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## **Social Media Usage and Its Addiction Level among Generation Y Agricultural Scholars in Meghalaya, India**

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### **Authors' contributions**

*This work was carried out in collaboration between all authors. Authors BK and RJS designed the study, performed the statistical analysis, wrote the protocol, and wrote the first draft of the manuscript. Authors KK and T Dabi managed the analyses of the study. Author T Das managed the literature searches. All authors read and approved the final manuscript.*

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### **ABSTRACT**

This study examined Generation Y's psychological addiction to social media with specific regard to Research Gate, Facebook, YouTube, WhatsApp and Twitter. The addiction was deduced using Griffiths' five components that govern behavioral addiction: tolerance, salience, withdrawal, conflict and relapse. The tenacity of this study was to clinch if Generation Y agricultural scholars' was in fact addicted to social media because of their necessity to sustain their connections with peers. The

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study reveals that Research Gate was the most widely used social media (95.00 per cent). About ninety four per cent (93.75 per cent) of the respondents primarily used social media for downloading study materials. Eighty eight per cent of the respondents had more than five social media account. 76.25 per cent of the respondents spend more than 3 hour on social media. About seventy three per cent (72.50 per cent) of the respondents spend two hour on social media for agriculturally related issues. The major advantages of using social media is "exposure to latest knowledge, skills and technology in research endeavors" followed by "gaining more visibility in research areas" as reported by 95.00 per cent and 93.75 per cent of the respondents respectively. 68.75 per cent and 7.50 per cent of the respondents reported high addiction and low addiction on social media, respectively. The results indicated that Generation-Y agricultural scholars faced constraints towards tolerance, salience, withdrawal and relapse. However, they face intrapsychic conflict, but not interpersonal conflict. Major problem associated with social media in dissemination of information is "costly data charge for high speed internet connectivity" (91.25 percent) being followed by "erratic internet connectivity in the campus" (90.00 per cent).

**Keywords:** *Social media; addiction; generation Y; agricultural scholars'.*

## 1. INTRODUCTION

Social Media (SM) refers to the means of interactions among people in which they create, share, consume and exchange information and ideas in virtual communities and networks. Social media is defined as a group of internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content [1]. The supremacy of SM is in that it is not just an invention, but a feature, which allows it to be realistic to a whole array of applications that encompasses communications amongst individuals. It also has detached the precincts of topographical distance from consumers, which empowers a dais that shares knowledge and philosophy, thereby playing part in the economic and political supremacy. It also allows businesses and organizations direct access to consumers and their genuine thoughts, giving up to date and relevant information on trends and preferences. SM has become widespread as it taps into one of individuals utmost rudimentary regular needs i.e. creating groups and partaking information, providing entertainment and communicating. It has been reported that there are now 1.5 billion users of social tools in the world, and is growing continuously meaning 80% of the world's online populace are interacting on social networks. In fact SM is the fastest adopted media tools in history and as these applications are transferred to Smartphone's there is no doubt that the number of consumers will linger to bourgeon [2]. The amplified use of social networking websites has developed into an international phenomenon in the precedent several years. It was started out as a leisure pursuit for some computer erudite

people has become a social norm and way of life for people from all over the world. These sites were embraced especially by teenagers and young adults as a way to unite with their peers, share information, reinvent their personalities, and showcase their social lives [3]. Majority of teenagers use internet for their daily activities and information gathering, as contrasting to older generations who used resources like the television or newspaper [4]. Students are affected being by the use of internet and this impact is determined by the type of internet usage. They are positively affected by the informative use of internet while having drastic impact of recreational use of internet on them [5]. Social network websites clutch attention of the students and then diverts it towards non-educational and unsuitable actions including worthless chatting. On the basis of this conjecture it can be inferred that social networking sites may badly affect the academic life and learning experiences of the student [6]. Extracurricular activities and academic activities are not enough to satisfy some students those who suffer through social networking seclusion. This shows that social networks are advantageous for the students as it contributes in their learning experiences as well as in their academic life [7]. Social networking websites also affect the way we receive information and news. The sites open up different portals through which we get information and create more diverse news outlets [8]. Internet addiction is related to high implicit (damaged) self-esteem; thus individuals with these emotional attributes may very well be at a higher risk than others of becoming addicted to the Internet [9]. Whether or not Millennials are in fact addicted to social media revealed that subjects reported

