



**CONSTRUCTION AND VALIDATION OF SOCIAL MEDIA USAGE
SCALE FOR UNDERGRADUATE AND POSTGRADUATE STUDENTS**

Dr. Momin Sumaiya¹ & Prof. Siddiqui Mohd. Mahmood²

¹Assistant Professor, Department of Education and Training, Maulana Azad National Urdu University, Hyderabad (T.S.), India)

²Professor, Department of Education and Training, Maulana Azad National Urdu University, Hyderabad (T.S.), India)

Corresponding Author - Dr. Momin Sumaiya

Email - sumaiya.momin@gmail.com

DOI - 10.5281/zenodo.7714462

Abstract:

The use of mobile phones as well as social media among young people as part of their daily life has increased in the last decade. Using social media for entertainment as well as educational purposes makes them more dependent on gadgets, various social media sites and apps. Social media has developed at an amazingly high speed in recent years and conquered millions of users around the world. Social media has become an important means of social communication also among individuals in recent years. In this scenario, sufficient studies on social media use should be reinforced. Investigators developed and standardized a social media usage scale to determine the extent of social media usage among young people and college students. The Social Media Usage Scale (SMUS) consists of two parts, Part A consists of seven (7) Multiple Choice Questions (MCQs) and Part B consists of 24 statements based on a five-point Likert scale. The reliability of the scale was established by Cronbach's alpha. The validity was determined by experts from different fields.

Keywords: Construction, Validation, Social Media, Students

Introduction:

The 21st century is the digital age and technology, computers and internet have undoubtedly occupied an important place in human life and social media plays a significant role in this scenario. The main reason for the expansion of the communication network via computers and the Internet is easy, affordable, cheap and fast access to information.

Social media refers to a type of technology based web sites that gives its users the opportunity to share ideas and thoughts and provide a communication platform. In the age of technology everyone and everything came under one roof and that is none other than social media. Social media is a web-based technology and applications that provide

its users with a platform to connect with each other at a very low cost.

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” (Kaplan and Haenlein, 2010). Merriam Webster (2014) dictionary defined social media as “A form of electronic communities (as web sites for social networking & micro-blogging) through which users create online communities to share information, ideas, personal message and other content (video & audio)”.

In the current study, the investigators attempted to develop a social media usage scale that includes 7 multiple choice questions and 24 statements on a five-point Likert scale and to standardize it.

Review of Related Literature:

Leodoro J. Labrague (2018) surveyed adolescents on Facebook use and emotional states of depression, anxiety, and stress. He used the Facebook Intensity Scale and the Depression, Anxiety and Stress Scale as tools. He found that 50% of those surveyed had symptoms of negative emotional state. He recommended that parents should be mindful of spending

time on Facebook to avoid developing depression and anxiety.

Masthi, N. R. et. al. (2018) conducted study on a topic, social media usage and health status among students studying in pre-university colleges of urban Bengaluru. The result of the study showed that social media addiction was 36.9% among users and that the most common health problem were eye-strain (38.4%), anger (25.5%), and sleep disturbance (26.1%). The habit of smoking, alcohol, tobacco, junk food consumption, having ringxiety and selfitis were found to be significant risk factors for social media addiction in male college students.

Manju Sasidharan & Dr. Tara S. Nair (2017) conducted a study on mental stress in relation to utilization of social media among higher secondary school students. They wanted to find out how strong the use of social media and mental stress are among higher secondary school students. They standardised the Mental Stress Inventory and Social Media Utilization Inventory tools. They found that higher secondary school students have moderate of social media use and that there are significant gender difference in social media use among the secondary school students. In addition, social media use was found to have a significant impact

on mental stress in higher secondary school students.

Erin L. St. Onge & Katie Hoehn (2015) conducted a survey on the educational use of social media sites by pharmacy students. Their objectives were to assess social media use among pharmacy students in remote campus locations and to identify student preferences for ways in which social media can be used. A self-made questionnaire was used to collect data. The results showed that pharmacy students actually use social media sites in their pharmacy education. The ability to stay up to date on important dates and campus events was identified as a benefit of integrating social media sites into pharmaceutical education, while the main identified disadvantage was that social media sites were too distracting and time-consuming.

Jenkins, Wright, & Johnson, (2013) developed a 10-item two-factor Social Media Use Integration Scale (SMUIS) for college students. It is a scale of online social media usage that measures the integration of users' social behavior and daily routines, along with the importance and emotional connection to that usage. Strong evidence was found for the reliability of the data collected with the scale (.914).

