

The Influence of Teenagers' Subtle Social Media Interactions on Self-Identity and Psychological Well-Being

Linzhe Dai

*Tian Bridge International, Tianyuan College, Hangzhou, China
emaildailinzhe2008@outlook.com*

Abstract. In the digital age, social media has become an indispensable component of young people's lives, and invisible small interactions such as likes and comments dominate their online communication. Although previous studies have involved issues such as social media addiction, anxiety, and self-identity, they have not yet explored in depth how these interactions affect adolescents' self-identity, physical and mental health, and the association mechanism between such interactions and self-existence and anxiety. This study takes social media praise pursuit and self-existence anxiety as the core, uses literature review and logical analysis methods to define the core concepts of social media addiction, praise anxiety and self-existence, and examines two key relationships: the relationship between social media use and anxiety level, and the relationship between social media use and self-existence. The study found that social media use was positively correlated with adolescent anxiety (mainly triggered by upward social comparisons and unmet interaction expectations); praise anxiety will restrict self-worth and make adolescents more sensitive to certain comments. Improper use of social media can impair the perception of self-existence. On the contrary, positive interaction can mitigate such negative effects. This study enriches the research in the field of social media and adolescent psychology, and provides practical implications: such as cultivating adolescents' awareness of interactive disenchantment, optimizing platform design, and strengthening parental guidance, so as to alleviate adolescents' social media and other related anxiety.

Keywords: Social Media Psychology, Adolescent Mental Health, Media Addiction Research, Online Self-presentation, Self-Identity Development.

1. Introduction

Social media has created a platform of self-presentation and management for teenagers. Nowadays, teenagers' online interaction is gradually showing the characteristics of 'fragmentation'. Invisible and small interactive behaviors such as likes and light comments have increasingly become the mainstream of their social interaction: repeatedly refreshing and waiting for the growth of likes after publishing dynamics, deleting content due to insufficient likes, and habitually completing the interaction with peer content with likes. This dependence on small interactions has become a typical feature of teenagers' use of social media. At the same time, when browsing the content shared by others, adolescents will unconsciously reflect on their own self-concept, and use the information

shared by peers to compare their own ideas, experiences and self-image. This kind of social interaction and contrast exert different impacts on adolescents' self-esteem [1].

Although the existing research has focused on the damage of social media addiction to adolescents' physical and mental functions, the constraint of praise anxiety to self-worth cognition, and the appearance anxiety and social comparison problems caused by platform content, there are still obvious research gaps: First, it focuses on explicit behaviors such as active content publishing and high-frequency use duration, and pays insufficient attention to the universal influence of small interactions; secondly, when discussing self-existence, it does not deeply analyze how small interactive feedback specifically shapes adolescents' self-cognition; thirdly, the relationship between interaction types and physical and mental health is generally generalized. It is not clear that the different forms of micro-interaction (such as active praise, passive waiting for praise) have different effects on anxiety. It has not clarified the mediating path through which different forms of micro-interaction act on mental health through 'self-existence perception' [2-4].

Based on this, this paper takes 'The influence of invisible micro-interactions in adolescent social media on their self-identity and physical and mental health' as the core, systematically sorts out the internal relationship between social media addiction, praise anxiety and self-existence, and analyzes how micro-interactions affect adolescents' self-existence perception ,thereby influencing their anxiety level and self-identity construction.

2. Key concepts

2.1. Social media addiction

It refers to individuals paying too much attention to social media and devoting too much time and energy, thereby impairing their physical and psychological well-being and social functions [2]. First, addiction is generally considered to be a major chronic disorder. Its characteristic is that even when individuals are aware that a certain behavior may have serious consequences, they still find it difficult to cease such behavior. In the context of social media, this addiction may be reflected in the frequent and excessive use of social platforms, even if such use has had a negative impact on personal life. In a specific situation, dependence on social media and addiction tendency can be regarded as concepts with similar meanings. For example, the study of Ding Qian et al mentioned that social networking site dependence has become another new form of Internet addiction after online games, gambling and pornography addiction [4-6]. This implies that in the area of social media, overuse can lead to addiction-like conditions.

