

The Impact of Excessive Reliance on Social Media on Teenagers' Social Anxiety and Well-being

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Abstract:

With the increasing functionality of social media, it has now become an integral part of people's lives. Compared with traditional social interaction methods, the new era of social media makes it easier for people to communicate with others, facilitating economic development and academic research. However, at the same time, it has brought many negative impacts. Many people have developed a serious dependence on social media, especially among the youth. They are immersed in the virtual online world, with their emotions being affected by the praise or criticism of strangers, which seriously affects their mental health. Therefore, this study delves into the relationship between excessive use of social media by teenagers and social anxiety and happiness, aiming to explore the path to balance the use of social media and mental health. The research results show that social media has a dual impact on the psychology of teenagers. Meanwhile, the differences in platform functions and usage scenarios will lead to different influences. Therefore, as parents, teachers or the whole society, people should deeply understand the emotional needs and social predicaments behind teenagers' addiction to social media and take corresponding measures to save them.

Keywords: Social media; social anxiety; well-being; teenager.

1. Introduction

With the development of the Internet, social media has gradually become an indispensable part of teenagers' study and life. According to data from the China Internet Network Information Center, the number of users of social media has exceeded 1 billion, and

more than 60% of them are young people [1]. Teenagers can accomplish many things through social media, such as entertainment, study and so on. Especially during the COVID-19 pandemic, teenagers studied at home, communicating with teachers and classmates through Wechat, and searching for information and completing homework with the help of

other software, such as online conferencing tools and educational platforms. Without social media, students would face considerable inconvenience in both study and daily life. However, while social media brings great convenience, some negative impacts also follow. An increasing number of teenagers are experiencing symptoms of social anxiety. They long for others' attention and praise to find their own value. This leads to an increasing number of teenagers strongly binding their self-worth with others' evaluations. However, the more so, the more likely they are to lose their own value, causing anxiety, diminishing life satisfaction, and reducing their sense of happiness.

2. Introduction to the Research Subjects

2.1 Social Media and the Degree of Over-reliance

Social media refers to a kind of website and technology through which users engage in all kinds of social interaction activities such as communication, sharing, open discussion and evaluation, and in the process of interaction, meet the needs of "building relationships" or "exerting influence" [2]. In the field of the Internet, content creation and exchange platforms based on user associations are called social media. On this platform, users can express their personal opinions, viewpoints and views in various forms such as videos, audios, pictures and texts. Social media forms are quite diverse. Common ones such as Wechat, Weibo, forums and blogs all fall under the category of social media. The main function of social media is to provide users with an open and diverse interactive space [3].

The definition of the degree of dependence is also gradually improving. Domestic scholars have investigated the frequency and dependence of college students on new social media from the perspectives of communication studies and education. Nearly 10% of college students spend as much as 3 to 4 hours a day on social networking sites. Wang Chongzhong pointed out in his research on the dependence on social media that they report compulsive tendencies to open social media and refresh content repeatedly. The proportion of students looking forward to new updates is the largest, accounting for 20%, which shows that college students are highly dependent on social media [4]. At present, a considerable number of investigations and studies have been conducted on the frequency and dependence of college students on social media, all of which suggest that college students are highly dependent on social media. The research team led by Zhou from the

School of Psychology and Cognitive Science at Peking University pointed out that social media addiction refers to an individual is maladaptive psychological dependence on social media platforms reaching the level of behavioral addiction, which includes six core symptoms: significance, emotion regulation, tolerance, withdrawal, conflict and recurrence [5].

2.2 Concepts and Manifestations of Social Anxiety

The concept of "social anxiety" emerged with Casper's report of "red terror" in 1846, mostly referring to the psychological states such as tension, worry and fear that people experience during social interaction. With the development of social media, many aspects of offline life have shifted online, and social media has become a platform for people is social communication and self-expression. The anonymity, immediacy and wide reach of social media make online social anxiety more complex compared to face-to-face social anxiety. Therefore, the concept dimension of online social anxiety has been broadened. Against this backdrop, online social anxiety is receiving significant attention from the academic community. Davidson and other scholars have discovered that online social interaction may give rise to a novel form of anxiety phenomenon, namely 'online social anxiety', which refers to the negative emotions such as tension and avoidance perceived by individuals during the use of online social media. The specific manifestations can be summarized into several aspects, including privacy concerns (fear of personal data exposure), interaction anxiety (discomfort in online exchanges), and negative evaluation anxiety (fear of criticism). Hong et al. from the University of Hong Kong proposed that online social anxiety is a kind of state anxiety, mainly referring to the negative emotions felt by individuals during the process of online communication. Subsequently, the academic community conducted specific research on different social media platforms [6]. For instance, McCord et al. defined "Facebook social anxiety" as the sense of anxiety that arises when using Facebook [7]; Lin Gongcheng et al. proposed "Weibo social anxiety" in their research on Weibo users, regarding it as the tension and unease that users feel due to the fear of receiving negative evaluations on Weibo [8]. Zhu Yang, Fang Guoyang and Wang Sujun defined "wechat social anxiety" as the emotional experiences such as worry, tension, fear and dread formed by individuals through social interaction via wechat [9]. Wen Xiangli et al., based on the comprehensive research of predecessors, proposed the concept of online social anxiety, arguing that it is the anxiety experienced by people when interacting in the context of

