

The Impact of Internet Age Network Information Dissemination on Adolescents

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Abstract:

This study explores the impact of the popularity of social network dissemination on adolescents in the context of the Internet age. It is found that network information not only helps adolescents expand their social networks but also relieves their loneliness and helps them maintain proper confidence. However, this study also finds that the complexity of network information makes it difficult for adolescents to discern the authenticity of information given their psychological immaturity and age characteristics. In the meantime, network information may cause negative psychological impacts on adolescents, such as comparative psychology and cyberbullying. Therefore, this paper suggests that joint efforts of families and schools should be leveraged to manage and monitor the time spent by adolescents on network platforms and guide them to properly utilize information networks. Last but not least, Efforts should also be put into cultivating adolescents' critical thinking to enable them to think independently and use social media rationally.

Keywords: Network dissemination; social platform; adolescent psychological health; guidance of adolescent behavior

1. Introduction

Recent years have witnessed rapid development of the Internet era and the rise of numerous social media platforms that have significantly affected the way of information dissemination and even people's lifestyles, making them addicted to the Internet. Mass media is widely regarded as a fundamental aspect of human communication, playing a crucial role in shaping how information is accessed and interactions are conducted. In the contemporary era, the flow of information is no longer restricted by time or space.

Various forms of media, including newspapers, television, and the internet, have become integral to everyday life, and it is increasingly difficult for individuals to remain untouched by their influence. With the digitalization of mass media, its impact has been extended even further. It now permeates nearly every corner of the globe and influences all facets of human life. Modern society is thus surrounded by a continuously evolving ocean of information [1]. Contemporary adolescents whose thoughts are at the forefront of the era are particularly deeply engaged in online social media platforms. While providing a large

number of employment opportunities, the Internet has also significantly changed people's lifestyles and brought new challenges to people and society as a whole, particularly in terms of adolescent psychological, behavioral, and physical health. Studies show that adolescents are an information-disadvantaged group. Due to their limited cognitive abilities, weaker critical thinking skills, and lack of awareness about information security, they tend to disclose more personal information as participants on social networking platforms. This includes not only their information but also shared privacy concerning their parents, teachers, and classmates. Consequently, they are more likely to become targets for cybercriminals, negatively impacting their studies and physical and mental health [2]. In addition, excessively exposing themselves to the Internet and using social media platforms at an inappropriate age can also cause sleep disorders and are highly associated with psychological problems like anxiety and depression. However, there is still spacious room to explore how to respond to massive misinformation and content harmful to psychological health on the Internet. Focusing on the positive and negative impacts of the Internet on adolescents, this paper devolves into how online content affects adolescents' psychological and physical health and explores the impact of online information dissemination on their emotional development. In addition, this study also provides prospects regarding the psychological and physical effects of online information dissemination on adolescents' psychological and physical health.

2. Current Situation of Adolescents' Use of Network Information

2.1 Positive Impact on Mental Health

2.1.1 Expanding social networks

With the development of the times and advancements in technology, emerging media relying on big data, internet networks, and mobile communication have come into being to provide information services to audiences, such as WeChat, Douyin, Facebook, etc. [3]. These social media platforms allow adolescents to break free from the limitations of time and space, maintaining close contact with family and friends across continents. Adolescents can also meet new people on social platforms. In real life, adolescents' social circles are relatively fixed, and most can only meet new friends within their class or local community. However, social platforms provide a new avenue for adolescents to make new friends. Due to academic pressures, it is difficult for adolescents to maintain face-to-face contact with friends, and long periods without

meetings can lead to estrangement. Social media helps them stay in touch daily. Adolescents can share their life status and interesting experiences on social platforms at any time, and this virtual interaction strengthens their relationships, offering psychological support and encouragement. Online communication has been identified as an important resource for adolescents, particularly those with limited access to traditional forms of social interaction. Through virtual platforms, opportunities to expand distant social networks are made available, while close-range relationships are also reinforced. As a result, individuals are enabled to improve their social adaptation and experience higher levels of well-being [4]. This online interaction enables adolescents to maintain long-term contact with their friends, and the "accompaniment" online helps them maintain old friendships while also making new ones.