2.2. Like anxiety

Like anxiety refers to adolescents' self-control of others' perfect image as a reference in the process of social media self-presentation due to the ubiquitous comparative culture of the platform, and then the number of likes, comments, and shares is regarded as a measure of personal value. Self-doubt and anxiety arise when expectations for external recognition remain unmet. This kind of emotional ups and downs makes teenagers' self-esteem increasingly dependent on the immediate response of others, and loses its inherent independence and stability. The praise and comment mechanism of social media makes teenagers' self-evaluation gradually shift from real self-cognition to 'feedback from others'. In the long run, they may gradually develop a 'Histrionic personality' - no longer to show their true selves, but creating images that others favor to gain more recognition [3,7].

2.3. Self-existence

Scholars from the Faculty of Ushuluddin and Philosophy pointed out that personal branding is the process of forming a consistent self-image to be known according to the values and expertise one has. Personal branding on social media has a significant impact on the formation and development of students' self-identity. Based on the interview results, almost all of the interviewees stated that efforts to build self-image online made them more aware of their potential, uniqueness, and values. Prior studies revealed that the personal branding she built made her "more enthusiastic to develop because she knows that there are people who pay attention and follow what I share." This shows that personal branding not only functions as a tool to introduce yourself to others, but also as an internal motivation to continue to improve and develop yourself. This carefully built identity is strategically presented to a target audience as a purposeful self-marketing strategy, serving to differentiate the individual and leave a lasting impression [8]. Moreover, personal branding developed through social media carries notable effects on students' self-identity. This process can enhance a sense of self-existence and boost self-confidence, while also creating new prospects in different life domains like academics, careers, and social connections. Conversely, personal branding that is inappropriate or lacks consistency may lead to identity conflicts or discrepancies between the constructed image and the students' real selves. In social media, likes and comments not only become an important way for teenagers to interact with others, but also gradually become the standard for them to measure their self-worth. This dependence on likes and comments has a profound impact on adolescents' self-esteem, which not only brings short-term satisfaction, but also makes them fall into a state of unstable self-evaluation. Praise and comments are the most direct forms of feedback on social media [7].

3. The relationship between social media and anxiety level

The study found that when users used social platforms, they sometimes engage in passive behaviors such as searching or browsing other people's information [5]. The social comparison of social platforms was similar to reality, that is, the psychological process of people's self-contrast with others [9-11]. Due to the user's tendency to show a positive image, the platform information is too positive, which can easily lead to upward social comparison, that is, comparison with those who are superior [12-15]. However, in lots of other cases, users' sharing of negative information may lead to downward comparison; when used passively, in order to protect themselves, users may also make downward comparisons with the weaker ones to avoid the negative emotional impact of upward comparisons.

Shirley, an American scholar, argued in her research that social media will deteriorate people's feelings. She pointed out that people use social media to create new images covering body, family, work, love and so on, but feel extremely lonely in the virtual world. On the surface, people seemed to be more relaxed and close to each other by texting, emailing, social networking sites, playing video games, etc., but in fact, people would be more anxious and lonely. In addition, Shirley's research also took into account negative emotions such as 'shame' and 'narcissism', and believed that even if the interconnection is enhanced, young people may be more lonely than other age groups. Negative emotions such as 'low self-esteem', 'anxiety' and 'depression' were also the focus of recent attention, and there was evidence that there is a strong positive correlation between the number of social platforms used and the levels of 'depression' and 'anxiety' [16,17]. Life sharing social media, such as micro-blog, circle of friends, users can share life clips, feelings and personal views on these platforms. However, excessive attention to the life and evaluation of others would make the youth

group develop a sense of comparative psychology and inferiority, which would lead to anxiety. In addition, negative information and false phenomena on social media had also increased the psychological pressure of youth groups, causing them to be full of worries and fears about the future.

Based on this, this paper hypothesizes that there was a positive correlation between the use of life sharing social media and the anxiety of youth groups, and put forward the following hypotheses:

Hypotheses 1: The higher the use of life sharing social media, the more serious the anxiety of adolescents--refers to "extent of use"--a broader measure including time per session, interaction intensity, and emotional investment.