social networks. Chen Bizhong et al., on the other hand, conducted a more in-depth analysis of the connotation of online social anxiety, which is manifested as privacy concerns, interaction anxiety, and fear of negative evaluations. These are all the interpersonal challenges such as heightened tension, fear of rejection, and avoidance behaviors that individuals perceive in social media interactions [10].

2.3 The Concept of Happiness

Subjective well-being usually refers to an individual's overall perception and evaluation of their own living conditions or specific areas of life. As a multi-factor construct, it mainly includes cognitive judgment of overall life satisfaction, as well as emotional assessment of positive and negative feelings. Since the different dimensions of this concept (such as life satisfaction, positive emotions, and negative emotions) reflect a person's subjective view of life experiences, happiness is often conceptualized as subjective well-being.

3. The Impact of Excessive Reliance on Social Media on Teenagers' Social Anxiety

Before the research began, Li Qinqin employed a mixed-method approach, combining questionnaires with interviews, thus strictly limiting the final research subjects to full-time college students and setting the research scenario on the Tiktok app. College students of different genders, grades and career changes are all active users of Tiktok. 74.77% of the research subjects have been active on Tiktok for more than half a year. Through the initial questionnaire survey, it was found that college student users have high stickiness, and their main purposes of using Tiktok are entertainment and killing time. Subsequently, through in-depth interviews, the key word "information" was captured. The group of college students is in full swing

In an information-intensive environment - "information cocoon" and "information explosion". In such an environment, social media platforms like Tiktok have exacerbated issues such as information overload and social comparison. For instance, the pressure of being peeped into one's life by friends of the same age or relatives and friends through social media, or the self-doubt triggered by the desire for others' recognition, praise and appreciation. However, most college students merely regard it as a temporary situation and have never systematically sought solutions.

Based on these, Li Qinqin grounded the study in social

comparison theory, which emphasizes both upward and downward comparisons. The study also drew on self-presentation theory, which focuses on how individuals manage impressions online. Based on these theoretical foundations, Li Qinqin adopted a mixed-method approach that primarily relies on quantitative analysis and is supplemented by qualitative analysis. The aim was to analyze the online social anxiety that college students experience when using social media and to explore its root causes. In terms of variable design, college students on Tiktok use behavior and interaction methods as independent variables, online social anxiety as the dependent variable, and set the responses to fluctuate between 1 and 5 to quantify their anxiety levels. The higher the score, the higher the anxiety level. In the practical process, convenient sampling was adopted. Paper and electronic questionnaires were distributed to five universities including Wuhan University and Huazhong University of Science and Technology, and 628 valid samples were retrieved, with a balanced distribution of gender and grade levels. Subsequently, the data were analyzed and processed using SPSS. Finally, it is concluded that social anxiety is widespread among college students, with the value ranging from 3 to 4. The anxiety among them is presented in multiple dimensions, with relatively high values in privacy concerns, content sharing, interaction anxiety, and self-evaluation anxiety. Meanwhile, Tiktok usage behavior has a differentiated impact on online social anxiety. Passive browsing duration is positively correlated with online social anxiety, while active creation is negatively correlated with online social anxiety. Silent interaction is more likely to cause anxiety than active interaction. Li Qinqin also put forward some practical suggestions at the end. For instance, colleges and universities can guide college students to reduce their passive use of Tiktok, encourage them to create actively and interact positively, and thereby alleviate the anxiety of online social interaction [11].