experiencing salience, tolerance, the intrapsychic element of conflict and relapse associated with their social media use [10]. The concept that addiction is related to impulse-control disorders through variations of delayed rewards testing [11]. Social media is gradually making its place in the field of agricultural industry. Facebook, YouTube, blogs, wikis and podcasts deliver huge prospective for use to extensionists but the content and outreach demands to be determined based on clients and content [12,13]. Social media provides an opportunity to link and network with one's audience in agriculture, instruct them and provide assistances to know more about agricultural sector. It makes preferment of extension programmes serene, allows real time communication with clienteles, helps encompass outreach to novel audiences, and endorses expansion of relationship among actors in Agricultural Innovation Systems (AIS) [14]. The extensionists or extension organizations can start by making an effective social media page, getting followers to collaborate for practical actions on the information shared through the social media pages, and keep the followers involved by continuous engagement through conversations to form a mutually created knowledge pool [15].

Social media is a dais of assignation where agriculture is the content and for agricultural producers, the chief motive for using these daises is corpus sway [16]. It gives farmers a say and prospect to directly link with their consumers, which can help in unswerving marketing and augmented profits along with expediting mass-personal communication [17]. At the same time, they don't need to hinge on a solitary source for information any longer and with augmented communication with peers and verified information at the accurate time can corroborate to be a very imperative idea. To agriculture as a business, the strategic tenets of communiqué that social media delivers are peer to peer schmoozing, farmer – industry schmoozing, user commitment, and crisis communiqué [18]. Social media delivers agribusinesses and agripreneurs an opportunity to link with clients and form associations. For extension organizations, communication has turn out to be much calmer and stress free as the personal interaction becomes unfussy with social media and platforms like Facebook, WhatsApp and Twitter which embolden extraordinary collaboration among customers profiting everyone involved. Social media existence also upsurges the virtual perceptibility of extension websites which is

another immense improvement for faster information transmission [19].

## 1.1 Statement of the Problem

Social media is enduring to grow exponentially based on the desires of the consumer. The chief consumers of social media are Generation Y i.e. the generation of people born during the 1980s and early 1990s; also called millenials, echo boomers, internet generation, iGen, net generation as they have constant access to technology (computer, cell phone) in their youth. Intuitively Generation Y are addicted to social media and as an outcome they feel perpetual societal pressure to be linked with their peers through sustaining an unremitting linking with advances in technologies. Their connectedness is crafting innovative kinds of peer-to-peer interactions that are significantly dissimilar from preceding generations. Agricultural researchers need to keep abreast of information and developments in their areas of specialization. This is because they are actively involved in improving animal and plant species, technology and sustaining best practices necessary for meeting production in the agricultural sector. There is a paradigm shift in the way people now collaborate and network with the advent of the internet, which indeed is a network of networks. Even though a lot of professionals are on social media, very limited study has conducted on the use of social media among researchers in the agricultural industry and the purpose for which they use social media. The study seeks to achieve the following objectives; to find out the social media which are mostly by agricultural scholars, to determine addiction towards social media by agricultural scholars; and to discover the advantages and related problem associated with using social media.

## 2. METHODOLOGY

### 2.1 Research Methods

A survey research design was adopted for the study. The population of the study comprised agricultural scholars in the College of Post Graduate Studies, Central Agricultural University, Umiam Meghalaya. A self-designed questionnaire was used as the major research instrument. Data were analyzed using descriptive statistics to obtain the results. In total eighty respondents were surveyed in order to get the results. The following sections deals with the results obtained from the study.

## 2.2. Methods of Analysis

The collected multiple responses with respect various aspects of social media addiction were tabulated and descriptive statistical measures like frequency and percentage were taken to analyse the data. Percentage was calculated with the following formula:

$$\text{Percentage} = \frac{\text{Numbers of response obtained}}{\text{Total number of respondent}} \times 100$$

## 3. RESULTS AND DISCUSSION

Table 1 was indicative of the fact that Research Gate is the most widely used social media by agricultural scholars i.e. 95.00 per cent being followed by Facebook and WhatsApp respectively which accounts for 93.75 per cent and 91.25 per cent respectively. Table 1 further revealed that Twitter is the least widely used social media by the respondents (5.00 per cent).