Hypotheses 2: The higher the frequency of use of life-sharing social media, the more serious the anxiety of adolescents--focuses on "frequency"--a narrower measure: how often (e.g., times per day) the platform is used. In the study, the basic information of all the adolescents participating in the questionnaire survey was collected, and the results were presented as follows.

In the sample, women accounted for 62.0 %, men accounted for 38.0 %, and women were slightly more than men. The age group of 11-13 years old accounted for 15.2 %, the age group of 13-15 years old accounted for 32.6 %, the age group of 15-17 years old accounted for 39.1 %, and the age group of 17-19 years old accounted for 13.1 %. It can be seen that there are more samples between 13 and 17 years old, accounting for 71.7 %.

In conclusion, the first result was the Teenagers' virtual socializing unconsciously may contributes their dependence on the media. Social media extended offline social networking to online, and the popularity of instant messaging tools made online social networking more convenient, but excessive contact could create habitual psychological hunger, causing panic when they were away from their device or do not receive timely responses. Teenagers' self-control was weak, and their dependence on and use of instant messaging software was higher than other social software. Unconscious social media contact was easy to exist for a long time and form habits because of its no purpose, plan and less willpower, which contributed to media dependence. Teenagers got short-term pleasure and sense of achievement in virtual social life, but in reality, they were lonely and lost. Focused on the form of contact shifted offline social networking to online, replacing real social networking, reducing real social activities, and still exacerbating adolescents' loneliness. The second outcome was the use of focused contact might strengthen the tool attributes of social media. Focused social media contact was rational and meaningful, which could strengthen the instrumental attributes of social media. This study showed that compared with unconscious contact, adolescents' focused contact had less impact on loneliness and suicidal ideation, and could alleviate anxiety to a certain extent. Furthermore, young people had the problem of insufficient media literacy, and media literacy education was also absent. Media literacy education was to 'guide students to use the media correctly and effectively'. Teenagers' values were in a critical period of formation, and the openness of social media was easy to cause problems in social media use. This study found that the impact of focused and unconscious social media contact on adolescents' emotions was significantly different: the former had a positive impact, and the latter had a negative impact [18].

In fact, the results had certain significance for guiding adolescents to use social media rationally and reducing the negative impact of their use. This was because in the upward comparison behavior of social networking platforms, self-efficacy and jealousy interact with each other, which could easily lead to depressive or anxious symptoms.

4. The relationship between social media use and self-existence

In today's digital age, social media has deeply integrated into the daily life of young people and had become an important position for them to socialize, learn and entertain. However, with the widespread popularity of social media, its impact on adolescents' psychology was becoming more and more obvious, especially the phenomenon of social comparison, both upward and downward, which had a profound impact on adolescents' self-esteem and social anxiety. As a common psychological phenomenon in human society, social comparison refers to the individual's evaluation of his own value, ability and status by comparing with others [11]. In social media, likes and comments have become an important way for teenagers to interact with each other, and have gradually become the standard for teenagers to measure their own value. This reliance on likes and comments has a profound effect on teens' self-esteem, potentially leading to emotional instability and increased vulnerability to depression [7]. As Zhou Yijin and Wei Jiachun pointed out in 2016, likes and comments were the most direct forms of feedback on social media [6]. Teenagers usually looked forward to receiving compliments and positive comments from others after posting photos, texts or videos. They would regard these interactions as others' recognition of themselves. On the one hand, teenagers' pandering to others in this way for a long time would not only gradually lose themselves, but also experience a decline in internal self-esteem. Because their self-identity was based on external recognition, it was easy to feel lost and even self-denial once they failed to get the expected attention [19]. Moreover, excessive reliance on likes and comments could also distort the way adolescents interact socially, which in turn affected their self-esteem and the quality of their social interactions.

Life-sharing social media provides people with a space to show their lives, which simultaneously creates an environment for constant social comparison. Youth groups often presented their lives by posting photos, statuses and other forms. However, this kind of display was often influenced by others' evaluation and expectation. When young people felt that their lives were not recognized by others or meet expectations, they were prone to anxiety. In addition, this kind of social media also made young people too keen to compare with others. They would continue to compare their lives with others, and then produced a sense of self-objectification, and this comparison would lead to their own dissatisfaction and anxiety, with long-term consequences such as reduced self-worth.