Zhang Shiyun & Cheng Xiao. focused the research subjects on adolescents aged 12 to 18, which is distinct from college students and adult users. This group is in adolescence, with unstable self-identity. Their main motivations for using short videos and social tools are "peer socializing" and "entertainment". Parents have strong control over the duration of use, but psychologically, they pay more attention to "social image" than adults, and social anxiety is often accompanied by 'self-worth denial', referring to feelings of inadequacy and diminished self-esteem. Therefore, Zhang Shiyun and Cheng Xiao, based on the "social econometric theory" of self-esteem (self-esteem reflects social acceptance), adopted the cross-sectional survey method. In terms of setting variables, the intensity of social media usage is set as the independent variable,

which is further divided into three aspects: “usage duration”, “usage frequency”, and “proportion of passive usage”, while social anxiety is set as the dependent variable. During the practical process, the study cooperated with three junior high schools and senior high schools. Through the distribution of questionnaires by class teachers, 512 valid samples were collected. Among them, the ratio of male to female students was approximately 1:1, and the grade distribution was even. Subsequently, data analysis was conducted using SPSS and AMOS to explore the core correlation between social media usage and adolescent psychology. The proportion of passive use of social media is positively correlated with social anxiety. The passive use of social media among high school students (aged 16-18) is more strongly associated with anxiety, possibly due to stricter self-evaluation standards, while that of junior high school students (aged 12-15) is weaker [12].

This study focuses on adult users across various social media platforms, providing a useful contrast to adolescent samples. It recruits research subjects with basic social media usage habits through online questionnaires, without any age or platform restrictions. This study takes the Cognitive Dissonance Theory as the core framework and adopts the quantitative cross-sectional survey method. The three dimensions of cognitive dissonance were set as independent variables, including attitudinal and behavioral inconsistency, cognitive conflict and information overload. The “discomfort” caused by social media posts was set as the dependent variable. The mature Emotion Scale was adapted, with a scoring range of 1 to 7 points. The control variables were the frequency of social media use, gender, age, etc. During the practical process, questionnaires were distributed through the online survey platform (MTurk), and ultimately over 400 valid samples were collected. Subsequently, data analysis was conducted using SPSS and AMOS, and it was concluded that cognitive dissonance, including attitudinal inconsistency and information overload, is the core driving factor for the “discomfort” caused by social media posts. Finally, the researchers also provided practical inspirations. Social media platforms can reduce users’ cognitive dissonance by decreasing the concentrated push of content with opposing viewpoints, thereby alleviating negative emotions. Analyze the mechanism by which excessive dependence triggers social anxiety, explore influencing factors such as cyberbullying, and present the results of empirical research like questionnaires [13].

The samples of this study were recruited in two batches. The first batch consisted of ordinary adult social media users, and the second batch included users with a history of social anxiety, who frequently used social media and exhibited online safety-seeking behavior. This study is

based on the “maintenance mechanism” (avoidance-reinforcement model) of social anxiety. Based on online survey, the mature scale LSAS-SR (Liebowitz Social Anxiety Scale-Self Report) was used to simultaneously measure the “level of social anxiety” and “offline social function”. Subsequently, through correlation analysis and multiple regression analysis, To examine the relationship between online safety-seeking behavior and social anxiety as well as offline social function, and to verify the discriminant validity of the scale through inter-group comparisons. Ultimately, it is concluded that online safety-seeking behavior is strongly positively correlated with the level of social anxiety and negatively correlated with offline social functions [14].

These four studies all revolve around “social media usage and users’ adverse psychological outcomes”, and there are many commonalities in terms of research logic, methods and theories. Firstly, at the level of research fields and theoretical foundations, all four studies focus on the intersection of “social media - psychology”, relying on the framework of social psychology. Jeong uses the theory of cognitive dissonance, Kamalou used the social anxiety maintenance model, Li Qinqin uses the theory of social comparison and self-presentation, and Zhang Shiyun et al. uses the social measurement theory of self-esteem. Avoid “empirical research without theoretical support”. Secondly, at the level of research subjects, regardless of whether they are adult users or college students and teenagers, all four studies selected groups that frequently use social media and all took into account the demographic balance of the samples, reducing the interference of sampling bias on the results. Thirdly, at the research method level, all four studies mainly conducted quantitative surveys, with effective sample sizes ranging from over 200 (Kamalou) to over 600 (Li Qinqin), which met the sample size requirements for quantitative research in social sciences. Subsequently, they all relied on scales and statistical models to analyze the data. The core methods were consistent, ensuring the operability of the data. At the same time, statistical software such as SPSS and AMOS were used to assist in the research. Fourth, in terms of research conclusions, all four studies point to the potential negative impacts of social media usage, emphasizing “differences in usage patterns”, and simultaneously revealing “intermediate mechanisms”, such as Jeong is “cognitive dissonance”, Li Qinqin is “social comparison”, and Zhang Shiyun is “self-esteem”, indicating that the influence of social media on psychology is not a “direct effect”. Instead, it is passed through an intermediate variable.