Gerlich, et. al. (2010) A scale named Social Media Affinity Scale was developed. They found that among the students surveyed, there were no significant differences between male and female in their internet use, social media use, and also in their opinion about social media sites in general.

Need and Significance of the Study:

Nowadays, the student group is the group that is more interested in knowing and learning about technological advancement and new trends. Social media usage is higher among college students than other users. The main reason is that these students are more attracted to new technologies and social media sites. Reviewing the relevant literature reveals that, many studies on social media use and its impact on various variables have been conducted by multiple researchers at different levels. No studies were found that include a standard tool or scale on social media usage pattern and extent. This gap has encouraged investigators to develop and validate a social media usage scale.

Construction and Validation of the Scale:

The Social Media Usage Scale (SMUS) was developed to study the use of social media among students. The scale was constructed and validated in three

stages. This scale is a blend of percentage analysis questions and Likert type rating scale. SMUS consists of two (2) parts.

Part-A consists of seven (7) multiple choice questions (MCQs), which examine the pattern of social media usage. These questions are based on the student's favorite social media site, the number of accounts on social media sites, the time spent on those sites, the total number of friends, and the purposes for which they are used.

Part-B consists of 24 statements based on the Likert scale (type of rating scale) which has five responses, Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree abbreviated as SA, A, U, D and SD respectively.

At the beginning of designing the scale, 7 questions for Part-A and 40 statements for Part-B (by determining 4 dimensions) were written. These questions and statements gives an notion that the user is using social media with the help of research supervisor and from the ideas gained from the review of related literature.

Out of the 40 statements, 20 statements were having positive and 20 statements were having negative polarity. The statements were split into four dimensions namely, personal use, study use, entertainment use and communication use.

Validity:

In any case, a rating scale should be stable and trustworthy. To confirm this, the investigator should verify the validity and reliability of the statements. The drafted statements were given to 15 experts in the field who are from different departments and experts in the language for open criticism and healthy suggestions to improve the quality of the scale. Experts gave their opinions and advice. As a result, some of the statements were modified, reconstructed or deleted and necessary changes were incorporated into the statements. For the first try-out an updated edition of the scale with 35 statements were used. There were no changes in part-A of the scale.

Try-Out/ Pilot Study:

For the first try-out/ pilot study, a sample of 160 participants was chosen. These participants were from target population (aged 18 and above) who were in different field of study at different colleges and universities. The participants included male and female students selected purposively from both professional and non-professional courses at undergraduate and post-graduate level. Responses were collected and converted into scores according to the scoring key. Cronbach's alpha test up to version SPSS 24.0 was used for the reliability of the scale. 5

statements were deleted based on Cronbach's Alpha value as deleting the statements enhances the reliability value.

Now in the second try-out study, the scale consists of 30 statements and was administered to a sample of 130 students in target population. After collecting and scoring of the data, Cronbach's alpha test for reliability analysis was used again in the SPSS 24.0 version. 6 statements were deleted based on Cronbach's Alpha value as deleting the statements enhances the reliability value. Thus, the final scale consists of 24 statements (6 statements in each dimensions) having 15 positive worded statements and 9 negative worded statements. Positively worded statements in the scale are statements numbers 1, 2, 4, 5, 6, 7, 8, 9, 10, 13, 17, 19, 21, 23 and 24. While 3, 11, 12, 14, 15, 16, 18, 20 and 22 are negatively worded statements.

Reliability:

Reliability was determined by using pilot study data. Cronbach's alpha method was used to establish reliability using SPSS version 24.0. This method measures the internal consistency of the scale. A high alpha value indicates high reliability, as $\geq .9$ - Excellent, $\geq .8$ - Good, $\geq .7$ - Acceptable, $\geq .6$ - Questionable, $\geq .5$ - Poor, and $< .5$ - Unacceptable (George and Mallery). The investigators found a coefficient of 0.785

of Cronbach's alpha for social media usage scale, which is considered good.

Scoring Key:

The scoring key was prepared by assigning positively worded statements, a score of 5 given to the responses "Strongly Agree" (SA), 4 to "Agree" (A), 3 to "Undecided" (U), 2 to "Disagree" (D), and 1 given to "Strongly Disagree" (SD). While the scoring process will be reversed for negatively worded statements, i.e. 1 given to the responses "Strongly Disagree" (SD), 2 to "Disagree" (D), 3 to "Undecided" (U), 4 to "Agree" (A) and 5 to "Strongly Agree" (SA). The range of the scale is 24-120. The sum of the total values will give the social media usage score.

