

The Impact of Social Media Use on Adolescents

Xiaoyue Zhang

Shanghai international High School of Britain, Australia & New Zealand, Shanghai, China

Keywords: Teenager, Social Media, Psychology.

Abstract: Using an online survey with 61 valid answers, this study examines the effects of social media on teenagers between the ages of 12 and 19. The findings show that teenagers, particularly those between the ages of 15 and 17, spend a lot of time on social media, primarily for social contact and enjoyment. Males and high school students use social media more frequently than females, with over half of respondents using it for more than four hours every day. According to the study, social media improves friendships but also increases anxiety, depression, and sleep problems, especially among those aged 15 to 17. Notably, as awareness of its negative impacts on mental health grows, some teenagers are starting to consider and cut back on its use.

1 INTRODUCTION

Regarding the topic of the impact of social media use on teenagers, in recent years, Chinese teenagers have widely used different social media, and these platforms not only provide a lot of fun for teenagers, but also provide some negative content. Social media is like a double-edged sword, it provides opportunities for teens to socialize, entertain, and learn, but it also brings some risks, such as exposing private information, internet addiction. Exploring this topic can help guide young people to use social media properly and help them grow up healthy. After reading and collating, most of the academic views of these articles revolve around the mental health of adolescents, and many of them describe the high incidence of psychological problems among adolescents, such as depression, anxiety and other mental illnesses. It also describes some of the negative effects of social media use on the causes of mental illness among adolescents, and analyzes the different behaviors of adolescents online and offline.

2 LITERATURE REVIEW

Regarding the impact of social media on adolescents, some researchers have concluded that social media can convey different levels of anxiety to people. Wu's (2024) study mainly used questionnaire survey and experimental design methods. Study 1 used the

convenience sampling method, selected students from a middle school in Jiangxi Province as the research object, and conducted a collective questionnaire survey through the class as a unit. Questionnaires are distributed and instructed by trained trainee psychologists. Study 2 mainly collects data through questionnaires and uses statistical methods for data analysis. In the second study, students with the previous standard deviation of the social anxiety score in study 1 were selected as subjects and randomly assigned to the experimental group and the control group with 15 people each for a six-week group counseling intervention after gender matching. Study 1 consisted of 120 questionnaires, and 99 valid questionnaires were obtained, with an effective rate of 82%. The basic information of the participants included gender and grade distribution. The gender distribution is 48 per cent and 52 per cent for males and females respectively, while the proportion of students in the upper grades is gradually increasing.

Study 1 focused on the relationship between social media use and social anxiety, while study 2 focused on the impact of group counseling on social anxiety through community at school. Study 1 had a predominantly cross-sectional design, while Study 2 had an experimental design and used a six-week group counselling as an intervention.

The limitations of the study are that there may be accuracy issues in the measurement of social media usage in Study 1, and more effective measurement tools need to be developed in the future.

In the second study, the researchers included the community-level factor of school community in the analysis, but there may be other factors that were not considered, such as individual-level differences, content and motivation of social media use, etc.

This means that when students are more proactive in the way they use social media, their social anxiety levels are reduced due to a greater sense of community at school.

The researchers used a group tutoring program to improve the sense of community at school among middle school students, thereby reducing social anxiety. The results of the study showed that the group tutoring program effectively increased students' sense of community at school and reduced their social anxiety.

Overall, by improving the sense of community in the school, it can effectively reduce the social anxiety level of students. This sheds light on educational practice that students who may experience higher levels of social anxiety through group activities and community building can be supported through group activities.

Xu and Yang (2024) mainly used questionnaires and statistical analysis to conduct research. This paper explores the impact of contemporary family parenting practices on adolescent prosocial behavior through empirical analysis. Firstly, the data were collected through a questionnaire survey, which mainly included students aged 6 to 18 and their parents, including their children's and parents' online behavior, online education, Internet literacy, academic performance, social psychological characteristics, social relationships and family education. Then, the researchers used SPSS and other software to conduct statistical analysis, including descriptive statistics, regression analysis and Bootstrap mediating effect test, to reveal the relationship between family upbringing, parental media intervention, children's social media use and adolescent prosocial behavior.

In terms of sample situation, the study finally obtained the sample data of 5213 adolescents and parents pairing, which is large and representative. The selection of these samples mainly excluded those with missing information on the core variables, and those whose children did not use the relevant platform.