Although these four studies are of high quality, they still share common limitations and have their own specific deficiencies. First, the causal relationship cannot be deter-

mined. All four studies were cross-sectional studies and could not verify the “causal direction”. For instance, Li Qinqin found that “passive use of Tiktok has been positively correlated with online anxiety”, but she was unable to determine whether “passive use leads to anxiety” or “anxious users are more inclined to passively use Tiktok (avoiding active social interaction)”. The “self-esteem mediating effect” proposed by Zhang Shiyun et al. Cannot rule out the reverse causal possibility that “users with low self-esteem are more likely to passively use social media”. Second, the representativeness of the sample is limited. The samples of Kamalou and Jeong are adult users from the West. Li Qinqin only covers college students from universities in Wuhan and its surrounding areas. Zhang Shiyun only targets teenagers from three middle schools. Neither of them can be extended to users of all age groups or all cultural backgrounds. Thirdly, the portrayal of “social media usage behavior” remains rough. For instance, the measurement of “usage behavior” still remains at the level of “duration, frequency, and type”, without distinguishing “content type” or measuring “usage motivation”. Fourth, ignoring the impact of “technical features” on psychology and overly focusing on “user behavior” leads to a monotonous perspective. None of the four studies focused on the direct impact of the platform technical characteristics of social media on cognition. For instance, Tiktok is “infinite descent” algorithm might increase the duration of passive use, but Li Qinqin did not include “algorithmic exposure frequency” as a variable. The “public display of likes” on social platforms may enhance social comparison, but Zhang Shiyun and others have not taken into account the regulatory role of this technical feature. The reverse influence from “psychology” to “behavior” was overlooked, such as how anxious users actively choose their usage methods, lacking a dynamic perspective of “two-way interaction”.

4. The Impact of Excessive Reliance on Social Media on Teenagers’ Happiness

This study selected 370 students from a comprehensive university in Anhui Province through random sampling and focused on Chinese college students, including 43. 9% male and 56. 1% female. Undergraduate students 65. 7%, postgraduate students 34. 3%. Subsequently, 400 questionnaires were distributed through random sampling and stratified sampling. Based on the 5-point Likert score of the Bergen Social Media Addiction Scale and the rule that “the higher the score, the lower the happiness”, 224 people (60. 5%) with scores of at least 6 questions ≥ 3 points were classified as the addiction group based on the Bergen

Social Media Addiction Scale criteria. The remaining 146 people were classified as the non-addiction group (39. 5%). After collection, common method bias test, descriptive statistics and correlation analysis were conducted using SPSS 22. 0. Ultimately, it is concluded that social use has a positive impact on subjective well-being, while social media addiction has a negative impact on subjective well-being [15].

This study focused on female smartphone users aged 20 to 39 in South Korea. Two longitudinal surveys were conducted, with the frequency of seven types of social media usage as independent variables and relative well-being, overall well-being, and life satisfaction as dependent variables, to examine the causal path from social media usage to social comparison to well-being. Ultimately, it is concluded that social comparison only has a significant negative predictive effect on relative well-being and has no impact on overall well-being or life satisfaction [16].

The data of this study is from the “Health Behavior Survey of School-Aged Children (HBSC)”, with 58, 976 samples covering early, middle and late adolescence. The average age is 13. 6 years old. 8. 95% of the respondents are users of problematic social media, and 5. 8% have a happiness level below the medium level. During the data collection stage, a cross-sectional survey was adopted, with problem-based social media usage (PSMU) set as the independent variable and happiness as the dependent variable. Subsequently, path analysis was conducted using Mplus 8. 0 and multiple group analyses were carried out. Ultimately, it is concluded that sleep difficulties and physical activity indirectly affect happiness. Women are more sensitive to PSMU, and screen time has a negative impact on happiness [17].

