

Analyzing the Impact of Social Media Usage on the Formation of Self-Identity among Chinese Adolescents

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Abstract: With the development of the Internet, various social media have gradually become popular among adolescents, and their influence on the formation of adolescents' self-identity has attracted more and more attention. Based on the self-perception theory of Erikson, Marcia and Piaget in developmental psychology, this paper deeply analyzes the relationship between social media use and adolescent self-identity. Through the review of related theories, this paper explores the two sides of the influence of social media on adolescents' self-identity: on the one hand, it provides adolescents with diverse information and broad social space, which is conducive to self-exploration and personality display, and promotes the positive development of self-identity; On the other hand, it also brings many negative effects, such as triggering false self-presentation, resulting in the confusion of adolescents' true self-awareness. This paper puts forward countermeasures and suggestions for future research directions from the three levels of family, school and society, aiming to provide theoretical basis and practical guidance for promoting the healthy development of adolescents' self-identity.

Keywords: Developmental Psychology, adolescents, social media, Self-Identity

1. Introduction

In today's digital era, various social media platforms such as WeChat, Weibo and Tik Tok have attracted a large number of young users with their convenient information dissemination, rich interactive functions, and diversified content presentation. According to a United Nations report, one-third of the world's Internet users are adolescents, and on average, one new child uses an online device every half a second[1]. According to the relevant survey data in the "Survey Report on the Internet Behavior of Chinese Youth" released by the Internet Network Information Center in 2023, the scale of young Internet users in China has reached 256 million, accounting for 41.5% of the total Internet users and 71.8% of the total number of adolescents. Social media has penetrated into all corners of adolescents' daily life, and the frequency of adolescents going online has increased, with more than half of them going online every day, and it has become a reality to go online anytime, anywhere, and multiple times a day[1].

Adolescents spend a lot of time on social media for social interaction, information acquisition and self-presentation, and this behavior pattern profoundly affects their psychological development, especially the formation of self-identity. Self-identity is one of the core tasks of adolescent

development, and it is of great practical significance to deeply analyze the impact of social media use on the formation of adolescent self-identity from the perspective of developmental psychology.

2. Definition of Core Concepts

2.1. Definition and Characteristics of Social Media

Social media refers to platforms based on internet technology that allow users to create, share content, and engage in social interaction. Characterized by convenience, interactivity, openness, and individuality, these platforms cater to the diverse needs of adolescents.

2.2. Dividing the Age Range of Adolescents in Combination with Developmental Psychology

In developmental psychology, adolescence usually covers the age group of 12-18 years. This period is a stage of rapid physiological and psychological development of the individual, with significant changes in physical appearance, the appearance of secondary sexual characteristics, and at the same time, in terms of cognitive ability, adolescents' abstract thinking ability is gradually enhanced, and they begin to be able to make hypothetical-deductive reasoning; In terms of emotion, mood swings are greater, and emotional experiences of self and others are more profound; In terms of social interactions, they gradually shift from dependence on family to seek more recognition and support from peers, eager to find their place in society.

2.3. Concept of Self-awareness

Self-awareness refers to an individual's cognition and understanding of themselves, including their abilities, values, emotional state, and other aspects. It is the reflection awareness of the self, and the understanding and recognition of self-image and identity[2].

3. Related Self-identification Theory Elaboration

3.1. Erik H Erikson's Theory of Self-Identity

According to Erik H Erikson, individuals go through eight stages of psychosocial development throughout their lives, and adolescence is in the fifth stage, which is to gain self-identity and overcome role confusion[3]. At this stage, adolescences often think "Who am I?" They gradually learn about themselves from the attitudes of others, from the social roles they play. At this point, they gradually break free from their dependence on their parents and form close friendships with their peers. If adolescents are able to successfully resolve conflicts at this stage, they will form a clear self-identity and have a clear plan and direction for their future. Conversely, if you can't integrate various information and roles, you will fall into role confusion and feel lost about your identity and future.

3.2. Marcia's Model of Self-identity State

Based on Erikson's theory, Marcia proposed a self-identity state model. Identity can be divided into four states: identity acquisition, delay, premature closure and diffusion. The former two states are benign, and the latter two states are unhealthy. The adolescents of identity acquisition type have defined their own values, goals and identity through in-depth exploration and thinking; the adolescents of delayed state are actively exploring but have not made a clear commitment; the adolescents of premature closure state accept the goals and values set by others prematurely without

sufficient exploration; Adolescents in the diffusion state have neither in-depth exploration nor clear self-identity, and are in a state of confusion and confusion.

3.3. Piaget's Theory of Cognitive Development

According to Piaget's theory of cognitive development, adolescents are at the stage of formal operation, which is typically characterized by the development and perfection of abstract thinking. adolescents gradually mature and rational thinking, can use logical thinking and processing problems, no longer adhere to fixed rules[4], and their thinking has greater flexibility and complexity.