In terms of study design, the researchers mainly focused on the relationship between family upbringing and adolescent prosocial behavior, and studied parental media intervention and children's social media use as mediating variables. The study also considered the influence of variables such as family social economic status and the mediated

behavior of parents and children, in order to better understand the influence mechanism of family upbringing on adolescent prosocial behavior in the digital age.

Due to the limitations of the study, this paper mainly examines the parallel mediating role of parents' media intervention and children's social media use, but fails to examine the interrelationship between these two types of factors and their possible moderating effects on children's prosocial behavior.

The results showed that parenting style was positively correlated with adolescent prosocial behavior, that is, the stricter parenting style of parents, the higher the level of prosocial behavior of adolescents. The study also found that parental media intervention and children's social media use were mediated variables, which mediated the relationship between family upbringing and adolescent prosocial behavior. Specifically, parents' media intervention behavior positively affected adolescents' prosocial behavior, while children's social media use behavior weakened the positive influence of family upbringing on adolescents' prosocial behavior to a certain extent. Finally, the study puts forward some countermeasures, such as the government should improve the policy support system for adolescents' participation in public affairs, so as to promote the development of adolescents' prosocial behavior.

The research methods used in Cao's (2024) article include overall random sampling and whole-class group testing, and distribution questionnaires. The sample size was 961 adolescents from Gansu Province, covering both boys and girls, with an age range of 11 to 18 years. The study design was a mixed experimental design, including two groups (experimental group, control group) and two test phases (pretest and post-test).

The experimental group consisted of students with a relatively low level of positive body image. The control group consisted of students with a high level of positive body image.

However, the study sample only selected students from a middle school in Gansu Province, which has certain geographical limitations, which may affect the generality of the study.

Studies only measured the time spent on social media without an in-depth analysis of the content and purpose of use, which may affect the overall understanding of the impact of social media. Only one follow-up survey was conducted in the study, and data were lacking to assess the durability of the intervention.

Yan (2016) mainly used the research method of literature research to collect and analyze relevant

research reports, papers, reports and other research data on the impact of social media use behavior on adolescent socialization, so as to understand and analyze the research status and main views in this field. In terms of study design, this article is mainly a review and analysis of existing research, and is not a rigorous experimental or research study. The research limitations of this article mainly lie in the fact that it is mainly based on the review and analysis of existing studies, and there may be biases in the research conclusions due to the limitations of existing studies. The paper concludes that the impact of social media use on adolescent socialization is multifaceted: there are both positive and negative aspects. The positive aspects are mainly reflected in the fact that social media can strengthen adolescents' sense of identity, change behavioral norms, enrich learning methods and help solve psychological problems. On the negative side, it can lead to problems such as Internet addiction, egocentrism, decreased learning efficiency and weakened social communication skills. The article highlights how to harness the positive effects of social media and remove its negative effects, such as video creators creating high-quality and positive content to influence teens, or parents guiding teens to use social media wisely. These are important issues for the healthy growth of adolescents.

Qu and Ni (2020) conducted a questionnaire survey of 2634 adolescents to study the impact of online social media use on adolescents' life satisfaction and its internal psychological mechanism, the mediating role of self-identity state. The results show that the use of online social media has a dual effect on adolescent psychological development, which can not only improve life satisfaction by strengthening the achievement self-identity state, but also weaken the life satisfaction of adolescents by strengthening the diffuse self-identity state.

These conclusions provide an important perspective for understanding how online social media can change adolescents' life satisfaction by influencing their psychological development, and also provide a basis for subsequent education and psychological intervention.

With regard to research methods, most of them were conducted in the form of questionnaires. Questionnaires sometimes have the problem of a low generality of results, and of course, and there is also the disadvantage of time limit, because people's opinions change all the time, so it is easy to lead to a certain error in the authenticity of the data. Data cannot be perfect, so the authors of this article believe that continuous data collection is needed to compensate for this shortcoming.