Table 2 was indicative of the fact that most of the respondents i.e. 93.75 per cent used social

media for downloading study material being followed by chatting and looking for references i.e. 92.50 per cent and 90.00 per cent respectively.

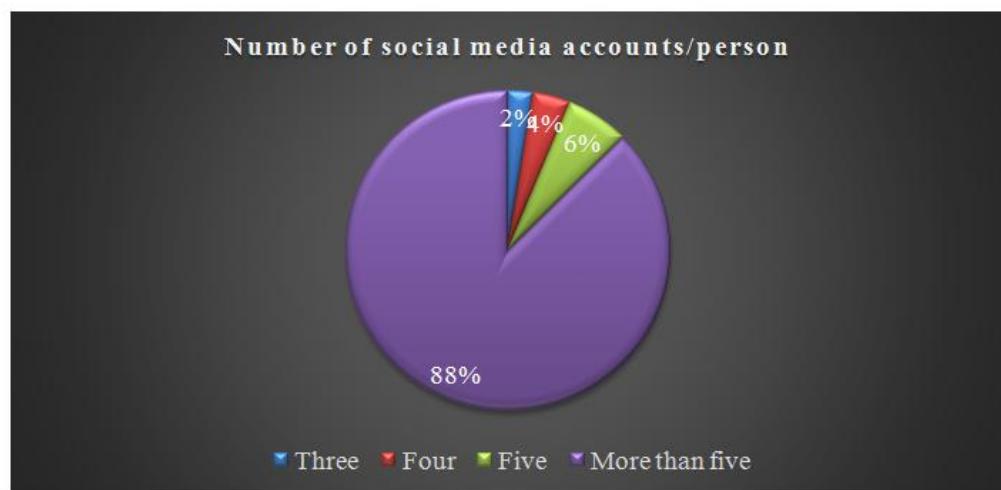
**Table 1. Most widely used social media by agricultural scholars (N=80)**

Sl. No.	Types of social media	Frequency	Percentage
1	YouTube	72	90.00
2	Twitter	4	5.00
3	Facebook	75	93.75
4	WhatsApp	73	91.25
5	Google+	71	88.75
6	Research Gate	76	95.00

Fig. 1 was revealing of the fact that majority of the respondents were having more than five social media accounts (88.00 per cent) being followed by five social media accounts and four social media accounts which constitute 6.00 per cent and 4.00 per cent respectively.

**Table 2. Primary purpose for using social media (N=80)**

Sl. No.	Statements	Frequency	Percentage
1	Looking for references	72	90.00
2	Chatting	74	92.50
3	Communication with teachers/class fellows	60	75.00
4	Sharing news and events	70	87.50
5	Uploading study material content on various sites	69	86.25
6	Blogging	5	6.25
7	Posting photos	71	88.75
8	Downloading study materials	75	93.75



**Fig. 1. Total number of social media accounts/person (N=80)**

Table 3 was revealing of the fact that on an average 76.25 per cent spend more than 3 hour/day being followed by 13.75 per cent and 6.25 per cent who used to spend 3 hour/day and 2 hour/day respectively. Likewise, on an average 72.50 per cent of the respondents spend 2 hour/day for agriculturally related issues followed by 15.00 per cent and 10.00 per cent who used to spend 1 hours/day and 30 minutes/day respectively (Table 4).

**Table 3. Average time spent on social media for /day (N=80)**

Sl. No.	Statements	Frequency	Percentage
1	1 Hour	3	3.75
2	2 Hour	5	6.25
3	3 Hour	11	13.75
4	More than 3 Hour	61	76.25

**Table 4. Average time spent on social media for agriculturally related issues/day (N=80)**

Sl. No.	Statements	Frequency	Percentage
1	Less than 30 minutes	2	2.50
2	30 minutes	8	10.00
3	1 Hour	12	15.00
4	2 Hour	58	72.50

**Table 5. Self-perceptions of respondents on social media addiction (N=80)**

Sl. No.	Statements	Frequency	Percentage
1	Strongly Agree	55	68.75
2	Agree	12	15.00
3	Neutral	2	2.50
4	Disagree	5	6.25
5	Strongly Disagree	6	7.50

Cent per cent of the respondents reported that SM can be used as tool for e-learning.

