

Understanding the Role of Social Media Use on Self-Esteem among Senior Secondary School Students

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Abstract

This study aims at understanding the effect of social media use on self-esteem among Senior Secondary school students. Some of the objectives of the study are to examine the relationship between social media use and self-esteem among Senior Secondary school students, to compare gender differences in social media use among Senior Secondary school students, and to compare gender differences in self-esteem among Senior Secondary school students. The study is conducted on 100 students, 50 male students and 50 female students, studying in senior secondary level at schools. Data collection is conducted using Rosenberg Self-Esteem Scale (RSES) and Social Networking Time Use Scale (SONTUS). The data analysis is done through JASP, an open-access statistical software. The results showed that there is no significant relationship between social media use and self-esteem, there are gender differences in social media use and females have lower self-esteem when compared to male students. Therefore, the result of this study shows the effect of social media use on self-esteem among Senior Secondary school students.

Keywords: School Students, Self-Esteem, Social Media Use

1 Introduction

With the advent of social media, it has been commonly observed that the younger crowd has been drawn to it in a vast majority. Accompanying this increased engagement with various social media platforms, is an incumbent need to study the varied effects that the use of social media can have on a young mind. We need to navigate the milieu of trajectories that excessive use of social media can have on the mental health of an individual. It has been commonly observed that the younger generation uses social media as a medium in their identity formation and one of the key aspects of this is the development of self-esteem. Each like and appreciate comment on one's social media posts act as a reward toward developing a positive sense of self-esteem. On the other hand, lack of acknowledgement from one's peers can prove detrimental to one's self-esteem.

In a survey of TCS GenY 2013-14 [1] entitled, "Smartphones are the digital Swiss knife for urban teens", conducted on Indian youth of age group 12 to 18, studying in high school, across the 14 Indian cities revealed daily online habits of teens in India. Some of the key outlooks of the survey concluded that 72% of Indian youth owns a smartphone or a digital gadget and more than 50% have Internet access in their home. Most of the teens spend more than 60 minutes on an average on Social Media as cited by Bhati, Bansal and Villa [2]. The result of Singh, Amiri and Sabbarwal's [3] study shows that over utilization of social media leads youth towards addiction. Bhardwaj, Goundar and Avasthi, [4] found that 45% of the Indian youth surveyed accessed social media from their mobile devices. Therefore, there is an urgent need to examine how the use of social media is affecting the mental health of the younger population, especially the school students.

2 Review of Literature

Social media use has been correlated with many problematic effects, especially on the adolescent population. Their age is very sensitive as they are in the process of discovering and forming their own identities and recognizing their place in the world. Those suffering from depressive symptoms or low self-esteem may benefit from reducing their social media use as found by Rosenthal and Tobin [5].

Another study by Ma [6] established that the associations between online activities and self-esteem were not significant ($p > 0.05$). This is in conjunction with the propositions of our present study, hence establishing some support from the literature surrounding this topic. On the contrary, Zhao, et. al. [8] illustrated that the levels of self-esteem were found to be negatively correlated with social media addiction. In a similar note, Triêu, P., Ellison, N. B., Schoenebeck, S. Y., & Brewer [10] found that the more time one spends on looking at the posts and scrolling through more of it, the lesser will be one's self-esteem, especially for people with more content to engage with on their Facebook feeds.

The use of certain predominantly image sharing platforms like Snapchat, according to Pop, Iorga and Iurcov [7], was found to be strongly positively correlated with self-esteem. The total score for self-esteem was significantly higher in men than in women, and male students appreciated themselves as being in a better state of mental health than women. In a significant

study, Andreassen et. al. [9] was able to establish that the influence of self-esteem on social media addiction is regulated by one's own emotions.

Some protective factors against getting addicted to social media are self-esteem and education level which subsequently resulted in greater satisfaction with life according to Koçak, İlme, and Younis [11]. Lee and Way [12] explained that the effects of social media depends on “who” uses it and the relation between social media use as well as chronic inflammation is mediated by self-esteem. Mann and Bloomberg [25] concluded that teenage females tend to concentrate more on interpersonal relationships as they develop their self-esteem. Saini [26] found that there is no significant correlation in self-esteem and social media. Sagar's [27] findings revealed a negative correlation between social media engagement and social connectedness as well as social media engagement and self-esteem.

Aggarwal [28] found that females tend to use social media more for body comparison and report higher body image concern, however, males showed lowered self-esteem compared to female counterparts among college and university students. Bhuvanewari [29], in a survey on high school students, found that majority of the sample use social media for 1 or 2 hours per day and 24% of the sample spend more than 2 hours daily. Majority of the students (52%) use their mobiles for sending messages to their friends and relatives. 33% of the sample use it for accessing social media. 35% of the sample use Facebook as the common social media platform.