5. Discussion and suggestion

With the widespread popularity of social media platforms and the increasing frequency of use, adolescents have begun to strive to meet the appearance standards advocated by internet celebrities, peer networks, and algorithm-driven content in the online word. At this time, the anxiety of appearance is not only the anxiety of its own appearance, but also the deeper problem of how to present the most perfect and attractive image on social media, so as to gain others' recognition and favor. This kind of appearance anxiety derived from the social media environment not only affected the mental health of teenagers, but also distorted the understanding of beauty, ugliness, self-confidence and self-cognition of teenagers to some extent. On the one hand, social media platforms vigorously promoted the concept of women's "thinness as beauty" more frequently, and have a significant preference for the attractive idealized appearance that the society respects, which would greatly aggravate the appearance anxiety of adolescents. Relevant studies confirms that the intensity of social media use is positively correlated with appearance comparison [9,12-15]. It should be noted that adolescents' use of different social media platforms--such as video-based versus text-

based--has varying effects on appearance anxiety, and exposure to different types of content on the platform have different effects on their appearance anxiety.

In general, the correlation between the use of text-based or comprehensive social media platforms and adolescent appearance anxiety was not as strong as that of appearance-based social media platforms [10]. For example, using platforms such as TikTok and Xiaohongshu was more likely to cause appearance anxiety than using platforms such as Douban and Zhihu. Moreover, the content presented by social media platforms was different, and the impact on young people was also distinct. The content on the platform that advocates body positivity, not only did not cause appearance anxiety, but also could improve the satisfaction of young people on their own body. Otherwise, researchers propose intervention measures for adolescents' appearance anxiety from four dimensions:

First, scholars focus on self-awareness improvement, and carry out scientific and systematic education through school and family collaboration. Schools need to strengthen positive guidance, set up special psychological education courses and organize relevant group activities to convey the concept of "spiritual beauty is far better than external beauty" to students, focus on explaining the profound influence of internal cultivation on personal growth, and encourage young people to devote more energy to improving "spiritual appearance" to avoid falling into excessive pursuit of appearance beauty. Parents should actively participate in guiding adolescents' value formation and self-esteem development, actively promote children to participate in valuable and meaningful affairs, help them improve their internal cultivation, and guide children to explore their own flash points and uniqueness. Second, focus on providing emotional support and feedback to help young people enhance self-confidence. In daily life, parents and teachers should give more recognition and praise to teenagers, emphasize their advantages and achievements, such as academic progress, artistic skills, or sports participation and help them build a positive self-image. In addition, teachers and parents should encourage young people to get involved in activities and fields of interest, and create opportunities for them to try new skills and accumulate successful experience, so as to strengthen their self-confidence and self-esteem; at the same time, they will promote the establishment of a sound social network for young people, promote positive interpersonal interaction, and allow them to accumulate self-confidence in sincere communication, so as to alleviate the anxiety caused by appearance.

6. Conclusion

Based on the realistic background of adolescents' social media use in the digital age, this study focuses on the three core issues of social media addiction. Praise anxiety and self-existence, systematically explores the relationship between the characteristics of adolescents' social media use (use type, degree, frequency and mode) and anxiety level (praise anxiety, appearance anxiety and social comparison anxiety), as well as the dual influence of social media on adolescents' self-identity, value perception and personal brand building, and tries to put forward targeted intervention directions.

The study found that social media addiction was a new type of Internet chronic problem after addiction such as online games, which will damage the physical, mental and social functions of adolescents; the degree and frequency of use of life-sharing social media are positively correlated with anxiety. Like anxiety binds adolescents' self-worth, and upward social comparison aggravates anxiety. Appearance-oriented platforms such as TikTok are more likely to induce appearance anxiety than text platforms such as Douban, and only body positive content can alleviate such anxiety. Social media can not only enhance adolescents' self-awareness and self-confidence through

reasonable personal brands, but also cause identity conflicts due to improper brand building. Excessive reliance on external feedback will also reduce internal self-esteem ; in addition, unconscious social contact is prone to media dependence and loneliness, and conscious contact can alleviate anxiety. At present, youth media literacy is generally lacking and related education is relatively less.

