

The Impact of Social Anxiety on College Students

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Abstract. Social anxiety(SA) is a highly prevalent psychological disease. Many negative effects usually accompany SA among college students. Scholars are increasingly paying attention to this phenomenon. Therefore, the research topic of this article is the impact of SA on college students. This article adopts the literature research method by reviewing relevant information on college students' SA, classifying existing papers and academic journals, and conducting in-depth thinking around the theme of this article. Based on the analysis of the research results of scholars, it is found that the higher the level of SA among college students, the greater the dependence on mobile phones. Under certain situations, college students with SA will show a lack of flexibility in the selection of emotion regulation strategies and the frequent use of avoidance emotion regulation strategies. The research conclusion of this article is that because socially anxious individuals lack social skills and are usually accompanied by negative emotions, SA will affect college students' mobile phone dependence (MPD) and emotional regulation. Effective relief strategies can be developed by understanding the impact of SA on college students.

1 Introduction

Human beings are social animals and cannot exist apart from the group. Social ability is one of the abilities that humans must possess. In today's era, social skills are becoming more and more critical. Social skills can help people better integrate into groups and gain a foothold in society. Social skills have gradually become an important support for improving people's core competitiveness in the workplace or school. College students possessing exemplary social skills can enable them to fully demonstrate their abilities and potential in school and integrate into society more quickly in the future. However, according to the 2019 China Epidemiological Data on Mental Disorders, the annual prevalence rate of social phobia in my country is 0.4%, so there are 5.6 million individuals diagnosed with social phobia every year. Students who enter college, which is close to semi-society, face future employment pressure, pressure to rebuild their emotional system, and other pressures. College students have become a susceptible group to SA disorder. In the past ten years, the number of relevant research results by scholars on college students' SA has almost shown a linear upward trend; the number of articles published by CNKI scholars on the topic of SA among college students in 2023 is 2.05 times that of 2013, people are paying more attention to the various impacts of SA on college students. Some studies have shown that moderate SA is normal and beneficial [1]. Still, the vast majority of existing research results show that SA will have many negative impacts on college students, and in severe cases, it may even affect

the normal life of college students. Therefore, this article will use a literature review method to summarize and explore the impact of SA on college students and provide practical suggestions for preventing and reducing these influences.

2 Concept of social anxiety

Social anxiety(SA), also known as "social phobia," refers to an individual's fear of being scrutinized by others, discomfort, rapid heartbeat, nervousness during interpersonal interactions, and even physiological symptoms such as rapid heartbeat and incessant sweating. Individuals with SA usually avoid real social situations and reduce social behaviors. SA disorder is one of the most prevalent mental illnesses. It is a chronic, long-lasting condition in which high SA levels individuals may also have comorbid psychiatric disorders such as depression [2]. Li Bo et al. believed through research that the main factor for individuals with high levels of SA is shame about their behavior [3]. Peng Chunzi et al. pointed out that college students have a higher possibility of getting social anxiety than high school students, which is usually characterized by high levels of tension, self-denial anxiety, and high levels of loneliness [4].

3 The impact of social anxiety on mobile phone dependence

3.1 Chinese and international research

Mobile phone dependence (MPD), also called phone addiction, means a state of addiction in which individuals have problems with mobile phone use, and abuse of smartphones leads to psychological issues. In an era of intelligent media, mobile phones are constantly updated, becoming one of the most popular intelligent terminals. The 52nd "Statistical Report on the Development of China's Internet" published by CNNIC shows that Chinese mobile Internet users reached 1.076 billion as of June 23 [5]. Among them, the popularity of mobile phones among students is high. Students with SA use mobile phones to escape from interpersonal interactions in real situations and even indulge in the virtual world constructed by phones to relieve their loneliness. In recent years, people have begun to pay attention to the relationship between students with SA and cell phone dependence. Some scholars have conducted in-depth studies on the relationship between college students' SA and MPD, providing reference insights into the impact of college students' SA on MPD. This section will review some of the research results. Research results almost always show that SA and MPD are directly proportional to college students, and students with SA are more likely to develop phone-dependent behaviors.

A scholar (Liu Fengqi) used a questionnaire survey method to distribute online questionnaires to college students in mainland China, Hong Kong, and Macao and finally recovered 166 valid questionnaires [6]. Analyzing the recovered data, individuals learned that the CORR between mobile phone addiction and SA was $r=0.64$. It was also found that the extent of mobile phone addiction among first- and second-year college students was greatly affected by gender, with males being greater than females, and there are differences in the SA levels of college students of different grades. Among these, the SA level of boys in the first and second grades mentioned above is higher than that of girls. The research results also show that mobile phone addiction among college students can predict SA through the mediating role of emotion regulation self-efficacy.