Hence, there is a pertinent need to examine more exhaustively the appropriate linkage between social media usage and its effect particularly on one's self-esteem.

3 Method

3.1 Research Problem

The study aims to address the research gap in the Indian context (especially the northern region) of the effect of social media use on one's self-esteem. The phenomena is particularly focused on the senior secondary school students.

3.2 Objectives

- To find the relationship between social media use and self-esteem among senior secondary school students.
- To find the gender differences in social media use among senior secondary school students
- To know whether females have lower self-esteem than male school students studying in senior secondary schools located.

3.3 Hypotheses

- There would not be significant relationship between social media use and self-esteem among senior secondary school students.
- There would not be no significant gender differences in social media use among senior secondary school students.
- The females would have lower self-esteem than male school students studying in senior secondary schools located.

3.4 Research Design

The study is a non-experimental, cohort dependent, community-based study.

3.5 Nature of Data

The data is quantitative obtained through questionnaires such as SONTUS and RSES, administered with the help of Google Forms.

3.6 Tools Used

SONTUS (Social Networking Time Use Scale)

The construct validity and reliability analysis of the instrument (SONTUS) was elicited through the design of a self-rated questionnaire, and representative items from a universal pool were drawn to ensure content validity in accordance with Cronbach's, [13] recommendation on the development of a new scale. It used the following validation procedures to validate the questionnaire items: translational validity (i.e., content and face validity), factor analysis, and the reliability test of internal consistency. The first validation method used when designing SONTUS was content validity. According to DeVon et al., [14], content validity assures that the items in the questionnaire reflect the full range of the traits under examination. Although, face validity has been described as the weakest form of validity because of its subjective assessment nature as stated by Trochim [15]; it however provides insight into how the potential participants might interpret and respond to the items reported by DeVon et. al. [16].

RSES (Rosenberg Self-Esteem Scale)

The Rosenberg Self-esteem Scale (RSES) assesses how a person views himself or herself as reported by Rosenberg [17]. The scale consists of ten generic statements about oneself (e.g., "On the whole, I am content with myself") that participants must rate on a four-point Likert-type scale with anchors 0: strongly agree and 3: strongly disagree. This scale is extensively used and has demonstrated strong reliability and validity according to Rosenberg [18] and Greenberger, Chen, Dmitrieva, & Farruggia [19]. Cronbach's alpha was .73 in the Chinese translated version of the RSES scale by Hamid, Yue, and Leung [20].

3.7 Nature of Sample

The sample consists of 100 students, 50 Male and 50 female senior secondary school students studying in schools.

3.8 Inclusion Criteria

- The male and female school students studying in schools.
- Students who have expressed informed consent to participate in the study.

3.9 Exclusion Criteria

- Students not using any social media platforms.
- The male and female students not studying in schools.

3.10 Sampling Technique

Data was collected through Google forms and the sampling technique used was that of snowball sampling technique.

3.11 Data Analysis

The process of data analysis was done with the help of JASP, an open access statistical software. The data was collected with the help of Google Forms. Information from the socio-demographic form was represented in the form of pie-charts. The first hypothesis was tested through Pearson's correlation. The second and third hypotheses are tested through independent sample t-tests. The results thus obtained were tabulated in the proper format and was tested for significance using the p-values. The hypotheses were consequently rejected or accepted in accordance to the significance of the respective p-values.

3.12 Ethical Considerations

Participants have been informed about:

- The purpose of the research as well as expected duration and procedures.
- Participant's right to decline to participate and to withdraw from the research once it has started, as well as the anticipated consequences of doing so.
- Reasonably foreseeable factors that may influence their willingness to participate, such as potential risks, discomfort, or adverse effects.
- Any prospective research benefits.
- Limits of confidentiality, such as data coding, disposal, sharing and archiving, and when confidentiality must be broken.
- Who participants can contact for clarifying questions.

4 Results

Table 1. Descriptive statistics of the age of the sample.