68.75 per cent and 7.50 per cent of the respondents reported high addiction and low addiction on social media, respectively (Table 6). A mixture of questions was asked to further describe the respondent's relationship with social media and their personal usage. The questions assessed emotions, inner conflicts and personal habits. Likert scale developed by Cabral (2011)

with slight modification was used in order to assess the addiction towards social media from a frequency standpoint of "very often" to "never" while connecting to the Griffiths five components of nonchemical addictions: tolerance, salience, conflict, withdrawal and relapse [20].

a) Tolerance: The first question in this section asked, "How often do you find yourself spending more time than intended on Social Media?" Responses show that 75.00 per cent very often find themselves in this predicament, along with 13.75 per cent who said often and 6.25 per cent that answered sometimes. This question directly connects with the behavioral piece of tolerance, stating that increasing amounts of a particular activity are required in order to achieve the same effect. A majority of this population subconsciously spent more time on social media in order to feel satisfied with their usage. The inability to control the amount of time spent on these sites connects to the individual's need to reinforce the virtual relationships on a more consistent basis. Social media moves so incredibly fast that tolerance needs to grow to maintain the relationship between the user and technology. When answering the question "How often do you find yourself saying 'just a few more minutes' when using social media?" 72.50 per cent said very often and 15.00 per cent said often, followed by 12.50 per cent who said sometimes. These responses show that this sample has a high level of tolerance with regards to social media and feel that they need to spend more time with social media in order to feel satisfied.

b) Salience: In order to assess the behavioral aspect of salience, which occurs when a particular activity becomes of high priority and dominates thinking, a question was asked: "How often do you find yourself checking social media sites before something else that you need to do?" A total of 62.50 per cent of respondents answered very often and 18.75 per cent stated often. As a conclusion, this sample of Generation-Y agricultural scholars showed that social media was taking priority over other activities. The need to check social media first ties into the necessity to stay connected to one's peers without having a direct conversation with them. Social media sites provide the updates one would receive from a phone call or a face-to-face conversation, but by checking social media first, one is provided with these answers without any authentic dialogue.

**Table 6. Actual percentage of the respondents for behavioral addiction (N=80)**

		Very often	Often	Sometimes	Rarely	Very rarely	Never
Tolerance	Over use of social media	60 (75.00)	11 (13.75)	5 (6.25)	4 (5.00)	0 (0.00)	0 (0.00)
	Tendency to indulge	58 (72.50)	12 (15.00)	10 (12.50)	0 (0.00)	0 (0.00)	0 (0.00)
Salience		50 (62.50)	15 (18.75)	9 (11.25)	6 (7.50)	0 (0.00)	0 (0.00)
	Intrapsychic	49 (61.25)	14 (17.25)	11 (13.75)	6 (7.50)	0 (0.00)	0 (0.00)
Conflict	Interpersonal	0 (0.00)	0 (0.00)	10 (12.50)	12 (15.00)	58 (72.50)	0 (0.00)
	Withdrawal	47 (58.75)	13 (16.25)	11 (13.75)	7 (8.75)	2 (2.50)	0 (0.00)
Relapse		48 (60.00)	12 (15.00)	10 (12.50)	6 (7.50)	4 (5.00)	0 (0.00)

Note: Figures in the parenthesis indicates percentage

c) Conflict: In connection with conflict, the question, "How often do you feel your efficiency agonizes because of social media?" was assessed. The majority of respondents, 61.25 per cent, replied very often.