3 OVERVIEW OF THE STUDY METHOD:

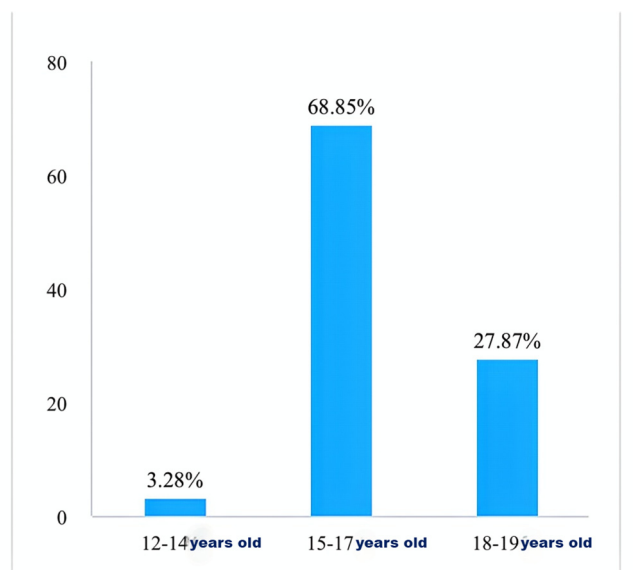
The authors of this paper used a questionnaire to distribute the questionnaire through the use of questionnaire stars, and the sample data collected is 61. The questionnaire survey can intuitively reflect the frequency of social media use and the positive or negative impact on the three different stages of adolescents aged 12-14, 15-17, and 18-19 years old. The research comes from relevant reports on the Internet, and there are psychological studies about adolescents as a group, similar to a series of physical and psychological problems caused by adolescence.

4 RESULTS

4.1 Age and Gender Differences

The survey results showed that 68.85% of the respondents were aged 15-17 years old, which was significantly higher than that of other age groups, indicating that participants in this age group had an absolute advantage in the sample (see figure 1).

Nearly 49.18% of the respondents said that they spend more than 4 hours a day on social media, indicating that social media occupies an important position in users' daily lives. 50% of users in the 15-17 age group use social media for more than 4 hours a day, showing a high level of social media dependence in this age group. In the gender cross-sectional statistics, 66.67% of male users use social media for more than 4 hours a day, compared to 45% of female users. This suggests that men are relatively more active in their use of social media. In the cross-grade statistics, 57.69% of the users of high school students use social media for more than 4 hours a day, indicating that high school students are more active on social media, which may be related to learning pressure and social needs.



Alt Text for the figure: Bar chart showing the percentage distribution of individuals across three age groups: 12-14 years old (3.28%), 15-17 years old (68.85%), and 18-19 years old (27.87%).

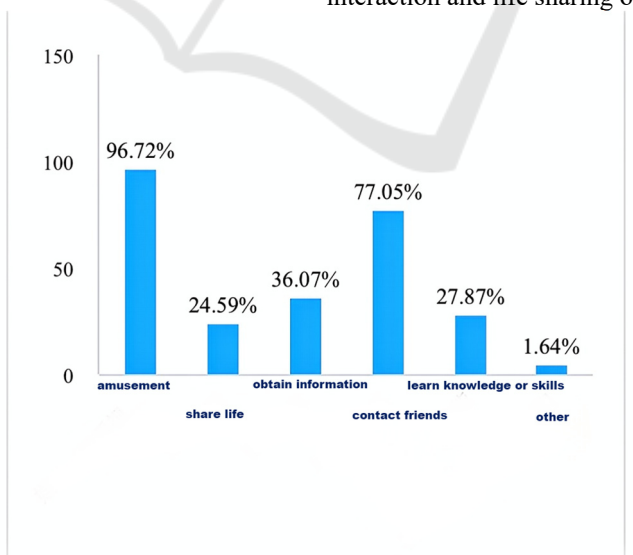
Figure 1. The relationship between the age of the respondents and the duration of their use of social media (Photo/Picture credit: Original).

4.2 The Main Purpose of Using Social Media

Of all respondents, 96.72% chose entertainment (e.g. watching videos), showing the dominance of entertainment content in social media use (see Figure 2). Among users aged 15-17, 95.83% chose

entertainment and 83.33% chose to connect with friends, showing that this age group attaches great importance to the social and entertainment functions of social media.

Among female users, 30% choose to share their lives and 80% choose to connect with friends, showing that women pay more attention to social interaction and life sharing on social media.



Alt Text for the figure: Bar chart illustrating the percentage of people using a platform for various purposes: "amusement" at 96.72%, "contact friends" at 77.05%, "obtain information" at 36.07%, "learn knowledge or skills" at 27.87%, "share life" at 24.59%, and "other" at 1.64%.

