

Research on the Impact of College Students' Mental **Health and Social Media Use on Loneliness**

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ABSTRACT

Nowadays, it is widely acknowledged that social media plays an essential role in our daily life, especially for college students, who have a high degree of demand and desire for social contact. Many studies have found that increased use of social media is associated with the deleterious outcomes of mental health, for it might lead to a sense of loneliness. This study was aimed at analyzing how loneliness caused by social media use impacts college students' mental health. Two hundred and eighty college students aged 17 to 26 from Communication University of China participated in this study by completing an online survey of the intensity of social media use, the level of loneliness and the mental health condition in November 2021. The results showed that college students' fear of disconnection was positively correlated with their intensity of social media use. In addition, most students were concerned whether somebody noticed their posts and felt depressed if there was no like or comment when they posted something on their moments. Moreover, students depressed by their unsatisfied sense of social connection tend to have a bad mental health condition. In conclusion, social media use does have an influence on college students' feelings of loneliness, impacting their mental health, which should be taken seriously.

Keywords: social media, loneliness, psychology, mental health, college students

1. INTRODUCTION

According to the past survey, the most frequently used social media for college students are Wechat, QQ and Weibo, accounting for 92.1 percent, 80.55 percent and 61.7 percent respectively. [1] However, while they acquire convenience, many of them lose the sense of connection. There is a study that has shown that despite owning lots of social media friends, people often have a feeling of loneliness. [2] For college students looking forward to responses from others, this may lead to mental health problems. [3] Therefore, this paper will focus on the following issues. First, what is the intensity of social media use among college students? Second, does social media use aggravate college students' feelings of loneliness? Third, will the feeling of loneliness of college students cause mental health problems? This paper adopts questionnaire and interview, these two methods. This study is aimed at analyzing whether the loneliness caused by social media use will affect the mental health of college students, how to avoid it and how to guide college students to improve their mental health.

2. QUESTIONNAIRE

2.1 Design of Questionnaire

This study is aimed at finding the influence of social media on the loneliness of college students. The questionnaire is composed of three parts: social media use intensity survey, social media use loneliness survey and mental health status survey. Questions related to social media use a five-point scale, with 1-5 indicating completely unfit, unfit, sometimes fit, fit, and completely fit respectively. Mental health status questions use a fourpoint scale, with 1-4 indicating never, occasionally, sometimes, and often respectively.

2.2 Participants

Three hundred eighteen participants took part in the study. There were thirty-eight participants who were excluded from the dataset for failing to finish the questionnaire. Therefore, our useable sample included two hundred eighty participants mainly from the Communication University of China. Of these



participants, 121 (43.21%) were men and 159 (56.79%) were women. In addition, most of them were undergraduates (97.14%) and the freshman, sophomore, junior, senior is 26.79%, 18.93%, 25% and 26.43% respectively.

2.3 Results

2.3.1 The intensity of social media use

Table 1 Whether Social Media Use Becomes My Life Habit:

Options	Subtotal	Percentage	
Completely unfit	8	2.86%	
Unfit	7	2.5%	
Sometimes fit	51	18.21%	
Fit	73	26.07%	
Completely fit	141	50.36%	
Total	280		

Among participants, 141 (50.36%) of them make social media use a life habit, and only 15 (5.36%) of them have the tendency of unfitness. As for the time spent on social media, 251 (84.07%) participants reported that they used more than 2 hours a day. 65 (25.9%) of them acknowledged their overuse of social media. Moreover, the number of participants, feeling a lack of connection

when they get off social media for a short while, was 177 (63.21%), and 42 of them reported a great extent sense of disconnection.