	Age
Mean	16.23
Std. Deviation	0.55
Kurtosis	-0.22
Minimum	15
Maximum	17

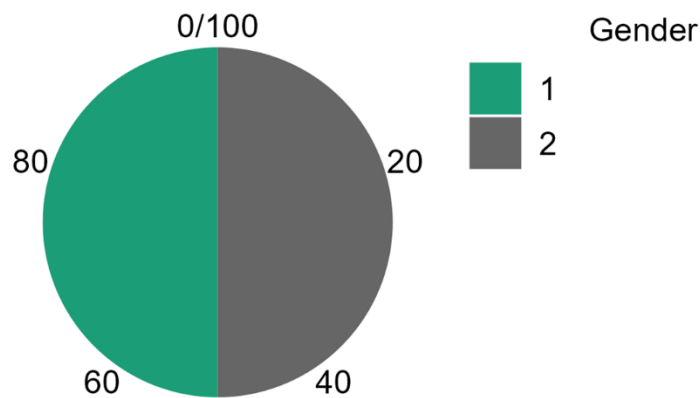


Fig. 1. Pie-chart distribution of gender of the sample.¹

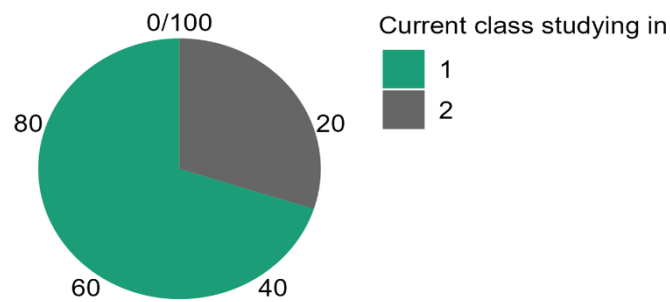


Fig. 2. Pie-chart distribution of current class of the sample.

Table 1. Pearson’s Correlation between RSES and SONTUS scales of the sample.

Variable		RSES (self-esteem)
SONTUS (social media use)	Pearson’s r	-0.128
	p-value	0.204 ²

¹ Fig.1. [1: Female, 2: Male]

² p < 0.05

Table 2. Independent samples t-test of SONTUS among male and female school students.

Variable	t	df	p
SONTUS (social media use)	-2.626	98	0.010 ³

Table 3. Independent samples t-test of RSES among male and female school students.

Variable	t	df	p
RSES (self- esteem)	0.000	98	0.500 ⁴

5 Discussion

The current study aims to understand the role of social media use on self-esteem of senior secondary school students studying in schools.

Descriptive analysis was performed for certain socio-demographic factors, such as, age, gender, current class studying in and the location of the school. Table 1 shows the descriptive statistics for the age of the sample. The mean of the age is 16.23, standard deviation is 0.55, kurtosis is -0.22, minimum age is 15 and maximum age is 17 in the collected sample. Fig. 1 shows the pie-chart distribution of the gender of the sample, which illustrates that 50% are male students and 50% are female students. Fig. 2 shows the pie-chart distribution of the current class the students are studying in, displaying that 30% are class 12 students and 70% are class 11 students.

Inferential analysis was performed for the three stated hypotheses. The first hypothesis states that there would be no significant relationship between social media use and self-esteem among senior secondary school students. Pearson's correlation was used to test this hypothesis. The correlation coefficient is found to be -0.128 at p-value of 0.204. Therefore, this hypothesis has been accepted at $p < 0.05$, which indicates that there is no significant relationship between social media use and self-esteem among senior school students. For most social media users, it has been found that there is no significant effect on their self-esteem. From the meta-analysis of Cingel et. al. [21], it was found that the true relationship between social media use and self-

³ $p < 0.05$

⁴ $p < 0.05$

esteem is specific to the person in consideration as well as particular susceptibilities and modes of social media usage.

The second hypothesis states that there would be no significant gender differences in social media use among senior secondary school students. Student's t-test for independent samples was used to test this hypothesis. The obtained t-value is -2.626, df is 98 and p-value is 0.010. Hence, this hypothesis has been rejected at $p < 0.05$, which indicates that there are significant gender differences in social media use among senior secondary school students. Further, post-hoc comparisons will reveal more information about which of the genders spend more time on social media platforms. Mazman and Usluel [22] found in their study that men use social media to form new relations while women use social media in order to maintain existing relations. According to a study conducted by the Pew Research Center [23], 61% of boys are more likely to make online friends when compared to 52% of girls.

The third hypothesis states that the females would have lower self-esteem than male school students studying in senior secondary schools. Student's t-test for independent samples was used to test this hypothesis. The obtained t-value is 0.00, df is 98 and p-value is 0.500. Hence, this hypothesis has been accepted at $p < 0.05$, which indicates that the females have lower self-esteem than male school students studying in senior secondary schools. Quatman and Watson [24] found that there are significant gender differences in self-esteem with boys differing from girls by a standard deviation of 0.22.

6 Conclusion

This study aimed to understand the role of social media use on self-esteem among Senior Secondary school students. A total of 100 participants, 50 males and 50 females gave their informed consent to participate in the study. After the data collection and subsequent analysis, it has been understood that there is no significant relationship between social media use and self-esteem among senior secondary school students, there are gender differences in social media use and females have lower self-esteem when compared to male students. The gender differences in social media use can be subjected to post-hoc comparisons in order to establish the exact nature of the difference of the particular variable in the two genders being studied. Henceforth, more relevant studies need to be conducted exploring more of the gender spectrum, covering more diverse geographical regions, and analysing more pervasive effects of using social media especially by the adolescent population.

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