites to flirt and make new friends [Mark (2000)]. Overall, men are using the Internet to compensate for insecurities whereas women are reinforcing their tangible relationships [Mark (2000)]. However, Amanda and Mary (2007) reported slightly different results about girls spending more time at social sites than boys. But, the difference was not significant.

The undergraduates and post graduates were using the social media almost alike. The marginal rise in social media addiction score among post graduates can be attributed to more access to personal computer systems, internet facility in their departments etc. Even the medium of instruction during their primary education shows no significant difference in their social media addiction level. Students exposed to computer and internet accessibility during pre- university college/+2 level had higher average cumulative social media addiction score (48.92), followed by those exposed to computer only in the undergraduate level (41.33). Students exposed to computer and internet from very early days had low average social media addiction scores. However, the difference between all the four categories was not significant except in case of students exposed to computer and internet during their pre university education, who had comparatively higher average cumulative social media addiction.

Table 2 : Average cumulative scores of Social media addiction among different groups of respondents (N= 120).

S1. No.	Criteria	Class	Number	Average Cumulative SMA SCORE
1.	Sex	Male	52	47.21
		Female	68	37.12
2.	Degree	Under Graduate	60	41.22
		Post Graduate	60	43.03
3.	Medium of instruction in	Kannada/ other Indian language	70	41.85
	primary education	English	50	40.36
4.	Background	Village	48	41.39
		Town	36	40.16
		City	22	44.77
		Metro	14	38.08
5.	Starting regular use of computer and internet.	Primary	53	38.97
		Secondary/ high school	39	40.81
		PUC/ +2	17	48.92
		Undergraduate degree	11	41.33

3.5 Popularity of social media sites

Majority of the respondents (97.5%) of the study were having more than one social media accounts. All the respondents were subscribed to facebook and of those, majority (93.33%) said facebook was their first choice social media site. For the remaining respondents, google+, twitter, linked in and youtube were the first choice social media sites. Of the respondents having multiple social media accounts with facebook as their first choice social media site, next preferred social media sites were google+(82.5%), twitter (50%) and linked in (7.5%). Other than the social sites, youtube was the most visited site by the students for education, entertainment and music purpose.

3.6 Correlation between social media dependency and social media obsession

The cumulative scores obtained on the social media dependency and social media obsessions were tested for their joint association to know the correlation between the two concepts of the construct social media addiction. The correlation score was 0.8321. This shows that there is about 83.21% correlation between social media dependency and the social media obsession among the students of University of agricultural sciences, Bangalore.

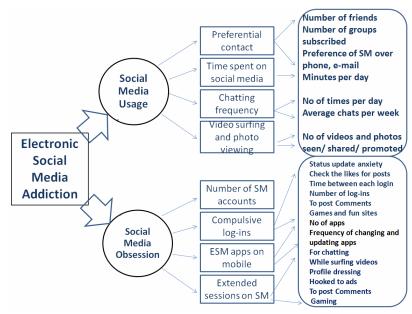


Fig. 1: Conceptual theoretical model developed to measure the social media addiction.

3.7 Level of social media addiction

As mentioned in the methodology, the respondents were categorised into five groups as very low addicted, low addicted, moderately addicted, highly addicted and very highly addicted to social media based on the equal class interval. The results are presented in Table 3.

Table 3 : Distribution of respondents into different classes of social media addiction.

Sl. No.	Level of Social media addiction	Number of students	Percentage
1	Very low addicted	10	8.33
2	Low addicted	69	57.50
3	moderately addicted	26	21.67
4	highly addicted	12	10.00
5	very highly addicted	3	2.50
	Total	120	100.00

On the social media addiction scale, most students (57.5%) belonged to low addicted, followed by moderately addicted (21.97%) and highly addicted (10.00%). There were few students (8.33%), who were least addicted to social media and very few (2.5%) were highly addicted to social media. These results are in contrast to the students from some advanced countries and students of other discipline. However, the results on the scale used for this particular study can be compared with limitations to measure with other scales.

On some of the items of scale on social media obsession, the results were interpreted along Griffiths'

research of non-chemical addictions. Griffiths uses six components to help determine behavioural addiction (These six components are: salience, mood modification, tolerance, conflict, withdrawal and relapse). The level of tolerance (through item 7-12) indicating increased requirement of same activity to achieve satisfaction, was found low to medium across all the respondent groups. Level of Salience (through Item 2), conflict (through item 13) and relapse (Through item 14) were also found low to medium. These results were supporting the scores of individuals falling in the low addiction to moderate addiction categories of social media addiction.

The findings of the study revealed that the addiction for social sites was engendered by their spent time on profile dressing, status update, surfing for videos and photos. Similar observations were made by Lenhart Amanda (2007) and the Neilson Company (2009). They reported that half of the teenagers among sample respondents visited their Social networking sites at least once a day which is indicative of the fact that in order to keep an attractive profile, frequent visits are necessary and this is a factor that facilitates potential excessive use. Moreover, the overall usage of Social sites increased by two hours per month to 5.5 hours and active participation increased by 30% from 2009 to 2010.

4. Conclusion

The results though, tested on a limited scale indicate low to moderate comfortable level of addiction of social media among students of agricultural sciences. The results with passage of time and increased opportunities for students to access the internet and more number of social sites with different modes of activities will be of interest in the coming days. This could lead to several challenges, unanticipated hither to on the part of the students and teachers to ensure proper learning. Research scope exists for further study on social media addiction and validation of the results for theory establishment for broader generalisations.

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