The subjects of this study focused on five Chinese college students of different grades and genders, with an average age of 19 and an average daily social media usage of 5. 6 hours who were interviewed with small samples in depth, focusing on individual subjective experiences and emphasizing the “essence of experience” and “contextual association”. In the receipt data stage, semi-structured interviews were adopted, divided into two rounds, each round lasting 20 to 35 minutes, totaling 10 interviews. The interview outline includes nine core questions such as usage duration, purpose, psychological changes, and social comparison experience. Eventually, four core themes were identified, all reflecting the two-way impact of social media on happiness. For instance, social media helps students post original content, connect with interest groups, and gain a sense of achievement after being recognized by strangers, thereby enhancing their self-identity and sense of happiness. However, at the same time, the “idealized life display” on the platform triggers passive upward com-

parisons, leading to anxiety and a decrease in self-worth [18].

All four articles break through the simple conclusion that “social media has a single positive or negative impact on happiness”, focusing on mediating variables (Social comparison, addiction, sleep, physical activity) and boundary conditions, and exploring the “association mechanism between social media and happiness”. First, during the research process, all four studies focused on the types and platform differences of usage. For example, Zhao L divided it into social and entertainment usage, Chae J divided it into different platforms, Zhang J and others divided it into problem-based and non-problem-based usage, and Xu Y and others divided it into active and passive usage. Second, in terms of the research population, all four studies selected young people who frequently use social media. This is because this group is the core group dependent on social media, and their happiness is easily affected by factors such as social evaluation and identity construction. The conclusions of the studies are more targeted for mental health intervention among teenagers.

At the same time, the four studies also have four shortcomings. First, the representativeness of the sample is limited. Zhao and L only studied one university in Anhui Province. Chae J is research subjects were only Korean women. Zhang J was only in Italy. Xu Y only focused on five people from a certain university in China. Samples from multiple countries or regions were not covered. The conclusion may be affected by cultural context and is difficult to be promoted across cultures. Second, cross-sectional analysis is dominant, and causal inference is weak. Except for the study of Chae J, the other three were all cross-sectional studies that merely captured the association at a certain point in time and could not determine the causal direction of “social media use to happiness”. Moreover, the longitudinal interval of Chae J is study was only one month, making it difficult to test the long-term effect. Thirdly, the measurement of some variables is relatively simple. For example, Zhang J is physical activity does not distinguish the intensity, sleep difficulties do not distinguish the degree of difficulty in falling asleep or the duration of sleep, which may lead to the omission of other dimensions. Fourth, the application scenarios of the research conclusions are limited. The quantitative studies of Zhao, L, Chae J and Zhan J focused on “variable association” and did not propose specific intervention strategies, such as how to guide adolescents to “use moderately”, while Xu Y is qualitative study mentioned “moderation strategies”, but the sample size was small and could not be generalized. Moreover, none of the four studies took into account “special scenarios”. For instance, although Zhao and L mentioned that the duration of online teaching

usage increased due to the COVID-19 pandemic, they did not analyze the moderating effect of the pandemic on the “usage to happiness” path. The research of Chae J and Zhang J is insufficiently combined with the current characteristics of media technology.

5. Suggestions

From the perspectives of family, school and society, methods are respectively provided to guide teenagers to use social media correctly, alleviate social anxiety and enhance their sense of happiness.

Based on the above research literature on the theme of social media usage and teenagers’ social anxiety and happiness, the following overall conclusion can be drawn. First, the use of social media has a significant two-way impact on the psychology of teenagers. On the one hand, there is a positive impact. Functional uses such as social connection, information acquisition, and identity building can enhance happiness. The use of social media can enhance self-identity and social connections. For instance, Xu Y is research concluded that ‘college students maintain emotional support from afar through social media and gain a sense of achievement by participating in interest groups’, and Jin Sijie discovered such phenomena as ‘students use private domain platforms like WeChat to conduct academic communication’. Through Li Qinqin is research, it can also be concluded that the content creation and interaction functions of platforms like Tiktok can provide teenagers with channels for self-expression and enhance their sense of self-worth. On the other hand, there are negative impacts. Non-functional uses such as entertainment addiction, passive comparison, and problematic use can easily lead to social anxiety and a decrease in happiness. From the perspective of social anxiety, the negative evaluation anxiety mentioned by Jin Shiji and Zhao L, the privacy concerns mentioned by Zhao L and Li Qinqin, and the sense of relative deprivation mentioned by Li Qinqin are all core manifestations. Among them, “negative evaluation anxiety” is the most prevalent among the youth group, and the idealized content push on platforms such as Tiktok can also intensify anxiety through “upward social comparison”. From the perspective of happiness inhibition, problematic social media use indirectly reduces happiness by disrupting lifestyle habits such as sleep and physical activity (Zhang J), causing addiction (Jin Shiji), and intensifying social comparison (Chae J). Women and older adolescents are more sensitive to this negative impact. The differences in the functions and usage scenarios of the second platform lead to different impacts. First of all, various platforms are classified into private domain platforms, public domain platforms and information platforms based