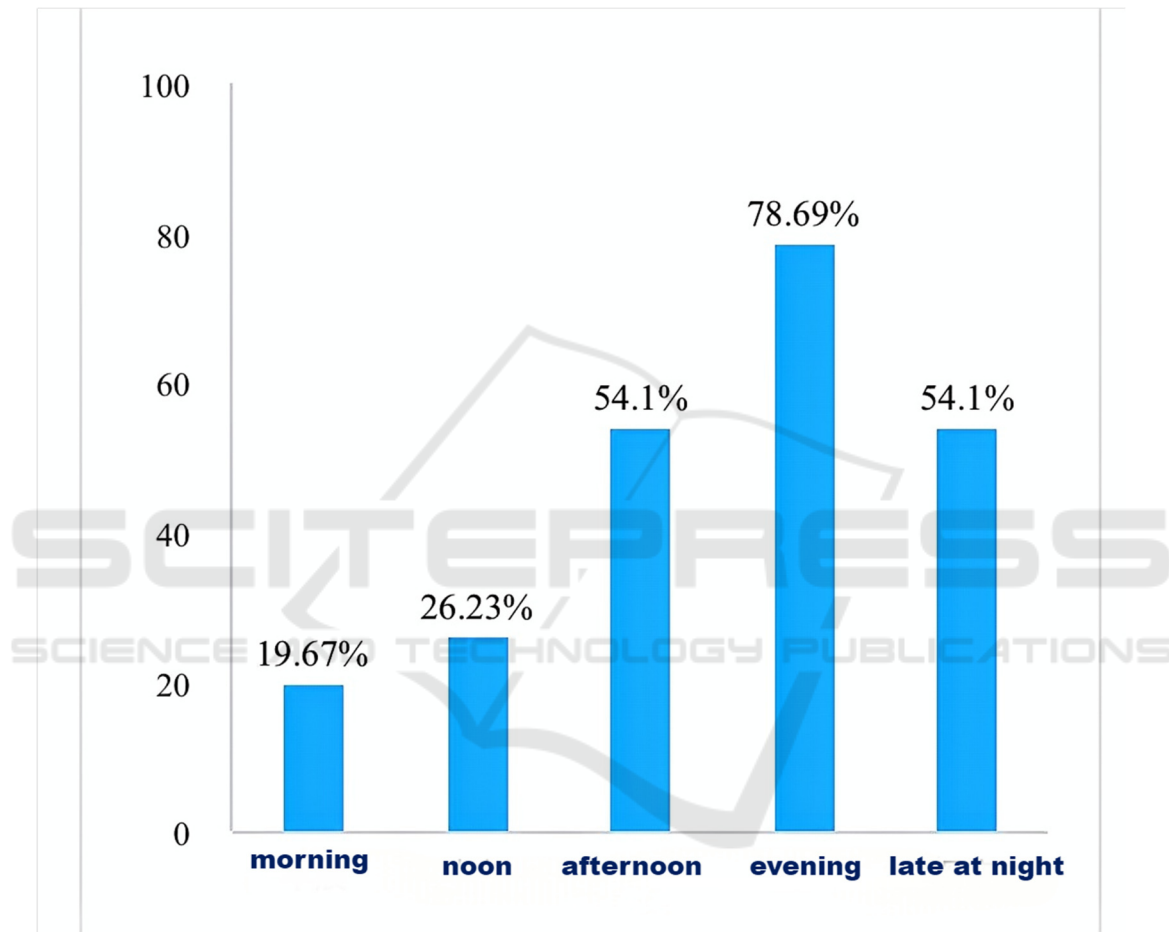
Figure 2. The relationship between the purpose of using social media and students' happiness (Photo/Picture credit: Original).

4.3 Peak Periods of Social Media Usage

According to statistics, the evening is the peak time for using social media, with the proportion reaching 78.69%. In contrast, the proportion of morning and noon use was significantly lower, at 19.67% and 26.23%, respectively (see Figure 3).

In the 15-17 age group, 70.83% chose to use social media in the afternoon and evening, showing

that they were highly active during these two time periods. In contrast, the usage of other age groups is more scattered, which is related to the different mobile phone free time and school time of teenagers aged 12-14, 15-17, and 18-19 years old. The data shows that 75% of women use social media at night, which is higher than 66.67% of men. This indicates that women are more likely to use social media at night.



Alt Text for the figure: Bar chart showing activity percentages at different times of the day: morning (19.67%), noon (26.23%), afternoon (54.1%), evening (78.69%), and late at night (54.1%).

Figure 3. The time period during which students most frequently use social media (Photo/Picture credit: Original).