2.3.2 The level of loneliness

Table 2 I care about whether there would have responses when I send a post

Options	Subtotal	Percentage
Completely unfit	24	8.57%
Unfit	39	13.93%
Sometimes fit	88	31.43%
Fit	77	27.5%
Completely fit	52	18.57%
total	280	



Options Subtotal Percentage Completely unfit 15 6.91% Unfit 10.6% 23 Sometimes fit 94 43.32% Fit 58 26.73% Completely fit 27 12.44% Total 217

Table 3 I feel lonely when there is no response of my post

230 (82.14%) of participants acknowledged that social media can close the distance between people. However, 217 (77.5%) participants still cared about whether someone responded to their posts, 179 (82.48%) of whom may get the feeling of loneliness when no one responded. But only 27 (12.44%) of them always felt lonely. In addition, when seeing other people showing their many friends in their posts, 63 (22.5%) participants

said they might tend to compare with them and generate loneliness. Moreover, 132 (47.14%) participants had experiences turning to contacts for help in different degree, 74 (56.06%) of whom feeling lonely if they failed. But only 6 of them got that feeling all the time.

2.3.3 The mental health condition

Options Subtotal Percentage Never 87 31.07% Occasionally 97 34.64% Sometimes 26.79% 75 Often 21 7.5% Total 280

Table 4 Level of Sleeplessness

In the survey of concentration, only 28 (10%) participants admitted having difficulties in that. However, the problem of sleeplessness seems quite severe, as 193 (68.93%) participants reported their experiences of sleeplessness, 21 (7.5%) of whom always got problem

with sleeping. Turning to the sense of playing a part in their lives, 217 (77.5%) of them acknowledged such sense, while 99 (35.36%) participants reported experiences of losing self-worth from time to time.



Table 5 Feeling of Unhappiness and Depression

Options	Subtotal	Percentage
Never	67	23.93%
Occasionally	144	51.43%
Sometimes	52	18.57%
Often	17	6.07%
Total	280	

In addition, when investigating the frequency of feeling unhappiness or depression, the frequency of 144 (51.43%) participants was occasional, the frequency of 52 (18.57%) participants was sometimes, and the frequency of 17 (6.07%) participants was frequent. Furthermore, as for the frequency of losing information, 93 (33.21%) participants are occasional, 49 (17.5%) participants are occasional, and 7 (2.5%) participants are frequent. As for the frequency of nervousness, the

frequency of 133 (47.5%) people is occasional, the frequency of 66 (23.57%) people is sometimes, and the frequency of 15 (5.36%) people is often.

2.4 Analysis

2.4.1 Intensity of use and level of loneliness

Table 6 The Correlation between Intensity and Loneliness

Item	Correlation
Intensity of Social Media Use	1
Sense of Disconnection and Loneliness	0.45**

The question 'when I get off social media for a while, I feel disconnected from others' is positively associated with 'the use of social media has become my life habit'. This presents college students with high intensity of social media use are more inclined to rest their sense of

connection to social media. As a result, failing to check social media may leads to loneliness.

2.4.2 Level of loneliness and mental health

Table 7 The Correlation between Loneliness and Bad Mental Condition

Item	Correlation
Loneliness	1
Sleeplessness	0.19**
Nervousness	0.18**
Unhappiness and Depression	0.22**
Lose Confidence	0.15*



The results show that a high level of loneliness is negatively associated with mental health condition.

3. INTERVIEW

The study interviewed 6 interviewees, and 5 questions were designed to supply the results of the questionnaire.

3.1 Interviewee

2men 4women

All of them were undergraduates, called A, B, C, D, E and F.

3.2 Restatement

- 1 Did social media use affect your real-life relationships?
- C: Social media restricts our expression, so we can not know each other's facial expression, mood and tone in real time, which might leads to misunderstanding, even contrary meaning. Therefore, the accuracy of social contact loses guarantee.
- E: Due to the low cost of social contact in social media, it is easy for me to click on a post that interests me a lot and join the chatting immediately. This makes me get more difficulties in real-life social contact.
- 2 Although social media expand the scope of social contact, do you feel it is difficult to form a solid friendship in real-life? And despite staying in touch, do you still feel lonely sometimes?
- B: Exactly, social media does expand my contacts, but it seems impossible for me to insight into others through social media.
- D: Never have I contacted deeply with my net friends. I tend to contact more with friends having real-life relationships with me.
- E: I have some deep communication experiences with my net friends, but they are still not as real as real-life friends, which sometimes bring the sense of loneliness.
- F: I have a few regular, close friends, knowing whenever I send them a message I'll get a response. This makes me feel less lonely, even though I do not text them frequently.
- 3 How do you view the replies from others to your posts? Will these replies affect your loneliness?
- A: Yes, personally, I would definitely prefer to see positive feedback and might feel slightly lonely if not, but nothing serious.
- C: This does affect. First of all, the reason for posts is to show yourself to others and to get "like", which is just like doing something purposefully. If not, loneliness will occur, but mainly depends on the expectation.