2.1.2 Alleviating loneliness

Social media platforms can help adolescents find people with similar interests. Friends made in school and daily life may not share the same hobbies and values as adolescents, and finding someone with the same interests in a vast crowd can be challenging. However, with the massive data support from social media, adolescents can quickly find people with shared interests. These common interests help adolescents quickly establish conversation topics with new friends, allowing them to resonate deeply. This shared resonance enables them to find a sense of belonging. For example, they can join communities focused on the same interests, where adolescents can freely share their interesting experiences and discuss topics they enjoy. Through this, adolescents can actively engage in discussions and interactions with friends from all over the world in their interest forums, forming stable social connections. Some minority groups may develop feelings of inferiority when facing external doubts, becoming isolated and unwilling to communicate with others, or even turning to crime. In this regard, it is crucial for adolescents from these distinctive personality groups to seek help and support on social media. They can find relevant theme-based communities and forums on social platforms to seek help and engage in mutual communication. These communities and forums offer these adolescents a space where they can interact without harm and where they can accept each other. In these communities and forums, they can confidently express their identities, freely share their feelings, and engage in in-depth exchanges with like-minded individuals. This environment fosters a sense of belonging, akin to that of a family. For these adolescents, this sense of belonging is particularly important, as it allows them to gain support and recognition they might not receive in real life. In these spaces, they don't feel excluded by mainstream society,

which helps them overcome loneliness and isolation. They can seek advice, share their lives, and greatly improve their self-confidence and optimistic mindset, leading to greater self-identity.

Moreover, social media allows adolescents to break free from the limitations of time and space, enabling them to explore cultures and traditions from around the world. This significantly broadens their perspectives and understanding, helping them appreciate the diversity of the world. Adolescents can use social media to validate what they have learned from books. For example, when learning about the lifestyles and customs of people from various countries, or the traditional cultures and historical anecdotes of different regions, they can engage in discussions and repeatedly verify their knowledge on social platforms. This greatly enhances their learning abilities and deepens their understanding of the world. The internet's open structure provides adolescents with the ability to transcend the constraints of time and geography. They are exposed to an abundance of online information, diverse cultures, varied ideologies, and multiple lifestyles. This exposure not only broadens their horizons but also helps break down narrow or insular perspectives. Such experiences are believed to contribute to the development of a more inclusive and diversified worldview [5]. This expanded worldview can help adolescents establish their perspectives on life earlier. Furthermore, exposure to a variety of cultures fosters greater confidence and tolerance when adolescents interact with others in the future. This can positively impact their self-identity. When adolescents maintain the right kind of self-confidence in daily life, they are more likely to integrate quickly into new environments, meet new friends, and grow personally. In such a confident atmosphere, feelings of loneliness and dependency are unlikely to arise. Even when faced with external criticism, adolescents can confront it calmly and accept challenges.

2.2 Positive Impact on Behavior

Adolescents can use social media platforms to acquire a wealth of knowledge and skills. In school, they often utilize social media to learn new things and to look up information they don't understand. In class, teachers might require students to form study groups on social media, where they can discuss topics and support each other's progress. Such discussions not only positively impact their academic achievements but also provide clearer goals and references for their future careers. Additionally, watching educational films and videos on social media and engaging in discussions about them can deepen adolescents' understanding, providing strong educational value and

fostering free discussions. This can stimulate their divergent thinking and independence in problem-solving. For instance, during driver's license exams, driving schools often require students to watch videos on car accidents, which is a vivid way to instill the importance of safe driving. Moreover, social media enables adolescents to interact more with peers, enhancing their communication, social, and self-expression skills. Making new friends on social media allows them not only to discuss studies but also to talk freely about shared interests. For example, teenagers interested in musical instruments might join a piano discussion group, while science enthusiasts might join an aerospace group. This not only helps them make friends but also gives them a platform to shine in their specific interests. Through positive interactions on social media, adolescents can significantly reduce feelings of loneliness, lower the risk of depression, and increase their sense of happiness and self-confidence.