4.4 The Impact of Social Media on Individual Anxiety and Depression Levels

Of all respondents, 59.02% said they sometimes felt anxious about social media content, indicating that the impact of social media on mental health is more prevalent (see Figure 4). In the 15-17 age group, 58.33% said they sometimes felt anxious about social

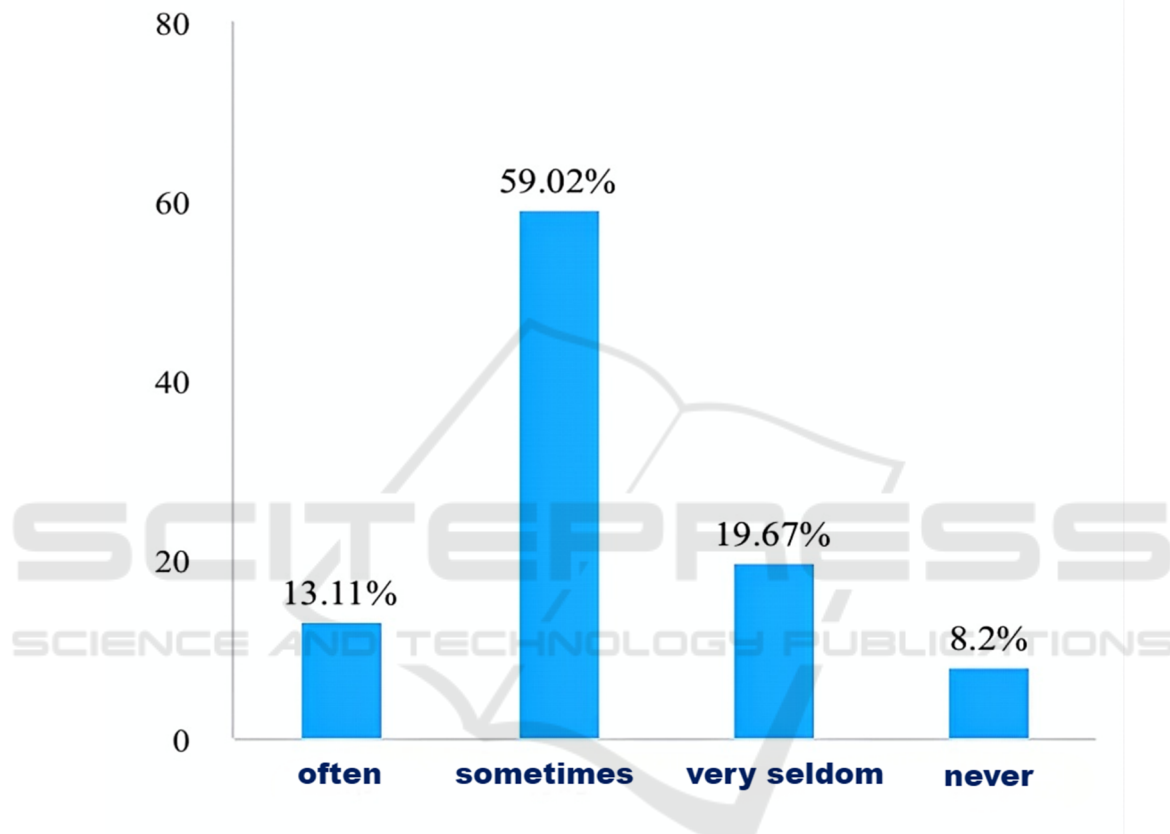
media content, while the 12-14 and 18-19 years old had lower levels of anxiety, showing that teens are particularly vulnerable to social media influences.

In a gender cross-sectional analysis, 65% of women said they sometimes felt anxious about social media content, compared to 44.44% of men. This suggests that women may be more vulnerable to the negative effects of social media. In the grade cross-level analysis, 57.69% of high school students reported feeling anxious at times, while the

proportion of junior high school students and college students was relatively low, indicating that high school students are more stressed in their social media use.

While 49.18% said they sometimes felt frustrated by negative comments on social media, and only 14.75% said they felt frustrated often. This suggests that while negative reviews have a noticeable effect

on some people, most seem to be able to maintain some degree of emotional stability. In the cross-age statistics, 20.83% of adolescents aged 15-17 said they often felt depressed, and 37.5% said they felt depressed sometimes, showing that this age group has a stronger emotional response to negative comments on social media. In contrast, 12-14 and 18-19 years old had a weaker response.