In addition, scholar Yang Xiaoyan and others used the sampling survey method to distribute questionnaires to 952 students from three universities in Heilongjiang Province every six months for a year, three times in total. This research used a larger sample size to verify whether MPD and SA are related. The scales used in the questionnaire include the Loneliness Scale, compiled by Russell et al., the Interaction Anxiety Scale, revised by Peng Chunzi et al., and the Mobile Phone Addiction Tendency Scale, compiled by Xiong Jie et al. The r values obtained through correlation analysis of the three recycling data were 0.39, 0.44, and 0.5, respectively. The correlation between SA and MPD is substantial [7]. The conclusion is that there is a positive correlation between

SA and MPD. SA can predict MPD. People with high levels of SA will choose to use mobile phones and become addicted to the virtual world brought by smartphones to escape from real society and seek psychological satisfaction. They treat unknown or uncertain things that often carry negative emotions to deal with, and people rely more on online communication to avoid facing these things offline.

Medical students are a group that deserves extra attention among college students because their strong professionalism, compact curriculum, and high future career requirements will cause students to be generally under high pressure. Scholar Li Xinyi and others used the questionnaire survey method to distribute questionnaires to college students at Kunming Medical University and collected 821 valid questionnaires for analysis [8]. Correlation analysis of the data showed that the r value between SA and MPD was 0.36, showing a substantial positive correlation. The r -value of self-control and MPD was -0.6, and the r -value between SA and self-control was -0.3, showing a significant negative correlation. It is also found that girls have higher anxiety levels than boys, possibly because girls have more sensitive personalities. It is concluded that individuals with SA pay more attention to the "self" and are prone to suspect that others have negative evaluations of themselves and thus resist social interaction. The theory of Compensatory Internet use believes that people use mobile phones or the Internet to make up for the lack of social interaction in real life, which will cause the individual to lose social ability in the long run.

3.2 Chinese and international research analysis

Existing research results provide clear and valuable insights into the relationship between SA and mobile phone addiction. However, there are still some limitations and factors that need to be considered. The above-mentioned studies have shown that the correlation between the level of SA and the degree of dependence on mobile phones among college students is positive. Individuals with SA will rely more on mobile phone use to relieve loneliness and meet social needs. However, it should be noted that during the research process, scholars usually choose college students from a certain local school as research subjects. Most data from universities or regions may be biased and lack generality. In further research, scholars can expand the sample size and randomly select college students from different regions as research subjects to improve the credibility of the experimental results.

In addition, most of the analyzed studies used the Mobile Phone Addiction Tendency Scale for College Students (MPATS) compiled by Xiong Jie et al., which has four factors (withdrawal symptoms, mood changes, salient behaviors, and social comfort) [9]. As well as 16 items, the number of items distributed among the four factors is uneven, and there may be errors in the measurement results. In future research, the number of items can be increased and averaged to improve the scale's reliability.

Many scholars have also used the Interaction Anxiety Scale (IAS) compiled by Leary in their research. Some studies by some scholars have found that the scale is not strictly equivalent between male and female groups and does not strictly consider the impact of gender differences [10]. Caution is needed when calculating mean SA scores using this scale in the future, and in-depth research is needed to improve its stability.

At the same time, many other factors may impact MPD, such as phone usage preferences, loneliness, self-efficacy, etc. These factors can be added as mediating variables in future research to explore whether these factors will indirectly affect social interaction, anxiety, and cell phone dependence.

Although existing studies still have some limitations, they generally provide more consistent results showing that high standards of SA college students rely more on their cell phones. It provides data support for future exploration of the connection between SA and mobile phone addiction or a research basis for exploring other indirect influencing factors. In the future, scholars can use more methods when studying this topic, such as follow-up surveys and interviews, to expand the diversity of research methods and provide more comprehensive data.

4 Social anxiety affects emotional regulation in college students

4.1 Chinese and international research

Emotion regulation refers to selecting appropriate emotion regulation strategies in some specific situations. Gross believes that the emotion regulation process involves individuals changing their emotions consciously and unconsciously [11]. Thompson, R. A. believes that the characteristics of the emotion regulation process include: First, Regulating the intensity of the emotional response to enhance, maintain, or weaken a particular emotional response. Individuals face different emotional problems through emotional regulation, adapt to different situations, and better integrate into their environment. For example, individuals should show relaxed and happy emotions at a party, peaceful, calm, and serious emotions at a seminar, and sad and painful emotions at a memorial service. Second, Emotional regulation not only includes emotional self-management strategies, but the outside world also affects emotional regulation. For example, listening patiently when others are frustrated or sad can indirectly manage other people's emotions. During exam week, teachers can influence students' emotions through encouragement or strict guidance. Third, Emotion regulation sometimes affects an individual's discrete emotions and more often affects the intensity and temporal characteristics of those emotions [12]. That is, it affects the intensity of the emotion experienced, delays or immediately affects the onset of the emotion, and the range of the emotion. With the rapid development of society, people's mental