Furthermore, adolescents can gain early exposure to social causes through social media. They can become more aware of the importance of environmental protection and animal welfare and can participate in contributing to these causes at a younger age. Today, many companies promote charity events and environmental campaigns on social media, encouraging adolescents to support social causes through direct action. These activities allow adolescents to be positively influenced by others' actions, helping them develop a strong sense of social responsibility.

3. The Impact on Adolescents

In today's internet-driven media landscape, network information dissemination brings not only positive influences but also negative impacts and challenges. Social networks have been regarded as an inevitable outcome of Internet development. As the saying suggests, "True social connection cannot exist without interaction." While tools and technologies are created to facilitate communication, it is ultimately the connections between people that represent the desired outcome. Once tools are established, however, they begin to exert a shaping influence on their creators. This dynamic, while offering immense potential and opportunities, also introduces risks, which can be likened to the Sword of Damocles—hovering with the potential to cause harm even as it offers benefits [6]. This section examines the negative effects on adolescents' mental health and behavior.

3.1 Negative Impact on Mental Health

Due to adolescents' immature minds and age characteristics, the vast array of information online can make it difficult for them to discern between true and false infor-

mation. Furthermore, exposure to social media can lead to a problematic mindset of comparison. People generally share carefully curated content on social media, often concealing flaws and presenting only their best sides. For instance, people may showcase their vibrant social lives and well-edited photos. Adolescents, whose cognitive development is still in progress, may be prone to compare themselves with these images, leading to a negative mentality of comparison. Continuous exposure to social media can easily lead to feelings of inferiority among adolescents. Moreover, seeing heavily edited photos can trigger appearance-related anxiety, causing dissatisfaction with their looks and life, which undermines their self-confidence. Adolescents from less fortunate families or those dissatisfied with their appearance who become overly engrossed in these online images may develop distorted perceptions, leading to dissatisfaction with their own lives, and in extreme cases, even criminal behavior.

Social media platforms can also be addictive for adolescents, leading to an excessive reliance on the virtual world. It has been suggested by some researchers that adolescents who spend excessive time engaged in online communication may become overly reliant on virtual interactions at the expense of real-world social skills. A lack of face-to-face communication can lead to deficiencies in emotional regulation and psychological resilience. Consequently, such individuals are more likely to exhibit distorted or maladaptive behaviors in real-life situations. Prolonged exposure to negative emotions is believed to increase the likelihood of engaging in risky or unlawful activities [7]. When adolescents rely heavily on social media for interaction, the views, likes, and comments on their posts can give them a false sense of satisfaction, making them feel admired and validated by others. This vanity fosters addiction and creates a dependency on social media. These adolescents often post carefully crafted photos, only to sit by their devices and continuously refresh their accounts to see how many views, likes, or comments their posts receive. This kind of activity fills a temporary void and brings fleeting pleasure. This is a worrying signal, as they may become engrossed in this fabricated media world to the negligence of the real one. Overindulgence in social media can lead adolescents to lose track of time in the real world, with hours or even entire days slipping away in the virtual realm. Such frequent use leads to psychological dependency, and this excessive reliance on social media erodes their self-control. Over time, it becomes difficult for adolescents to maintain focus on any single task, which can negatively affect their academic performance and family relationships, potentially leading to declining grades and family discord. More critically, if this behavior continues, these adolescents may struggle to disengage from the virtual world, ultimately losing

fundamental social skills and a realistic understanding of society.

The information posted on social media platforms often has a fragmented nature. Prolonged reading of such fragmented content can cause adolescents to lose patience. When adolescents gradually become accustomed to seeking help from fragmented information, their attention spans decrease, making it difficult for them to stay focused for extended periods. Fragmented information on social media strongly appeals to some adolescents because it allows them to obtain a large amount of information in a short time. However, this way of consuming information subtly alters their ability to focus, making them more susceptible to the pull of the internet's virtual world. This shallow reading habit erodes their patience, which is a serious issue. When adolescents lose patience, they struggle to process and understand complex information, limiting their ability to engage in deeper thinking about what they encounter.

