

Study on the Influencing Factors and Coping Strategies of College Students' Mental Health based on Social Media Environment

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Abstract: With the popularity of social media, college students' mental health is deeply affected by it. This paper aims to explore the dual impact of social media on college students' mental health, analyze its main positive and negative factors, and explore the influencing mechanism. The study found that social media plays a positive role in providing information access convenience, emotional support and learning resources, which helps to improve college students' cognitive ability and meet their emotional needs. However, problems such as information overload, social comparison and cyberbullying may trigger negative emotions such as anxiety and depression, which seriously affect mental health. This paper further analyzes the psychological and behavioral mechanisms of social media on college students' mental health, and proposes coping strategies such as improving psychological resilience, strengthening mental health education, and optimizing platform design. The study believes that the combined efforts of individuals, schools and society can effectively alleviate the negative impact of social media and promote the positive development of college students' mental health.

Keywords: Social Media; College Students; Mental Health; Influencing Factors; Coping Strategies.

1. Introduction

With the rapid development of mobile Internet technology, social media has become an indispensable part of college students' daily life, profoundly affecting their learning, social interaction and emotional expression. From WeChat, Weibo to Douyin, Bilibili, etc., these social media platforms have attracted college students to spend a lot of time every day with their powerful functions and convenient operation experience. Data show that college students are much more active on social media than other groups. They use these platforms to learn about news trends, expand their knowledge horizons, express personal opinions, and establish and maintain social connections with others. However, this highly dependent usage pattern has both a positive effect on college students' mental health and hidden potential risks that cannot be ignored. On the one hand, social media provides college students with unprecedented learning opportunities and social support through its interactivity and immediacy. College students can easily access academic resources, social information and life skills through social media, which effectively promotes their cognitive development and learning efficiency. At the same time, social media provides college students with a channel for emotional support. When facing stress, loneliness or life setbacks, they can get comfort and resonance from their peers through online interaction and enhance their psychological resilience. Especially in special periods such as the epidemic, the importance of social media to college students' psychological support and emotional regulation is more prominent. However, the negative impact of social media on college students' mental health cannot be ignored. First, information overload has become a common phenomenon. The massive information push and real-time updates of social media often make college students feel

overwhelmed. Long-term immersion in the information flow will cause anxiety, lack of concentration and other problems. Secondly, social comparison in social media also poses a threat to college students' self-identity and mental health. When college students compare themselves with the "idealized life" that has been beautified and screened on the platform, they are prone to dissatisfaction and even negative emotions such as inferiority and anxiety. In addition, cyberbullying is becoming more and more common. Some college students become targets of attack because their appearance, speech or opinions are contrary to the mainstream. This experience will cause profound trauma to mental health and may even cause serious consequences such as depression and autism.

In the critical stage when college students' psychological development has not yet fully matured, the positive and negative effects of social media are intertwined. If not guided, it may cause serious consequences. Especially in the era of rapid development of informatization and networking, how to better utilize the advantages of social media while effectively avoiding its negative effects has become an important issue of concern to all sectors of society. Research on the impact of social media on college students' mental health can not only provide scientific guidance for mental health education in colleges and universities, but also provide theoretical basis and practical solutions for the optimization design and policy formulation of social media platforms. Therefore, the research on this topic not only has important theoretical value, but also has far-reaching practical significance for improving the overall mental health level of college students and promoting social harmony.

2. The Main Factors Affecting the Mental Health of College Students through Social Media Environment

2.1. Positive Impact

Social media has shown multi-dimensional positive effects in the learning and emotional support of college students. First, social media has greatly improved the convenience of information acquisition. College students can quickly obtain learning resources, social information and practical skills knowledge through various platforms. This efficient way of information dissemination not only helps to expand students' knowledge, but also improves their ability to solve academic problems and cope with real problems. For example, many college students follow academic celebrities, attend online lectures or join study groups through social media, all of which provide solid support for their cognitive ability and academic progress. Secondly, social media plays an important role in emotional support, providing a channel for college students to alleviate loneliness and enhance their sense of belonging. Through online communication, they can easily connect with friends, classmates and even strangers, share their feelings and get emotional comfort. This peer support is particularly important when dealing with life pressure and emotional distress, especially when facing academic pressure or interpersonal relationship problems. The instant interaction and supportive feedback on social media can bring them positive psychological experience.