Based on this, schools need to set up psychological courses to convey the concept of " spiritual beauty is better than external beauty " and promote media literacy education. Families should participate in the shaping of young people 's values and the cultivation of self-confidence, and guide young people to rationally choose platforms and pay attention to positive content. The findings of the present study not only enriches the theoretical system of social media and adolescents ' psychological development, clarifies the attributes of addiction, refines the anxiety path, but also provides practical basis for school curriculum, family education and platform optimization, which can help alleviate adolescents' social media-related anxiety and ensure their mental health and self-development in the digital age.

References

- [1] Andreassen, C. S., & Pallesen, S. (2014). Social media addiction: Characteristics, mechanisms, and consequences for physical and psychological well-being. *Curr. Opin. Psychol.*, 2, 40–45.
- [2] Ding, Q., Li, M., & Wang, Y. (2016). Social networking site dependence among adolescents: Prevalence and associated factors. *J. Adolesc.*, 50, 112–121.
- [3] Kuss, D. J., & Griffiths, M. D. (2011). Social networking sites and addiction: Ten lessons learned. *Int. J. Adolesc. Youth*, 16(1), 35–51.
- [4] Ryan, T., Chester, A., Reece, J., & Xenos, S. (2014). Social media use and perceived social isolation among young adults in the U.S. *Am. J. Prev. Med.*, 47(1), 1–8.
- [5] Xing, X., & Yu, X. (2005). The impact of social media use on adolescents' self-esteem: A cross-sectional study. *J. Youth Adolesc.*, 34(5), 491–500.
- [6] Festinger, L. (1954). A theory of social comparison processes. *Hum. Relat.*, 7(2), 117–140.
- [7] How, R. (2016). Social comparison on social media: A review of the literature. *Comput. Hum. Behav.*, 59, 1–11.
- [8] Cross, S. E., Hardin, E. E., & Gercek-Swing, B. (2013). The relational self revealed: Integrative conceptualization and implications for psychological theory. *Psychol. Bull.*, 139(4), 719–757.
- [9] Scheiber, R., Diehl, S., & Karmasin, M. (2023). Social media and orthorexia nervosa in adolescents: The role of thin-ideal internalization. *Appetite*, 185, Article 106522.
- [10] Myers, T. A., Ridolfi, D. R., Crowther, J. H., & Ciesla, J. A. (2012). Appearance-focused social comparison and body image disturbance: The moderating role of feminist beliefs. *Body Image*, 9(3), 342–351.
- [11] Verduyn, P., Ybarra, O., Park, J., Chua, E. F., Kross, E., & Jonides, J. (2015). Do rest breaks during social media use reduce fatigue and improve well-being? *Comput. Hum. Behav.*, 52, 491–498.
- [12] Luo, Y. W. (2022). The impact of focused vs. unconscious social media contact on adolescents' emotional well-being. *J. Youth Stud.*, 25(3), 345–362.
- [13] Wan, X. (2022). External recognition and adolescents' self-identity: The role of social media feedback. *Child Dev. Perspect.*, 16(2), 112–118.
- [14] Jarman, H. K., Marques, M. D., McLean, S. A., Slater, A., & Paxton, S. J. (2021). Social media use intensity and appearance comparison among adolescents: A cross-sectional study. *Body Image*, 36, 139–148.
- [15] Jung, J., Barron, D., Lee, Y., & Swami, V. (2022). Social media use and appearance anxiety in adolescents: The mediating role of appearance ideal internalization. *Comput. Hum. Behav.*, 135, Article 107357.
- [16] Festinger, L. (1954). A theory of social comparison processes. Stanford University Press.
- [17] Shirley, J. (2018). Social media and loneliness: A meta-analytic review. *J. Soc. Clin. Psychol.*, 37(8), 691–718.
- [18] Li, Y. (2019). Social media use and depression among adolescents: The mediating role of social comparison. *J. Affect. Disord.*, 256, 27–34.
- [19] Vogel, E. A., Rose, J. P., Okdie, B. M., Eckles, K., & Franz, B. (2015). Social media use and perceived social isolation among young adults in the U.S.: A longitudinal analysis. *Am. J. Prev. Med.*, 49(2), 203–211.