3.2 Negative Impact on Behavior

Under the influence of online information, cyberbullying has become increasingly common on today's highly developed social media platforms, causing irreparable harm to innocent adolescents and fostering a social trust crisis. Adolescents, whose worldviews, life philosophies, and values are still being shaped, often lack proper value judgment regarding online information. As a result, they are more easily influenced by false information, violent content, and even harmful values depicted in short video clips, which they may imitate [8]. In the current internet era, privacy is highly exposed, which amplifies the risk of privacy leaks. Trusting adolescents, if they make even minor mistakes, can be exploited by certain malicious individuals who utilize their mistakes to cause endless harm. Female youths are particularly vulnerable, as some wrongdoers steal their private photos, alter them using AI software, and widely distribute them. This inflicts severe psychological trauma on the victims by leaving them feeling helpless and hopeless. In such an environment of cyberbullying, adolescents may lose trust in others and get significantly impacted on their mental health.

Social media platforms can also heavily impact adolescents' physical health, particularly sleep. Many adolescents become so absorbed in social networks that they cannot break free, often browsing their phones before bed, which delays their sleep. When adolescents check social media before sleeping, they may focus on who viewed or commented on their posts, making it harder for them to fall asleep. This is especially true if they are close to falling asleep and then interrupted by notifications, making sleep even more difficult to achieve. Additionally, the screen light from phones and other electronic devices sup-

presses melatonin production, keeping them in an excited state and delaying sleep further. Research also indicates that sleep problems, an important indicator of recovery outside academic activities for university students, are closely related to their physical and mental well-being [9]. Insufficient sleep hampers their alertness and focus during daytime activities. All these significantly affect their daily lives.

4. Solutions

In today's internet era, teaching adolescents how to use social media responsibly is essential to prevent misuse. Schools and families should work together to foster critical thinking in adolescents early on, enabling them to think independently and use social media rationally.

While adolescents are still developing mentally, parents should reasonably control their time spent on social media platforms. Most adolescents, when first introduced to social media, find it difficult to resist its allure. Without timely guidance and correction, this can lead to dependence. Setting specific internet usage limits for adolescents new to social media is therefore crucial, requiring open communication and supervision by parents. The best way to prevent adolescents from becoming overly attached to the virtual world is to help them appreciate the beauty of the real world. Parents can spend more time with their children, perhaps by organizing a family activity each week, so adolescents can experience the joy of life and receive emotional support from their families, which is very important for their development.

Schools should also guide students on the appropriate use of electronic devices. For instance, teachers can educate students in class on the dangers of excessive social media use, or play relevant videos to provide positive guidance. In class, teachers should prohibit the use of electronic devices and, during discussions, discourage reliance on AI or pre-existing answers, instead encouraging students to use online resources to aid their exploration of answers. Furthermore, schools can actively organize extracurricular activities to nurture adolescents' interests. When they are involved in a club they enjoy and can engage in open conversations with friends, it effectively reduces feelings of loneliness and enhances their social skills.

5. Conclusion

This paper analyzed the effects of social media platforms and the development of the internet on adolescents in the digital age. Socially, social media provides adolescents with a beneficial platform to connect with friends who share their interests or to engage in topic-based commu-

nities, which can enhance their social skills and confidence. However, excessive reliance on social media may lead some adolescents to immerse themselves in a virtual world, diminishing their real-life social abilities. Additionally, social media platforms provide great convenience for adolescents seeking information. They can overcome time and space barriers to find almost anything they want to know on the internet, though this fragmented information can lead to a habit of superficial reading, undermining their ability for deep thinking. Regulatory bodies should work together with government agencies to introduce policies aimed at reducing behaviors like cyberbullying. Families and schools must collaborate to guide and monitor adolescents in the responsible use of information platforms and reinforce supervision over electronic devices to ensure sufficient sleep and overall health. Hopefully, shortly, adolescents will learn to use digital networks responsibly and contribute positively to society.

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