In addition, social media also provides a platform for college students to show themselves. Posting content, sharing achievements or showing talents on social media can help college students gain more attention and praise, thereby enhancing their self-confidence and self-worth. Especially in some group activities or public topic discussions, college students can not only enhance their influence by actively participating, but also build confidence and a sense of belonging through interaction. This participatory online experience helps promote mental health development and help college students form positive psychological expectations.

2.2. Negative Impacts

(1) Information overload and psychological fatigue

Social media is characterized by real-time updates and massive information push, but this endless flow of information often makes college students feel overwhelmed. Too much information not only occupies their time and attention, but also puts continuous pressure on their psychological state. For example, a large number of unread messages and platform notifications will cause "information anxiety", making college students feel that they must pay attention at all times to avoid missing important content. This excessive focus on the "timeliness" of information may lead to emotional tension, distraction and psychological fatigue. Especially during study or rest time, the frequent interruptions will make it difficult to concentrate, which will further reduce learning efficiency and increase anxiety.

(2) Social comparison and self-identity crisis

Social media, with its visual and emotional characteristics, amplifies social comparisons between people. These platforms are full of carefully beautified "highlight moments", such as travel photos, luxurious life or career achievements. When college students compare their daily lives with these

idealized images, they often feel that their lives are dull and unremarkable, thus falling into self-doubt or even inferiority. This psychological gap may affect their recognition of self-worth, especially when such comparison becomes a habit, which will further deepen their negative emotions and psychological distress. In the long run, this self-identity crisis may bring long-term negative psychological effects and even lead to depression or anxiety.

(3) Cyberbullying and psychological trauma

With the popularization of social media, the problem of cyberbullying has become increasingly prominent. Some college students may become targets of cyberbullying, such as malicious attacks, public humiliation or slander, because their appearance, views or behaviors are contrary to mainstream values. This kind of cyberattack against individuals not only seriously damages their self-esteem, but may also lead to psychological problems such as isolation, anxiety and even depression. Some victims may choose to close their social media accounts or even develop a fear of social networks, affecting their normal study and life. Cyberbullying may also lead to the accumulation of psychological trauma, making college students more cautious or withdrawn in future interpersonal interactions. In addition, due to the publicity and diffusion of cyber attacks, victims often need longer to get out of the shadow, and the long-term impact on their mental health cannot be ignored.

(4) Social media addiction and time management issues

Another negative impact that cannot be ignored is social media addiction. Some college students are overly dependent on social media, viewing it as their main form of entertainment and social interaction, and even have difficulty controlling their usage time. This addictive behavior not only takes up study time, but can also lead to lack of sleep and circadian rhythm disorders, ultimately dealing a double blow to their physical and mental health. Especially during exams, excessive use of social media can further exacerbate anxiety and make it difficult for them to focus on their study tasks. This vicious cycle can significantly reduce the overall quality of life of college students.

In summary, the positive and negative effects of social media on college students' mental health coexist. While enjoying the convenience and support brought by social media, college students must also be wary of its potential negative effects and learn to use these tools rationally to maintain a balanced development of mental health.