Final Statements of the Scale:

Part-A:

1. Which social media site is your most favourite?
2. How many social media site accounts do you have?
3. How much do you spend overall time on social media per day?
4. When do you post on social media?
5. How often do you access social media account?
6. How many friends do you have on social media sites?

7. What's your purpose of using social media/social media sites (can tick multiple options)?

Part-B:

Personal use:

1. I feel proud that I am a member of social media community.
2. Social media is a part of my day to day life.
3. I cannot imagine my life without social media.
4. Social media is necessary now a day.
5. Social media affect negatively on my daily life.
6. I upload my photos on social media sites.

Study use:

1. I use social media for my study purpose also.
2. Social media have positive effects on my studies.
3. Social media can be used in studies.
4. More time I spend on social media, I get more information and knowledge.
5. I use social media during college hours also.
6. I use social media for academic discussions with my friends and teachers.

Entertainment use:

1. Use of social media became one of my favourite hobbies.
2. Social media help to update myself about latest trends and news.
3. I spend lot of time in using social media.
4. Instead of going out with my classmates and friends, I prefer to be alone and spend time on social media.
5. I use social media for news.
6. I use social media during meal time also.

Communication use:

1. I have a good social network on social media sites.
2. Most of the time I am online on social media sites.
3. I have more online friends than real life friends.
4. I am active on Social Media.
5. I use social media while travelling also.
6. I use social media during ongoing classes/lectures.

Discussion and Conclusion:

Technology is a blessing when used productively. In the age of digital natives, the creative use of mobile phones and social media can never be ruled out. The social media usage scale was

constructed and validated according to the standard techniques for the validation of a Likert type with a five-point rating scale. It contains 7 MCQs questions and 24 statements. The minimum score that a sample can achieve is 24 and the maximum score is 120. When a sample scores between 78 and 91, then it measured as an average or moderate level of social media usage. While a score higher than 99, shows that the sample is more addicted to social media usage.

This scale can be used for all undergraduate and postgraduate students belong to the age group of 18 and above to determine pattern and extent of social media use. The investigators believe that this scale will be beneficial to students, allowing a precautionary measure to be taken in the event of over use.

References:

1. Andreassen, C. S. (2015). Online social network site addiction: A comprehensive review. *Current Addiction Reports*, 2, 175-184. doi:10.1007/s40429-015-0056-9
2. Bhati, Vikramaditya & Bansal, Jayshri & Villa, Sr. (2019). Social Media and Indian Youth. *INTERNATIONAL JOURNAL OF COMPUTER SCIENCES ANDENGINEERING*. 07. 818-821.
3. Edwards, A. L. (1957). *Techniques of Attitude Scale Construction*. New York: Appleton Century Crofts, Inc
4. George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference*. 11.0 update (4th ed.). Boston: Allyn & Bacon.
5. Gerlich, R. N., Browning, L., & Westermann, L. (2010). The Social Media Affinity Scale: Implications For Education. *Contemporary Issues in Education Research (CIER)*, 3(11), 35-42. <https://doi.org/10.19030/cier.v3i11.245>
6. Gorhe, Manasi. (2019). Impact Of Social Media On Academic Performance Of Students. 10.13140/RG.2.2.21427.27687.
7. Jenkins-Guarnieri, M. A., Wright, S. L., & Johnson, B. (2013). Development and validation of a social media use integration scale. *Psychology of Popular Media Culture*, 2(1), 38–50. <https://doi.org/10.1037/a0030277>
8. Labrague, L. J. (2014). Facebook use and adolescents' emotional states of depression, anxiety and stress. *Health science journal*, 8(1), 80.

9. Masthi, N. R., Pruthvi, S., & Phaneendra, M. S. (2018). A comparative study on social media usage and health status among students studying in pre-university colleges of urban Bengaluru. *Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine*, 43(3), 180. Retrieved on 20/10/2021.
10. Sasidharan, M. and Nair, Tara S. (2017). Mental Stress in relation to Utilization of Social Media among Higher Secondary School Students. *Edutracks* (June, 2017), 16(10), 40-44
11. Smith, A., & Anderson, M. (2018). *Social Media Use 2018: Demographics and Statistics*. Retrieved from <https://www.pewinternet.org/2018/03/01/social-mediause-in-2018/>