

# Social media impact on psychological well-being—A cross-sectional study among the adolescents of Odisha

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## ABSTRACT

**Background:** Psychological well-being encapsulates positive dimensions, encompassing an individual's sense of mastery, autonomy, personal growth, and a profound connection with purpose and meaning in life. In the domain of mental well-being, research indicates that social media yields consequential outcomes, contributing to elevated levels of well-being, life satisfaction, and social support. The engagement of adolescents with social networking sites serves as a facilitator in fortifying existing friendships and cultivating new connections through online platforms. This, in consequence, alleviates social isolation and loneliness, thereby fostering a discernible enhancement in the mental health of adolescents. **Method:** The study was conducted among 120 undergraduate students studying in different colleges of Bhubaneswar, Odisha. The study was based on a 2 (social media use) × 2 (gender) factorial design with independent variables being the social media use (high use and low use) and gender (boys and girls) of the undergraduate students. All of the adolescents were in the age group of 17–19 years. Subjects were randomly selected from different undergraduate colleges of Bhubaneswar, Odisha. Data analysis was performed using the IBM SPSS Statistics software version 21. **Results:** The sample consisted of 120 students from different colleges of Bhubaneswar, Odisha. Comparisons of psychological well-being mean scores of subjects indicated that high social media use had higher psychological well-being than their low social media use among the counterparts. Psychological well-being scores of the boys was found to be higher than girls, indicating that boys were psychologically healthier than their girl counterparts. **Conclusion:** The finding of this study revealed that higher social media users had better perceived social support than lower social media users. Comparison of mean scores disclosed that boys and higher social media users had better psychological well-being than girls and lower social media users respectively. Social media is linked to social support and psychological well-being among the college students. This information will provide information to psychologists and public health specialist guiding their work with college students.

**Keywords:** Adolescents, psychological well-being, social media

## Introduction

Adolescence is a period of transition in terms of both physical and mental. During this phase, the adolescent develops stronger bonding with peer groups and romantic interest.<sup>[1]</sup> There is

always physiological and psychological development during this part of life, most of which expansion is now dependent on social media. These digital worlds are the ways through which billions of operators create and share contents and participate in social networking. Social media are reciprocal computer-mediated technologies that ease the construction and allocation of information, proposals, career interests and other forms of expression through virtual communities and networks.<sup>[2]</sup> These networks have occupied such a position in our lives with which we remain alive without avoiding it. In the last few years, this virtual world has grown remarkably at

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an unexpectedly rapid rate and has captured millions of users around the world. Nowadays, adolescents are being more attracted towards this virtual world. We can see that close to 92% of adolescents are active on social media. Digital presence is so important to them that the physical presence of near and dear does not matter.

Perceived social support is one's perception about whether others will offer or have offered effective help during the times of need. It generally refers to the viewed contentment, care, respect or help one individual receives from others.<sup>[3]</sup> It can be rigorously interpreted as one's conception that he/she is part of a supportive social network, whether it may be emotional, informational or companionship. Researchers have found the advantage of social media use that, it enables people to convey their thoughts and feelings and to receive social support.<sup>[4-7]</sup> Gender differences regarding the level of perceived social support have varied. In a study, it showed that males had significantly higher perception of social support compared to those females.<sup>[8]</sup>

Psychological well-being refers to positive functioning that includes one's sense of mastery and autonomy, personal growth, relatedness with purpose and meaning in life. Regarding mental well-being, social media is linked with productive consequences like increased levels of well-being<sup>[9]</sup> life satisfaction and social support.<sup>[10]</sup> Social networking sites allow adolescents to enhance bonds with existing friends and to form new friendships through online sites, which in turn helps in decreasing social isolation and loneliness, and ultimately improves mental health of the adolescents.<sup>[11]</sup> On the contrary, social media also leads to addictive behaviours, e.g., Facebook addiction, impaired academic performance, cyberbullying, feeling of envy and lower levels of well-being.<sup>[4,11]</sup> Use of social media has become an inseparable part of the everyday lives of many college students. Various researches indicate that like a double-edged sword, social media can be both beneficial and detrimental to overall well-being. Thus, there is a need to establish context-specific analysis rather than any assumption. This research is planned with the following objectives.

## Objective

1. To probe into the effect of social media use and gender on perceived social support of college students.
2. To study the role of social media use and gender on psychological well-being of college students.
3. To assess the interaction effect of social media use and gender on perceived social support and psychological well-being of college students.

## Materials and Methods

The study was based on a 2 (social media use) × 2 (gender) factorial design with independent variables being the social media use (high use and low use) and gender (boys and girls) of the

undergraduate students. The dependent measures were perceived social support and psychological well-being.

## Sample size

The sample consisted of 120 adolescents, 60 subjects in the high social media use group and 60 subjects in the low social media use group. In each group, there were 30 boys and 30 girls. All of the adolescents were in the age group of 17–19 years. Subjects were randomly selected from different undergraduate colleges of Bhubaneswar, Odisha.