on their different functions. Taking wechat and QQ as examples, private domain platforms mainly focus on strong relationship socializing, with clear privacy boundaries and low anxiety over negative evaluations. Social uses such as contacting friends and academic communication can all enhance happiness. Public domain platforms represented by Tiktok and Instagram mainly focus on weak relationship socializing, and their content display tends to be idealized, which can easily lead to social comparison and evaluation anxiety. Information platforms mainly focus on news dissemination and have the weakest inducing effect on anxiety. Secondly, there are differences in usage scenarios. According to the research of Xu Y and Li Qinqin, active use such as posting content and interactive communication often brings positive psychological experiences, while passive use is prone to cause anxiety and a decrease in happiness. Thirdly, the teenage group shows contradictions in the use of social media from several perspectives. This is an inevitable outcome when they use their immature hearts to handle an extremely complex social tool during their growth process. They are both eager to show themselves off and hope to receive others' praise and compliments, yet they are also afraid of exposing their imperfect aspects. As Xu Y pointed out, most young people recognize the importance of "moderate use", but the algorithmic recommendations of the platform lead to addiction. The effect of the restraint strategies such as uninstalling software and physical isolation adopted is very limited.

Therefore, as parents, teachers or people from all walks of life, people should not simply regard teenagers as addicted users but recognize the underlying emotional and social needs. First, the family is the core source of psychological security for teenagers. Therefore, from the perspective of the family, parents should collaboratively formulate rules with teenagers, such as setting daily time limits and defining functional versus non-functional use. For example 30 minutes a day for contacting friends and academic communication, and marking the time limit of "non-functional use", such as prohibiting the viewing of short videos two hours before going to bed. At the same time, parents should increase "family time", for instance, having a family outdoor activity once a week, so as to reduce teenagers' emotional dependence on social media. When teenagers feel anxious due to social media, parents should communicate actively with them, listen patiently to their thoughts, and conduct rational analysis and education to help them overcome the challenges of social media-induced anxiety. Second, schools need to incorporate social media mental health education into curricula, for example through workshops and case-based teaching. Schools can offer more courses on "Media Literacy and

Psychological Adjustment", and combine case teaching to enable students to fully understand the relationship among them. At the same time, precise intervention can be carried out for different student groups, and more diverse offline activities, such as sports events, art clubs, and volunteer programs, can be organized to provide real social scenarios for teenagers, thereby reducing their reliance on virtual social interaction. Thirdly, society needs to create a healthy media environment for teenagers. Relevant departments should enhance platform supervision by enforcing youth protection policies and monitoring algorithmic recommendations, urge social media platforms to implement the "youth mode", which restricts late-night use and filters harmful content, and reduce the recommendation of non-functional content by algorithms. At the same time, relying on communities and youth activity centers to provide accessible counseling services and peer support programs.

'Social Media Mental Health counseling points' are set up to provide free psychological assessment and counseling services.

6. Conclusion

Although several studies have well demonstrated the relationship between social media usage and social anxiety as well as happiness, there are still limitations. Firstly, several studies have limitations in sample selection due to geographical and cultural singleness. For example, Zhao L only selected 370 college students from a comprehensive university in Anhui Province, and none of them conducted cross-border and cross-cultural comparisons. And the representativeness of the selected groups is insufficient. Most studies focus on college students aged 17-24. Only Zhang involves adolescents aged 10. 5-16. 5, so it is impossible to fully present the psychological characteristics of adolescents across all age groups. Meanwhile, due to the fact that left-behind children and children with a history of mental illness need to be referred to special education institutions and community welfare systems, the difficulty in obtaining samples is relatively high. Moreover, professional ethical review and privacy protection measures are required, which increases the research cost. Therefore, this group of people was not included in the research scope. Secondly, there are loopholes in the research design. For instance, several studies failed to distinguish the specific differences between "active use" and "passive use".

Looking to the future, research on this issue should focus more on cross-cultural fields and implement long-term tracking. Researchers can select samples of teenagers from different cultural backgrounds for comparative analysis, and combine cultural psychology theories to explore

the relationship between social media and psychology. At the same time, the tracking period should be extended, with multiple time nodes (e. g. , 1 year, 3 years, 5 years) to assess long-term cumulative effects, with a focus on the long-term cumulative psychological effects of social media use, including changes in anxiety trajectories and well-being development.

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