4. Characteristics and Motivations of Adolescents Using Social Media

4.1. Characteristics

The use of social media by adolescents in China has obvious characteristics. Adolescents use social media in a variety of ways. Live games and Short Video tend to be entertaining. Networking with acquaintances is the main feature of adolescents 'online communication[1]. On social media, they actively participate in discussions on various topics and share their opinions and feelings. At the same time, they are keen to pursue fashion trends, and popular topics and hot trends on social media often attract their attention and participation quickly.

In addition, adolescents pay great attention to self-display, hoping to show their personality and talents by publishing unique content and gain recognition and attention from others.

4.2. Motivations

Chinese scholar Huang Shaohua and others believe that the motivation of online communication leads to the emergence of online communication psychology at the internal level[5], and there are four reasons for the emergence of online communication psychology.

The first is to meet social needs. They want to build and maintain good relationships with others through social media, gain a sense of belonging and emotional support[6].

The second is access to information. This is a common motivation for adolescents to use social media, through which they can quickly learn about domestic and foreign news, learn new knowledge, obtain information about interested industries, etc.

The third is search for entertainment. This is also a major driver for adolescents to use social media, with a variety of interesting short videos, games, and live streams that help them relieve the studying stress and relax.

The last one is shaping self-image. They try to create a unique self in the virtual world by carefully curating the content they publish and presenting their ideal image to others.

5. The Positive Impact of Social Media on the Formation of Adolescents' Self-identity

5.1. Expand Self-awareness Dimension

Social media provides a diverse platform for adolescents to access a wide variety of information, and they can be exposed to a wide variety of information and perspectives by following bloggers in different fields[7].The convenience and universality of this information acquisition will help adolescents to have a more comprehensive understanding of the cutting-edge knowledge and development trends of their professional fields, so as to improve their awareness of their professional abilities and development directions.[2]

5.2. Social Interaction Feedback Promotes Introspection and Reflection

Social media platforms provide a rich and diverse space for adolescents to express themselves, allowing them to showcase their personality, opinions, and talents through text, pictures, videos, and more[7]. Exhibiting interactions is informed by interactive feedback from others, whether positive praise or constructive criticism, that prompts introspection and reflection to help them identify roles and identities that are appropriate for them.

5.3. Enhance Social Belonging and Emotional Support

Social media breaks the boundaries of time and space. Adolescents can easily join various interest communities, share their interests and hobbies with like-minded people, and discuss topics of interest together[8]. This sense of belonging can make adolescents feel their own value and significance and enhance their sense of self-worth.

Adolescents can also talk to relatives and friends anytime and anywhere when they encounter difficulties or setbacks, and get emotional support and encouragement. This emotional support across time and space is important for adolescents' mental health and self-identity development, allowing them to feel that they are not alone in difficult times, thereby enhancing self-confidence and security[9].

6. The Negative Impact of Social Media on the Formation of Adolescents' Self-identity

6.1. Cause False Self-Presentation and Cognitive Bias

On social media, people can become their own imaginary characters and build virtual images on the Internet by shaping their identity. Some adolescents' long-term false self-presentation will make adolescents gradually blur the boundary between real self and virtual self, and produce cognitive ambiguity to their real image, ability and characteristics.

From the perspective of psychological mechanism, when adolescents are accustomed to presenting false selves on social media and gaining recognition from others, they will be immersed in this false image to a certain extent and gradually ignore the true self[10]. Over time, they become confused and uneasy about who they are in real life, making it difficult to form a stable self-identity.

6.2. Cause values lost.

The openness of social media in a multicultural context forces adolescents to unconsciously form diverse values[11], and in the process, their self-identity also wavers. They may advocate one style today and follow another trend tomorrow, unable to establish a stable self-value orientation.

6.3. Aggravating Social Comparisons and Psychological Stress and Adding Emotional Distress

Social media is full of "perfect life" displays, which can easily trigger adolescents' comparison psychology. Excessive social comparison makes adolescents produce negative emotions such as inferiority complex and anxiety. Long-term exposure to this psychological state can lead to doubts about their abilities and worth, which can hinder the healthy development of self-identity.

In the social media environment, adolescents are very concerned about other people's feedback on their content, such as likes, comments, etc. When they don't get the attention they expect or encounter negative comments, they are prone to anxiety, depression and other negative emotions. These negative emotions can also interfere with the normal development of self-identity in adolescents, leaving them confused and uneasy in the process of exploring themselves.

7. Coping Strategies or Measures

7.1. Family Aspect

7.1.1. Strengthen Parent-child Communication and Understand Kids 'Social Media Use

According to John Bowlby's attachment theory in developmental psychology, good parent-child relationship is an important foundation for healthy growth of adolescents[12]. Parents should ensure that they communicate regularly with adolescents and ask them about their experiences on social media to understand their feelings and confusion in the process of using social media. In the way of communication, we should adopt an equal and respectful attitude and avoid condescending preaching[12].