## Tool for data collection

In this study, three tests were used to measure the independent variable and dependent variable, namely the perception of social media, perceived social support scale and psychological well-being scale.

### 1. Perception of Social Media Questionnaire<sup>[12]</sup>

The questionnaire consisted of 28 items, out of which 13 items were positive and 15 items were negative. These items were keyed in both the directions. The students were requested to indicate their responses on a five-point scale. The response and scoring were done like Never (0), Rarely (1), Sometimes (2), Often (3) and Almost Always (4) for positive statements and in a reverse way for the negative statements from 4 to 0. The maximum possible score of this test 112. The scale had Cronbach's alpha reliability and the content validity of 0.82 and 0.48, respectively.

### 2. Psychological Well-being Scale<sup>[13]</sup>

The scale was evolved by Sahoo that consisted of 14 items. It was a seven-point rating scale and the value of scores ranged from one to seven for each dimension. Participants were asked to circle the number that closely characterized their feelings. The higher score indicates higher psychological well-being of an individual. The scale had been pilot tested and validated. Its reliability and validity were found to be satisfactory. The split-half Cronbach alpha ranged from 0.85 to 0.92. The congruent validity was 0.87.

### 3. The Multidimensional Scale of Perceived Social Support<sup>[14]</sup>

This scale was developed by Zimet, GD *et al.*, (1988). It comprised of 12 items, and each item was rated on a seven-point scale ranging from very strongly disagree to very strongly agree; the value assigned were very strongly disagree (1), strongly disagree (2), mildly disagree (3), neutral (4), mildly agree (5), strongly agree (6), very strongly agree (7). Subjects were asked to encircle the number on the scale that best fitted for them. The higher ratings were considered to represent high social support.

## Data collection

After taking prior written permission from the principal, the researchers approached the subjects who gave consent to participate. The very purpose of the research was explained to them, and they were assured of the confidentiality of their

responses and data. Adequate amount of rapport was established, and written informed consent was taken before administering the questionnaires.

### Ethical issues

We obtained approval from the Research Committee and Institutional Ethics Committee of the Nayagarh Autonomous College, Nayagarh, Odisha.

## Results

The primary purpose of the current study was to find out the effect of social media use and gender on perceived social support and psychological well-being of the adolescent students. Test scores of both boys and girls from high usage and low usage were statistically analysed by means, standard deviations and ANOVA. Results are given below.

Results in Table 1 showed that there was a significant main effect of social media use,  $F(1, 116) = 3.79, P < .05$ . On the other hand, Gender  $F(1, 116) = 0.009, P > .05$  had no significant main effect on this variable. The interaction effect of social media use x gender was also not found to be significant on perceived social support of the subjects,  $F(1, 116) = 1.54, P > .05$ .

Mean scores in Table 2 indicated that high social media use ( $M = 63.51$ ) had better perceived social support than low social media use ( $M = 60.96$ ). However, boys ( $M = 62.41$ ) were equal to girls ( $M = 62.06$ ) on perceived social support.

Result in Table 3 showed that there was significant main effect of social media use on psychological well-being of the subjects  $F(1, 116) = 6.77, P < 0.05$ . The main effect of gender was also significant  $F(1, 116) = 7.82, P < 0.01$ . However, there was no significant social media use x gender interaction effect  $F(1, 116) = 3.18, P > 0.05$  on the psychological well-being of the subjects.

Table 4 shows the comparisons of psychological well-being mean scores of subjects indicated that high social media use ( $M = 69.91$ ) had higher psychological well-being than their low social media use ( $M = 63.91$ ) counterparts. On the other hand, the psychological well-being scores of the boys ( $M = 69.73$ ) had higher than girls ( $M = 64.10$ ) subjects, indicating that boys had greater psychological wellness and were psychologically healthier than their girl counterparts.

## Discussion

The present study intended to study the influence of use of social media and gender on perceived social support and psychological well-being of adolescents. Findings indicate that there is significant effect of social media use on perceived social support of subjects. It implies that subjects with high social media usage perceive greater social support than those who have lower usage. In Maslow's hierarchy of needs, social needs refer to the

**Table 1: ANOVA on perceived social support scores of the subjects**

Source	SS	df	MS	F
Social media	192.37	1	192.37	3.79*
Gender	0.97	1	0.97	0.009
Social media × Gender	166.25	1	166.25	1.54
Error	12463.68	116	107.44	

\* $P < 0.05$ ; \*\* $P < 0.01$

**Table 2: Mean and SD of perceived social support scores of the subjects**

Gender	Social media				Combined	
	High use		Low use		Mean	SD
	Mean	SD	Mean	SD		
Boys	62.50	11.89	62.32	10.96	62.41	11.37
Girls	64.67	10.03	59.78	8.24	62.06	9.37
Combined	63.51	11.03	60.96	9.61	62.24	10.38

**Table 3: ANOVA on psychological well-being scores of the subjects**

Source	SS	df	MS	F
Social media	825.30	1	825.30	6.77*
Gender	953.26	1	953.26	7.82**
Social media × Gender	388.12	1	388.12	3.18
Error	14133.73	116	121.84	