Another 17.25 per cent said often, and 13.75 per cent stated sometimes. The conflict is derived from either an interpersonal or intra-psychic conflict connected with social media usage. Ultimately, a majority of these users claim to very often. The reoccurring inner conflict among this generation's ability to be productive or spend more time on social media has an effect on how each individual performs in class, work, and in their tangible relationships. This intrapsychic conflict removes social media away from solely the interactive world but forces it to have a strong effect on the physical world. Overall, this inner disagreement of productivity provides a deeper problem where social media has a large power over the individuals' thought process. The question, "How often do other people comment on your social media usage?" also correlates with the factor of conflict. This question assessed the interpersonal relationships one maintains in conjunction with social media. As a result, 72.50 per cent of respondents said very rarely, 15.00 per cent said rarely, followed by 12.50 per cent also said sometimes. It is apparent that from this population that interpersonal conflict is not necessarily an issue. External conflicts regarding social media usage between Generation-Y agricultural scholars are not an issue because, as a whole, they are accustomed to using social media daily.

d) Withdrawal: This occurs when the respondent feels displeased with the discontinued use of social media. In response to the question "How often do you typically feel stressed out, disconnected or paranoid when you cannot access social media?" 58.75 per cent stated very often, 16.25 per cent stated often, while 13.75 per cent said sometimes. Though it seems that no withdrawal has truly taken place, there are specific conclusions that can be made as to why these answers are in majority. This generation has had a constant connection with social media and because this relationship has never been removed withdrawal is not necessarily an issue.

e) Relapse: This occurs when repetitive reversions of previous social media patterns reoccur. In answering, "How often do you try to cut down the amount of time you spend online and failed?" Of the respondents, 60.00 per cent said very often, 15.00 per cent said often and 12.50 per cent said sometimes. From this question, it is assumed that the majority of respondents identify that their attempts at reducing social media usage are usually ineffective and described as a failure. By attempting to trim down, they're recognizing that their social media use is a trouble. By attempting to use social media less, they feel that their relationships are suffering, and that they need more time to keep them consistent.

The major advantages of using social media was "exposure to latest knowledge, skills and technology in research endeavors" (95.00 per cent) followed by "gaining more

**Table 7. Major advantages of using social media by agricultural scholars (N=80)**

Sl. No.	Statements	Frequency	Percentage
1	Helped in finding a mentor	63	78.75
2	Helped in publishing my research work faster than before	66	82.50
3	Gaining more visibility in my area(s) of research	75	93.75
4	Helped greatly in disseminating information between/among groups	74	92.50
5	Helped in connecting with agricultural researchers with similar research interest in/outside my country	70	87.50
6	Exposure to latest knowledge, skills and technology in research endeavors	76	95.00
7	Helped in creating various agricultural chat groups or forum	68	85.00
8	Helped in finding right methodology for my research work	69	86.25

**Table 8. Major problem associated with social media in dissemination of information (N=80)**

Sl. No.	Statements	Frequency	Percentage
1	Restricted Access	70	87.50
2	Costly data charge for high speed internet connectivity	73	91.25
3	Erratic internet connectivity in the campus	72	90.00
4	Legal liability	65	81.25
5	Limited presence of farmers in social media	57	71.25

visibility in research areas" and "helped greatly in dissemination of information between/among the groups" 93.75 per cent and 92.50 per cent respectively as indicated by Table 7. Table 8 further revealed that major problem associated with social media in dissemination of information is "costly data charge for high speed internet connectivity" (91.25 per cent) being followed by "erratic internet connectivity in the campus" (90.00 per cent).

#### 4. CONCLUSIONS

The study revealed that Research Gate was the most widely used social media (95.00 per cent). About ninety four per cent (93.75 per cent) of the respondents primarily used social media for downloading study materials. Eighty eight per cent of the respondents had more than five social media account. 76.25 per cent of the respondents spend more than 3 hour on social media. About seventy three per cent (72.50 per cent) of the respondents spend two hour on social media for agriculturally related issues. The major advantages of using social media is "exposure to latest knowledge, skills and technology in research endeavors" followed by "gaining more visibility in research areas" as reported by 95.00 per cent and 93.75 per cent of the respondents respectively. 68.75 per cent and 7.50 per cent of the respondents reported high addiction and low addiction on social media,

respectively. The results indicated that Generation-Y agricultural scholars faced constraints towards tolerance, salience, withdrawal and relapse. However, they face intrapsychic conflict, but not interpersonal conflict. Major problem associated with social media in dissemination of information is "costly data charge for high speed internet connectivity" (91.25 percent) being followed by "erratic internet connectivity in the campus" (90.00 per cent).

#### COMPETING INTERESTS

Authors have declared that no competing interests exist.

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