7.1.2. Guide Correct Use and Cultivate Self-cognition Ability

Using Piaget's cognitive development theory, parents can guide adolescents to analyze and judge information on social media and review their behavior and reactions on social media, helping them better understand their interests, values and behavior patterns, thus improving self-cognition.

7.2. School Aspect

7.2.1. Set Up Media Literacy Education Courses

In the design of the course content, it should cover the basic concepts of media, the operation mechanism of social media, the dissemination characteristics of information and other basic knowledge. At the same time, it is necessary to focus on cultivating students' ability to analyze, evaluate and create information[13]. Teacher can introduce some cases of successfully identifying false information and avoiding adverse effects, so that adolescents can learn the identification methods and thinking modes.

7.2.2. Organize a Variety of Campus Activities

According to Eriksson's theory of psychosocial development, the main task of adolescence is to establish self-identity. Schools can organize more community activities, through participation in community activities, adolescents can play their talents in their own areas of expertise and interest, gain a sense of achievement, so as to better understand their strengths and weaknesses, explore their future development direction.

7.3. Social Aspect

7.3.1. Strengthen Network Supervision and Create A Healthy Network Environment

The government should constantly improve relevant laws and regulations, clarify the responsibilities and obligations of social media platforms, and severely crack down on the dissemination of false information and bad information. A dedicated network regulator can be established, staffed with professional regulators, to monitor social media platforms in real time.

7.3.2. Play the Role of Media to Spread Positive Energy and Correct Values

The media should give full play to its role in guiding public opinion. According to Bandura's theory, it can set up positive role models for adolescents and provide positive imitation objects for other adolescents by reporting their achievements in academic, artistic and sports[14].

8. Future research prospects

Although some achievements have been made in previous studies, there are still many areas to be expanded and deepened. Looking forward from the three levels of family, school and society will help to further clarify the future research direction and provide more powerful theoretical support and practical guidance for promoting the healthy growth of adolescents.

8.1. Family Aspect

Future research could explore how to formulate personalized and scientific social media use rules according to the psychological characteristics of adolescents at different stages of development.

Future research could delve into specific patterns and quality indicators of parent-child interaction and how they affect adolescents' self-identity development in social media use.

Future research could focus on how parental social media habits, frequency, and patterns subtly influence adolescents' social media use behavior and self-identity construction.

8.2. School Aspect

Future research could evaluate the actual impact of different media literacy education curriculum contents, teaching methods and teaching duration on adolescents' social media use ability and self-identity development through experimental comparison and other methods.

Future research could explore how to create a positive, healthy and diversified campus social media culture and guide adolescents to express themselves and interact positively in campus cyberspace[12].

Future research could focus on how to integrate social media literacy education into the regular curriculum system, and how to integrate community activities with design media is also an important direction of research.

8.3. Social Aspect

Future research could deeply analyze how the algorithmic recommendation mechanism, content review standards and privacy protection measures of social media platforms affect the type and quality of information that adolescents are exposed to[2], and thus affect their self-identity.

Future research could analyze the relationship between social media use and adolescent self-identity in different historical periods and different cultural backgrounds from a macro sociocultural perspective[2].

Future research could analyze how online and offline activities for adolescents conducted by social organizations and institutions help adolescents build a coherent and positive self-identity between reality and fiction.

9. Conclusion

In developmental psychology, adolescence is a critical stage in the formation of self-identity, and the widespread use of social media is deeply involved in this process. The mechanism of action is mainly embodied in three aspects: cognition, emotion and social communication. In cognitive aspect, social media affects adolescents' cognitive construction of self and society; in emotional aspect, it affects adolescents' self-emotional experience through feedback and social interaction from others; in social communication aspect, social media expands adolescents' social scope, but it may also lead to virtualization of social relations, thus affecting their self-identity development in real society.

On the positive side, social media offers many opportunities for the development of self-identity among adolescents. By sharing their lives and interests on social media, adolescents have more

opportunities to demonstrate their personality and talents, gain recognition and support from others, which helps to enhance their self-confidence and promote positive self-image construction. At the same time, various interest groups and topic discussions on social media can enable adolescents to find like-minded partners and meet their needs for belonging, thus strengthening their group identity in self-identity.

However, social media use also poses significant challenges to adolescents' self-identity. On the one hand, social media often presents a beautified "ideal self," and adolescents are frequently exposed to such content, which is easy to produce unrealistic comparisons, leading to dissatisfaction with themselves and hindering the formation of true self-identity. On the other hand, negative comments and malicious comments on the Internet may cause adolescents to fall into self-doubt, hurt their self-esteem and interfere with the healthy development of self-identity.

In short, social media has a complex dual impact on the formation of adolescent self-identity. Society, schools and families need to pay close attention to adolescents' Internet use, guide them to make rational use of social media, seek advantages and avoid disadvantages, and promote the positive development of self-identity.

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