pressure is increasing. College students are faced with academic pressure, future employment pressure, marriage and love pressure, etc., resulting in some students' emotional ups and downs. College students are required to have a socially acceptable range of emotional regulation. If students' emotional fluctuations are too high, it may affect their studies and relationships. College students with SA disorder are usually considered to have higher negative emotions, and there have been few studies on the impact of SA on emotion regulation in the past. In recent years, people's attention to the relationship between SA and emotion regulation has continued to rise. The annual publication of relevant academic results on the relationship between SA and emotion regulation on CNKI has shown a fluctuating upward trend since 2012. The annual number of relevant documents published has increased from 2 in 2012 to 40 in 2023.

Werner, K.H. et al. evaluated Gross' five emotion regulation strategies (expressive suppression, situation modification, attention distribution, cognitive reappraisal, and situation selection) [13]. These five emotion regulation strategies form the emotion regulation process model, and the emotion regulation interviews used are based on this model. The study results show that socially anxious individuals report a higher frequency of expressive suppression, use situational selection more frequently than healthy individuals, exhibit high avoidance tendencies, and have lower self-efficacy in emotion regulation on verbal tasks than healthy individuals.

Daros, A.R. et al. used cell phones to conduct an experiential sampling study to evaluate their reports of the use of the emotion regulation strategy among 115 college students with varying levels of SA [14]. Based on the data, they found two types of clusters between subjects: (1) avoidant-emotional regulation strategy (including suppression and avoidance of emotional experiences) and (2) engagement-oriented emotion regulation strategy (including active participation in emotional experiences, such as cognitive reappraisal). Research reports show that when faced with strong negative emotions, socially anxious individuals are liable to use emotion avoidance strategies and less likely to use emotion regulation strategies. The anxiety levels of socially anxious individuals increase in social situations. As the level of social desire increases, socially anxious individuals are liable to use emotion regulation strategies to adapt to social situations.

Researcher Su Liyun believes there are differences between men and women when choosing emotion regulation strategies [15]. Men usually regulate their emotions by diverting their attention, such as by exercising or surfing the Internet. In contrast, women usually regulate their emotions by releasing emotional pressure, such as crying or seeking reassurance. College students in lower grades are more likely to use emotion avoidance strategies in social situations than students in higher grades. SA can also cause negative emotions in

students, which can lead to self-denial and inferiority complexes. Higher levels of SA lead to lower levels of emotional intelligence. The emotions generated by SA can also impact the cognitive and emotional regulation of college students.

Researcher Zhang Shaohua and others conducted experiments on two groups of subjects, namely 37 college students with high levels of SA and 29 with low levels of SA college students. They were shown 80 emotional pictures and asked to respond when the pictures were negative [16]. At the same time, choose two strategies to regulate emotions: cognitive reappraisal or avoidance. The results showed that when shown pictures of negative social emotions, both the high SA group and the low SA group chose to avoid them more. When shown non-social negative emotional images, both high and low SA groups chose cognitive reappraisal more than avoidance. The results indicate that individuals with high SA will behave with decreased flexibility in selecting an emotion regulation strategy only when exposed to socially relevant emotional stimuli.

4.2 Chinese and international research analysis

Most research results consistently show that college students, regardless of whether they have high or low SA levels, are more likely to choose avoidant emotion regulation strategies than healthy people. SA will bring more negative feelings to college students and will have many impacts on their academic, social, and life. Patients with SA will lack flexibility in choosing emotion regulation strategies in social situations. These research findings fill the gap in previous research on the relationship between SA and emotion regulation and provide valuable insights for research in this area, but some shortcomings remain.

Some scholars did not strictly group the topics they chose for their research. For example, they did not group men and women into groups before combining the data. There may be discrepancies in preferences for emotion regulation strategy selection between men and women. For example, women prefer implicit emotion regulation, leading to lower reliability of research findings. Therefore, in future research, scientists should take gender-related factors into account in experiments or explore them separately.

At the same time, different individuals encounter different things or are in different environments simultaneously. For example, in some research groups, there may be individuals in an excited state, or there may be individuals in a depressed mood. At some point, the data surveyed may be biased by the individual's emotional state at that time. Therefore, in future research, other variables should be controlled to reduce the influence of external factors on experimental results, such as taking multiple measurements and averaging the results after a certain period of time.