3. The Underlying Mechanism of Social Media's Impact on Mental Health

3.1. Psychological Mechanism

Content on social media often triggers emotional contagion. Positive content (such as inspiring stories or supportive comments) can convey positive energy and help alleviate negative emotions; but negative content (such as sad events or angry discussions) may trigger anxiety or depression. In addition, empathetic interactions on social media make college students more likely to empathize with the emotions of others. However, while this empathy effect brings positive feelings when helping others, it may also increase emotional burden due to excessive sympathy for others' problems. College students are at a stage where they have a high need for social connections, and social media strengthens the satisfaction of a sense of belonging through mechanisms such as likes, comments, and attention. Continuous interaction will

cause college students to develop a certain psychological dependence, and even regard social media as the main way to gain a sense of identity. However, once this dependence becomes too strong, it may lead to oversensitivity and fear of being ignored ("social phobia"), thereby increasing psychological pressure.

3.2. Behavioral Mechanism

Research shows that the time and frequency of social media use are directly related to mental health. Moderate use of social media can enhance happiness and satisfaction, but long-term and high-frequency use may lead to mental fatigue and distraction. Especially when the use time encroaches on study or rest, it is easy to cause anxiety and guilt. Over-reliance on social media often disrupts college students' daily routines. For example, the habit of browsing the phone late at night will shorten sleep time and reduce sleep quality, leading to fatigue and emotional instability. In addition, long-term use of electronic devices will interfere with the secretion of melatonin, further affecting sleep. This vicious cycle will eventually have a negative impact on mental health.

In summary, the impact of social media on college students' mental health is not only reflected in the surface use behavior, but also deeply rooted in their psychological needs and emotional responses. Understanding these internal mechanisms is of great significance for formulating scientific intervention measures.

4. Coping Strategies to Improve College Students' Mental Health

4.1. Personal Level

First, improve psychological resilience and self-regulation ability, enhance emotional management ability and stress resistance by participating in mental health lectures or psychological training courses, learn to actively adjust your mindset when facing challenges, and reduce the negative emotions brought by social media. Secondly, learn to treat the content and comments of social media rationally, cultivate critical thinking ability, and rationally look at the "highlight moments" on social media, avoiding blind comparisons or being influenced by negative comments. College students should realize that the life display on social media is not a complete presentation of reality, and should pay more attention to self-growth and intrinsic value.

4.2. School Level

First, increase mental health education courses, popularize knowledge on the use of social media, include mental health education in compulsory courses, combine the characteristics of social media, and teach students how to use social media scientifically to avoid its adverse effects on mental health. Secondly, provide mental health consultation and counseling services, set up psychological counseling rooms, provide professional psychological counseling, pay attention to students who suffer from psychological pressure due to social media problems, and promote students' positive interaction and emotional support through group psychological activities.

4.3. Social and Technical Aspects

First, optimize the content recommendation algorithm and

reduce the push of negative information. Social media platforms should assume social responsibility, optimize the recommendation mechanism through technical means, give priority to pushing positive energy content, and reduce controversial, extreme and negative emotional content to help users build a positive online environment. Second, strengthen the supervision of cyber violence: by improving relevant laws and regulations, increase the punishment of cyber bullying, provide legal aid to victims, purify the social media environment, and protect college students from bad information and cyber violence.

Through the collaborative efforts of individuals, schools and society, the mental health of college students can be effectively improved, helping them to better adapt and develop in the social media environment.

5. Conclusion

This study explored the dual impact of social media on college students' mental health, analyzed its positive and negative factors, and revealed its complex role in mental health. Social media has played a positive role in providing information access convenience and emotional support, but problems such as information overload, social comparison and cyber bullying pose a threat to college students' mental health. The study also explored the internal mechanism of social media's impact on mental health, including emotional contagion, belonging needs, and the association between usage behavior and mental health. Based on these findings, the study proposed a series of coping strategies at the individual, school and social levels, emphasizing the reduction of the negative impact of social media by improving psychological resilience, increasing mental health education and optimizing platform content recommendation algorithms. Although this study has limitations in the scope of data sampling and focuses mainly on short-term effects, it provides a theoretical basis for further in-depth exploration of the long-term impact of social media in the future. In general, this study provides valuable references for mental health education and social media platform design in colleges and universities, and proposes practical strategies for improving the mental health of college students.

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