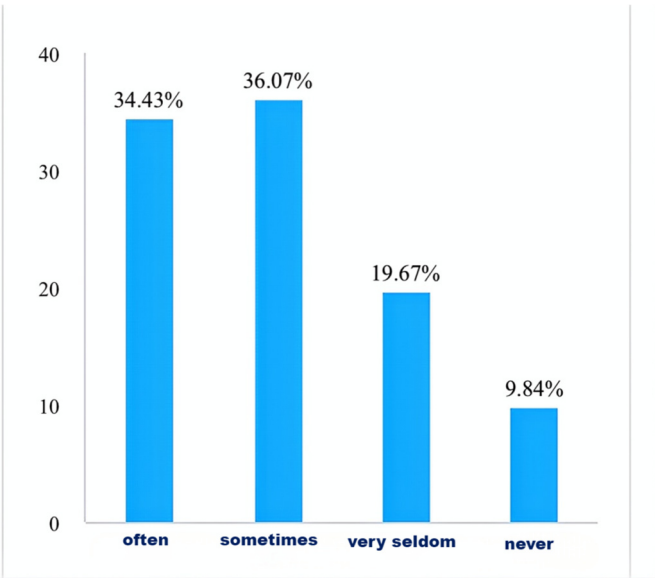
Alt Text for the figure: Bar chart showing frequency percentages: "often" at 13.11%, "sometimes" at 59.02%, "very seldom" at 19.67%, and "never" at 8.2%.

Figure 4. The relationship between social media content and students' mental health (Photo/Picture credit: Original).

4.5 Impact of Social Media on Sleep

In the 15-17 age group, 34.17% of respondents regularly use social media to affect sleep, and 33.33% sometimes use it. The above data shows that this age group is more dependent on social media. Among high school students, the sleep of 26.92% is

negatively affected by frequent use of social media, and 38.46% used it sometimes. It shows that high school students are under greater pressure to use social media (see figure 5).



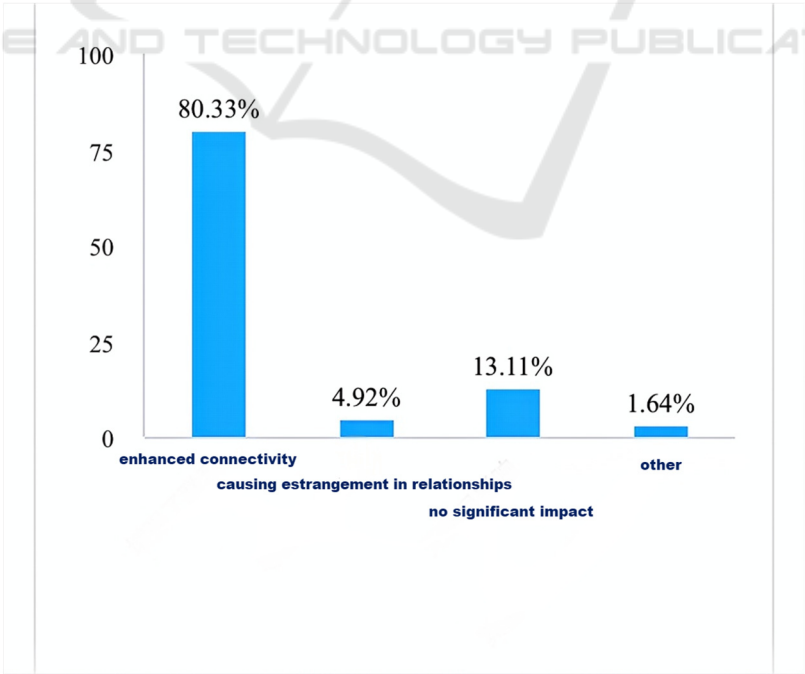
Alt Text for the figure: Bar chart displaying frequency percentages for activities: "often" at 34.43%, "sometimes" at 36.07%, "very seldom" at 19.67%, and "never" at 9.84%.

Figure 5. The relationship between using social media and students' sleep (Photo/Picture credit: Original).

4.6 Enhancement of Friendships Through Social Media

80.33% of the respondents believe that social media enhances the connection with friends, and only 4.92%

believe that social media leads to estrangement (see Figure 6). In the 12-17 age group, 87.5% of people believe that social media enhances connection, while only 20% of 18-19 years old say the same, showing a significant difference in the effectiveness of age and social media use.



Alt Text for the figure: Bar chart showing the impact of a factor on relationships: "enhanced connectivity" at 80.33%, "no significant impact" at 13.11%, "causing estrangement in relationships" at 4.92%, and "other" at 1.64%.

Figure 6. The relationship between using social media and students' friendship (Photo/Picture credit: Original).

4.7 Reduction of Time Spent on Social Media by Teens

In the 15-17 age group, 50% of respondents said they tried to reduce their time on social media, showing that adolescents in this age group are concerned about and reflecting on social media use. In contrast, none of respondents in the 12-14 years group tried to reduce social media use, suggesting that teens in younger age groups may not yet be aware of the impact of social media use.