Furthermore, most studies select research subjects with SA by analyzing the SA Scale, a non-clinical

diagnosis [16], rather than individuals who are clinically diagnosed with SA. Patients with SA disorder screened by the scale may include healthy subjects, such as those who only suffer from short-term SA caused by low mood, which affects the accuracy of identifying research subjects. In future research, the researchers could consider conducting in-depth research on individuals with clinically diagnosed SA to analyze the connection between SA and emotion regulation more precisely.

5 Conclusion

This study found that SA has multiple influencing factors on college students. Among them, SA is positively related to college students' dependence on mobile phones. College students with SA tend to spend more time on their mobile phones for socializing or playing games to reduce loneliness. Acquire social needs that are not being met in reality. At the same time, socially anxious college students will show reduced flexibility in emotion regulation strategies in social-related situations or under the stimulation of negative emotions and frequently choose avoidant emotion regulation strategies, which affects college student's cognitive and emotional regulation. Therefore, it can be concluded that socially anxious college students will rely more on mobile phones, and this will affect their choice of emotion regulation strategies. The university curriculum is less compact and has more free time. At the same time, university courses and activities examine the cooperation between students, which means that college students will have more time to be in social situations, and individuals with weak social skills are prone to anxiety. At the same time, college students are approaching or reaching the marriage age, which will intensify the pressure of marriage and love to a certain extent; future employment requires students to have social skills and learn to express their thoughts. College students are more likely to suffer from SA due to various influencing factors. Patients with SA tend to have a high degree of self-doubt when socializing face-to-face, which will produce anxiety and fear of social interaction. The anonymity of the Internet allows users to speak freely, and the cost is low, making individuals with SA fall into the comfort zone of virtual scene structures. The negative emotional experience SA brings to college students will make them troubled and avoid real-life social interactions. College students with SA usually have a sense of self-esteem and inhibit expression. In face-to-face interactions, SA can make individuals nervous and less flexible in choosing emotion regulation strategies. Severe SA will affect the physical and mental health of college students, weaken their ability to express emotions and cause mobile phone addiction, which will affect students' normal life and even evolve into depression. This study shows the negative impact of SA on college students and provides a reference for future research in this area. In future research, researchers can explore aspects such as self-efficacy or prosociality to

determine the effects of SA on college students. This kind of influence can provide college students with a good social environment or carry out psychological intervention in a targeted manner.

References

1. Q. X. Wang, G. H. Jing. Ed vocation **20**, 66-67, (2010)
2. C. Y. Moutier, M. B. Stein, *J clin psychiatry* **60**(9), 4-8 (1999)
3. B. Li, J. Zhong, M. Y. Qian. *Chin ment health J.* **17**(2), 4 (2003)
4. C. Z. Peng, P. Y. Deng, H. X. Ma, B. Cheng, Q. Hu, H. H. Zhou. *Chin J health psychol.* **04**, 241-243 (2004)
5. CNNIC, The 52nd statistical report on the development of Internet in China (2023), Available online at: <https://www.cnnic.cn/n4/2023/0828/c88-10829.html>
6. F.Q. Liu. *J. Ment. Health.* **37**(1), 11-11 (2022)
7. X. Y. Yang, Y. J. Bai, Y. Y. Yu, X. Q. Wang, J. Lv, J. Q. Cao. *Chin. J. Clin. Psychol* **01**, 64-67, (2022)
8. X. Y. Li, Z. Zhang. *Psychol mon*, **01**, 16-18+25, (2021)
9. X. Jie, Z. K. Zhou, W. Chen, Z. Q. You, Z. Y. Zhai. *Chin Mental Health J*, **26**(3), 4 (2012)
10. D. B. Li, Z. F. Li, Z. Y. Wang. *Appl psychol* 1-12, (2023).
11. J. J. Gross. *Cognit & Emotion* **13**(5), 551-573 (1999)
12. R. A. Thompson. *Monogr Soc Res Child Dev* 25-52 (1994)
13. K. H. Werner, P. R. Goldin, T. M. Ball, R. G. Heimberg, J. J. Gross, *J Psychopathol Behav Assess* **33**, 346-354 (2011)
14. A. R. Daros, K. E. Daniel, M. J. Meyer, P. I. Chow, L. E. Barnes, B. A. Teachman. *Motiv & Emotion* **43**, 844-855 (2019)
15. L. Y. Su, J. H. Zhao. *University*, **20**, 87-90,(2023)
16. S. H. Zhang, B. Sang, K. Jiang, T. T. Pan, Y. Liu. *Psychol Sci* **03**, 633-641 (2021)