\* $P < 0.05$ ; \*\* $P < 0.01$

**Table 4: Mean and SD of psychological well-being scores of the subjects**

Gender	Social media				Combined	
	High use		Low use		Mean	SD
	Mean	SD	Mean	SD		
Boys	70.68	11.66	69.03	11.59	69.91	11.56
Girls	68.64	12.84	59.78	7.67	63.91	11.24
Combined	69.73	12.17	64.10	10.68	66.91	11.74

desire to make friends, intimate relationship and belongingness. Social media is fulfilling these needs to a greater extent these days, particularly for adolescents. In this technology-based society, it has become difficult to find a teenager who is not roaming in the virtual world or who has no account in any platform of social media. By having larger amounts of virtual friends, there is always someone to reply them 24 × 7. Thus, they may believe that numerous people are there to help them, and also, they can share their feelings to many. This thinking may prevent them to feel lonely and may enhance their perception of social support. Besides these, those who have higher access and are active in this digital media most of the times, they are becoming famous and well-connected with others. Making different videos, sharing it, getting likes and comments may also promote their social assistance. But low social media users don't have such virtual friend circle or social support system. With the development of advanced version of mobiles each day, people are engrossed in social networking to such extent that they don't have time for

face-to-face conversation. This may lead low users to feel lonely and to perceive low social support.<sup>[12-14]</sup>

It is found in this study that gender has no significant effect on perceived social support. It means both adolescent boys and girls are more or less similar in their perception of social support. In order to create their identity, they may open accounts on Facebook, WhatsApp, Instagram, Tinder, Snapchat, and many other forums of networking by making their profiles attractive. Apart from this, the teenagers face various emotional as well as psychological turmoil that lead to depression, anxiety and stress.<sup>[15]</sup>

Most of the boys and girls desire to make more and more friends to manifest their thoughts, feelings in front of their friends so that the negative emotions and experiences can be minimized. In this phase of life, peer relations become more important than any relations because friends make them feel a sense of acceptance and belonging. Social media provides them the biggest platform to explore themselves, express themselves and to share their thoughts and most crucially there is no body to judge them in the virtual world, which may facilitate both the genders to better perceive social support.

From the results, it was observed that high social media users had better psychological well-being than lower social media users. By getting engaged in social media for more time, adolescents may get a chance to fulfil their different needs. The web space is a channel for cathartic release which may lead to emotional gratification. When teenagers exhibit their anger, frustration and hatred towards somebody or even express viewpoints, it may control their anxiety. The need for affiliation is accomplished by various sites. Many love affairs start in these sites and sex chats may lead to the attainment of sexual desires. Due to the power of being incognito, one's religion, caste, creed, race, etc., don't have any significance that may decrease inferiority complex and enhance self-esteem and hence may satisfy power needs. The aesthetic and cognitive needs may also meet through creative articulation in blogs and literary websites and so on. Apart from the fulfilment of these needs, the sense of being updated with the passage of time may also result in better psychological well-being of those who travel to this virtual world most of the times. The result is supported by the researches done by Kim and Lee.<sup>[6]</sup> But contradictory findings are also revealed in the studies by other authors who have shown the negative impacts of social media on psychological well-being.<sup>[16]</sup>

Results also reveal that boys have better psychological well-being than girls. This is because boys may not have any restrictions on using or on duration of usage of social media. Thus, they may feel free to access any sites, to open accounts on any means of the virtual world and also may enjoy various dating sites. Due to the socialization practices in our society, boys are not encouraged to express their feelings and emotions openly. Hence, social media may be a perfect avenue for their emotional manifestation leading to better psychological well-being. On the other hand, girls may have many restrictions to access the digital media and

to create accounts on different sites. They may be often made to feel insecure that their personal information or photos will get viral in the web space which will create a bad image of them. These notions may worsen the psychological well-being of girls. There are mixed results regarding this finding. On the other hand, no significant gender difference was found in other studies.<sup>[16]</sup> Few authors have pointed out gender differences in certain dimensions of psychological well-being.<sup>[17-19]</sup>

## Conclusion

The present research is encouraging, in that social media use does appear to be linked to perceived social support and psychological well-being of college students. This contrasts with popular belief that frequently prioritizes the negative consequences of social media use on mental health, e.g., prevalence of cyberbullying, depression and anxiety. Greater knowledge concerning gender differences will assist to recognize and rectify the disparities between protective factors, facilities and opportunities for males and females. There is a need to promote optimal well-being and social support for females. The general findings of the study are important both from theoretical and practical point of view. This paper has a practical implication for formulating different life skills modules for college students' social media usage, social support and psychological well-being. The result of this study facilitates positive thinking about possible psychological intervention for boosting the well-being of college students by improving their pattern of social media use.

## Recommendation

It will also provide information to psychologists and public health specialist guiding their work with college students.

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## Conflicts of interest

There are no conflicts of interest.

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