4.8 Summary of the Findings

The survey sheds light on the impact of social media on teens, especially those aged 15-17. The survey results show that teenagers generally spend more time on social media, with nearly half of the respondents using social media for more than 4 hours a day, and social media has become an important part of their daily lives. While the majority of respondents felt happy after using social media, anxiety and frustration also came with it, especially among the 15-17 age group.

It is worth noting that the positive role of social media in enhancing friendships with friends is recognized by most teenagers, however, the impact of negative comments and content also makes some teens feel uneasy and self-doubting. In addition, surveys show that many teens are aware of the potential negative effects of social media time and are trying to reduce it, suggesting that they are increasingly concerned about their mental health. For example, young people are clearly aware that verbal abuse and online violence are behaviors that have a negative impact on their mental health, and teenagers are trying to avoid cyber violence.

Overall, social media plays a dual role in teens' lives: as both a tool for socialization and entertainment, as well as a source of anxiety and self-comparison. Therefore, parents and educators should pay more attention to the experience of adolescents on social media, and provide necessary guidance and support to help them better cope with the challenges brought by social media and promote healthy psychological development.

5 DISCUSSION

Focusing on adolescents aged 15-17 years, the main conclusion of this study is that adolescents generally spend more time on social media, which has become an important part of their daily lives. The impact of

social media use on secondary school students is complex and multidimensional (Wu, 2024). From the sample cases collected so far, the majority of people use social media to connect with their friends. In addition, because adolescents are more susceptible to peer influence, peer recommendations also play an important role in their media choices (Zeng, 2025). This has also affected their relationships with friends, and the data shows that most people have strengthened their connections, which is a more noteworthy positive. In the same way, teenagers can use different social media to get a lot of information, break the information cocoon, or share life vlogs to bring the positive side to their audience. Social media is a network tool and platform for people to share their opinions, experiences, and opinions in the digital age, mainly involving different forms such as social networking sites, microblogs, forums, etc (Xu & Yang, 2024). Teenagers can have more contact with the world outside of school through social media, so that communication is no longer confined to schools and classrooms, increasing the depth and breadth of communication, and thus shifting one-way cultural acceptance to multi-directional communication (Zhang and Xie, 2023). This allows teenagers to gain positive emotions such as a sense of identity and happiness from social media. Social media not only attracts like-minded friends, but also helps users increase their knowledge, meet their cognitive needs, emotional needs, personal integration needs, social integration needs, and stress relief needs, and provide teenagers with a strong sense of belonging. Taking WeChat Moments as an example, many teenagers like to browse a large amount of information in Moments, and pick out what they are interested in from the information to forward and comment, thus attracting the attention of others, gaining self-identity and enhancing their sense of self-confidence (Yan, 2016).

It can be seen that the conclusions about the positive impact of social media on adolescents are mostly consistent. In view of the negative impact of adolescents falling into social media algorithms, it can be improved from the level of adolescents (Tao & Zhang, 2025).

In addition, the survey shows that most teenagers sometimes feel anxious and depressed after using social media, and at the same time, they are also depressed because of negative comments, which indicates that the negative emotions brought by social media are prone to psychological problems among teenagers, such as depression, anxiety and other diseases.

With the continuous emergence of social

platforms and the continuous spread of social networks, the types of social media have increased significantly, and the flood of information, excessive netizens and frequent interaction behaviors have greatly increased the time and energy costs of the public to obtain information and maintain social relationships, and "are prone to negative emotions and avoidance behaviors" (Yang, 2024). Self-esteem is often studied as a mediating variable, and there is a significant relationship between an individual's self-esteem level and many aspects of adolescent development (Cao, 2024). Specifically, individuals with high neurotic personality are prone to mood fluctuations, anxiety, and irritability, which will cause individuals to be extremely uncertain about the external environment and sensitive to external information, which in turn will cause individuals to have a huge fear of missing out when using social networks, so that they frequently consult and log on to social networking sites, and eventually evolve into problematic social network use behaviors (Zhang, 2024). This may be because while the network provides opportunities for the integration and coordination of the internal state and the external environment, it also increases the difficulty of self-integration (Qu & Ni, 2020).