- 4 What do you think of the level of loneliness among college students?
- A: Well, due to different life plans among us, I think everybody has his or her own time line, which reduce contacts among college students. Therefore, many of us feel much more lonely than ever before.
- 5 How do you alleviate loneliness caused by social media?
 - C: I would try communicating with people in real life.
- F: As for me, I tend to get off the social media, stay with myself and feel my loneliness, then I will feel less lonely than before.

3.3 Summary

The interview shows that social media use does have a significant impact on the loneliness of college students. It is mainly caused by the lacking sense of connection, for example, the gap between the expected response and the reality, and the unsatisfactory response or even no reply after the messages sent. The reasons for this phenomenon mainly include the limitation of social media expression and the lacking sense of reality.

4. DISCUSSION

4.1 Reasons for the Phenomenon

Past research has found that mental conditions would demotivate as the time spent on social media (such as Facebook) becomes longer. [4] Past data analysis also has shown the more time spent on social media, the more possibility to feel lonely. And some people even suffer from social autism. [5] Furthermore, it is the overuse and unhealthy use of social media that to great extent results in personal loneliness [6]. Not only does social media contacts be recognized as superficial connections, but it also lacks reality, promise and emotion. In a word, it reduces the quality of relationships among people. Therefore, college students will get strong sense of loneliness if they rely on social media too much. [7] Last but not least, it seems easier to meet strangers through social media than in real life. Thus, some college students may abandon their real-life relationships, which will lead to loneliness. [8]

4.2 Solution

Experts recommended that it is useful to join more real-life activities, as this may distract college students' attention to social media. [9] Hence, the intensity of social media use will become lower. Getting more involved in real life can develop self-awareness, which means college students may get to know their lives' significance and targets. Furthermore, social support is also important, so colleges and society should take their



responsibility as well. [10] They should carry out the promotion of appropriate use habits, and advocate for implementation.

5. CONCLUSION

This paper focuses on the relationship between social media use and loneliness among college students. It can be concluded that first of all, most college students have the habit of using social media every day. Many of them use it more than 2 hours a day, and over half of them use it more than they planned. Hence, social media use is common among college students and many of them have the problem of overuse. In addition, through the survey, the degree of loneliness is associated with the intensity of social media use. To be specific, college students who use social media intensively, i.e. as the primary social tool, are more likely to feel lonely than those who use social media less intensively, i.e. as an aid to real-life social contacts. Moreover, loneliness does worsen college students' mental health condition. With severe loneliness, college students tend to feel depressed and lose their selfvalue. At the same time, students with mild loneliness would not generate such emotions. As a consequence, their mental health status differs from each other, which means the mental health status of students with severe loneliness is obviously worse than those with mild loneliness. College students with worse status have higher risk suffering from mental illness.

Overall, it is not whether college students use social media or not that has the major impact on their sense of loneliness, but the intensity or habits of their use, which might further affects their mental health and even leads to mental illness. This dilemma does not mean that college students should abandon social media, nor do they need to devalue it, but they should learn to use them appropriately and correctly.

As for the limitations, firstly, data was mostly collected from undergraduate students, and the number of graduate students was too low. Future research should turn graduate students for survey. Second, the number of participants is only 280 and from almost the same college, which causes limitations of variety. Future research should collect wider range of sample. In addition, literature review is limited due to the literature retrieval ability. Hence, future research should search more literatures for study.

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