For parents, teenagers' use of mobile phones should be reasonably controlled, reasonable screen time limits should be set, and their psychological state should be guided to accompany them as they grow up. and encourage them to socialize offline and socialize with friends. Similarly, they should maintain open communication with teens about their social media usage to help identify potential risks such as cyberbullying or privacy breaches. Parents should set an example by demonstrating healthy online habits and teaching teens how to balance online and offline life to ensure that social media does not interfere with learning, sleep and relationships.

For educators, it is up to them to help teenagers develop proper mobile phone habits, such as giving lectures. Educators can incorporate healthy mobile habits into their curricula to teach teens how to use social media safely and responsibly. Educators should help students identify false information, encourage critical thinking, and develop healthy online behaviors. At the same time, educators should pay attention to the psychological state of students, detect anxiety or stress caused by social media in time, and provide support.

For social media platforms, it is recommended to strengthen content moderation to reduce the impact of negative information, provide more mental health support features, crack down on bad information, and

encourage high-quality creators. Provide stricter privacy protection settings for teens, and develop parental monitoring tools to help parents understand their children's usage. In addition, social media platforms can introduce a reminder function to encourage moderate use. Platforms should also provide educational resources to help teens learn about cybersecurity, and set up easy reporting channels to ensure they can get help quickly.

In the course of the study, there may be the following shortcomings. The first is sample bias, this study mainly focuses on adolescents in the age group of 15-17 years, and the data for other age groups are relatively small, so the research sample may lack a certain representativeness, resulting in the conclusion that it cannot be generalized to a wider group.

To avoid this problem, researchers should ensure that the sample is diverse and random, covering variables such as different backgrounds, ages, and genders, to improve the generalizability of results.

In the future, the above measures can effectively reduce the shortcomings in the research and improve the scientificity and credibility of the research.

6 CONCLUSION

Using a survey of 61 participants, this study investigated the effects of social media on teenagers between the ages of 12 and 19. The findings indicated that social media is important, especially for people between the ages of 15 and 17, who utilise it for social contact and pleasure. However, it also causes anxiety; according to around 60% of respondents, social media information makes them uneasy. Sleep and emotional stability are impacted by frequent use, particularly in women. Despite these drawbacks, some teenagers are growing more conscious and making an effort to use social media less. This emphasises how important it is to get help creating safe internet practices.

This study offers suggestions for reducing the detrimental effects of youths' excessive usage of social media. Limiting screen time, promoting offline socialising, and modelling responsible digital behaviour are all things that parents should do. Teachers may encourage students to use social media responsibly, incorporate digital literacy into their curricula, and assist students' mental health. Social media companies ought to strengthen privacy safeguards, provide mental health resources, and improve content control.

The majority of the study's participants were

between the ages of 15 and 17, which restricts generalisability. To increase the validity and trustworthiness of comparable studies, future research should employ a more randomised and diverse sample.

REFERENCES

- Cao, Y. 2024. The relationship between adolescents' social media use and self-esteem: The mediating role of positive body image (Master's thesis, Northwest Normal University).
- Qu, R., & Ni, X. 2020. The influence of social media use on adolescents' life satisfaction: The mediating role of identity status. *Psychological and Behavioral Research*, 18 (02): 214–219.
- Tao, X., & Zhang, T. 2025. The influence of social media algorithms on adolescents and comprehensive governance. *News Forum*, 39 (01): 27–31. doi:10.19425/j.cnki.cn15-1019/g2.2025.01.005
- Wu, J. 2024. The influence of social media usage patterns on social anxiety: A moderated mediation model (Master's thesis, Guangzhou University).
- Xu, P., & Yang, W. 2024. Parenting in the digital age and adolescents' prosocial behavior. *Youth Studies*, 2024 (01): 13–26, 94.
- Yan, N. 2016. The influence of social media usage behavior on adolescent socialization. *Reading and Writing (Education and Teaching Edition)*, 13 (09): 62–63. doi:10.16071/j.cnki.cn51-1650/g4.2016.09.046
- Yang, Z. 2024. Between connection and estrangement: A study on the impact of social media interaction situations on adolescents' information avoidance behavior (Master's thesis, University of Chinese Academy of Social Sciences).
- Zeng, Y. 2025. How mainstream media can enhance its influence on the adolescent group. *China Press*, 2025 (02): 92–93. doi:10.13854/j.cnki.cni.2025.02.032
- Zhang, L. 2024. The relationship between neuroticism and problematic social networking use among adolescents and intervention strategies (Master's thesis, Northwest Normal University).
- Zhang, S., & Xie, N. 2023. The influence of social media on adolescents' social interaction behavior and educational strategies. *Contemporary Educational Research Series*, 9 (10): 7–12.