

Longitudinal Study on the Impact of Social Media on Loneliness and Psychological Well-being

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Abstract: In the current era of continuous scientific and technological development and societal progress, the use of social media has a profound impact on individual development. The question of whether frequent use of social media affects individuals' sense of loneliness and subjective well-being is a contentious academic issue. The practical application and trends in the development of social media are also focal points of consideration and research in contemporary societal and technological advancements. Therefore, this paper analyzes the current state of social media development and explores its impact on individuals of different age groups. It examines the practical effects of social media on individuals' feelings of loneliness and psychological well-being, delving into how to use social media correctly to promote individual growth and development.

Keywords: Social Media, Loneliness, Well-being, Longitudinal Study

1. Introduction

Throughout the historical development process, human communication history can be divided into three stages. Initially, print media, radio, and television were the primary means of information dissemination. In the second stage, digital media and various internet technologies played a key role. In the current development process, self-media forms such as Facebook, Weibo, Twitter, etc., have gradually become mainstream channels for information dissemination, evolving into a new stage. Social media provides a platform for individuals to independently express their opinions, distinguishing itself from traditional media that simply outputs viewpoints and information. In the current era, online media offers individuals more expressive space. Simultaneously, the use of social media also influences individuals; for example, does frequent use of social media affect human happiness and loneliness? Can controlling the time spent on social media effectively reduce individual loneliness? The various impacts of social media usage patterns on individuals' subjective well-being are crucial topics in the current societal development process. Therefore, this article analyzes the impact of social media on individuals of different age groups, focusing primarily on the university stage of young adults and extending the analysis to the elderly, exploring the influence of social media on individuals' feelings of loneliness and psychological well-being [1].

2. Research Methodology

In the specific research process, a survey and interview format was employed to investigate the impact of social media on feelings of loneliness and psychological well-being among 150 first-year students and 150 second-year students, with an equal gender ratio of 1:1. The questionnaire survey was conducted simultaneously with interviews. Additionally, interviews were conducted with 100 individuals aged 50 to 65 to understand their perspectives on social media and explore the impact of social media on feelings of loneliness and psychological well-being within this age group. Combining the results from the survey and interviews, the longitudinal impact of social media on feelings of loneliness and psychological well-being was summarized [2].

3. Influence of Social Media on Individuals of Different Age Groups

As social media undergoes continuous development, various trends emerge, including changes in the disseminating subjects, content, and reforms and developments in different social media platforms based on user demands [3].

Results from surveys and interviews conducted on first-year students indicate that, during the transition from junior high to university, these students have greater autonomy over their mobile devices. Consequently, students in this transitional phase exhibit higher frequencies of social media usage, with 30% spending up to 17 hours on their phones daily. Gradually, a dependency on social media becomes apparent. Platforms such as QQ Space, WeChat, Weibo, Instagram, and others, both domestic and international, captivate the curiosity of first-year students. Due to their inquisitive nature and ample free time, students in their first year easily become engrossed in various social media platforms. Particularly, the development and maturation of platforms like TikTok significantly occupy the majority of students' study and leisure time during the continuous evolution of the internet. Additionally, the unfamiliarity of first-year students with their surroundings, many having moved from their hometowns to unfamiliar cities for their studies, results in a reluctance to let their guard down and assimilate into new communities and environments. Consequently, first-year students invest most of their time in various social media platforms to gather information and express their opinions through the internet.

The study and investigation of second-year students reveal a different scenario. With one year of transition, second-year students become more familiar with the university and its surroundings. They establish stable relationships with their peers, and there is a noticeable decrease in social media usage time compared to the first year, with an average of 8 hours on the phone and 4 hours spent on social media daily. Under these circumstances, second-year students can efficiently utilize their free time to engage in more extracurricular activities and face-to-face social interactions in real-life settings. To some extent, this reduction in dependency on social media during the second year also stems from students' growing awareness of the importance of studies and the multiple pressures associated with postgraduate exams and future employment. Students in their second year dedicate their free time to academics, thereby minimizing the significant impact of social media on their lives and indirectly reducing the likelihood of dependence.

Surveying and analyzing university students through questionnaires and interviews provide preliminary insights into the impact of social media on feelings of loneliness and psychological well-being. However, with aging becoming a significant concern in the development of modern society and increasing societal pressures, young and middle-aged individuals find themselves predominantly immersed in work and studies. For some elderly individuals, life becomes less enriching after retirement. Therefore, the author believes that studying the influence of social media on feelings of loneliness and psychological well-being among the elderly can help garner more attention for the elderly in their daily lives. Understanding the psychological development levels of the elderly can

lead to increased comprehension and care. Due to rapid societal development in recent years, individuals aged 50 to 65 exhibit varying degrees of acceptance of social media. Some elderly individuals, influenced by higher educational levels during their youth or individual differences, delve deeper into the exploration of novel concepts. Consequently, they adapt well to the rapid development of the internet, enabling them to use social media effectively and integrate into the lives of younger generations. However, there are also elderly individuals with lower education levels or limited learning abilities during their youth. In the era of rapid internet development, these individuals struggle to adapt to societal changes, comprehend the use of smartphones for social media, leading to significant generation gaps and communication barriers with younger individuals. This, to a large extent, results in an increase in feelings of loneliness and a decline in psychological well-being [4].

4. Analysis of the Impact of Social Media on Feelings of Loneliness and Psychological Well-being in Different Age Groups

4.1. Impact on Feelings of Loneliness and Well-being in First-year Students

The primary source of loneliness for first-year students is the discomfort associated with unfamiliar environments and the challenges in establishing smooth interactions with new classmates. Therefore, during the first year of university, students alleviate their sense of loneliness by using social media. They immerse themselves in the process of social media usage, sharing experiences and engaging in emotional communication with individuals online, aiming to enhance their own sense of happiness. The formation of a collective sense of loneliness is also a prevalent social phenomenon during the widespread use of social media. While the widespread application of social media appears to bridge the gap between individuals and serve as a link for communication, a practical analysis reveals that the broad usage of social media leads to the expansion of each individual's social circle and facilitates convenient interactions. However, this results in emotional support that is more superficial, distancing individuals from intimate relationships in real life. Consequently, many individuals feel that despite being with friends, their relationships lack intimacy. Therefore, during the first year of university, while there is an increase in the frequency of social media usage, an overall strong sense of loneliness prevails, and individual psychological well-being appears to be superficial, lacking in-depth emotional support and interpersonal interactions.

4.2. Actual Development of Loneliness and Well-being in Second-year Students

Overall, the loneliness index for second-year students is lower than that of the first year, and the psychological well-being index shows an improvement compared to the first year. Due to the continuous improvement in individual psychological development and cognition, second-year students are more familiar with their studies and university life. They can invest more energy and time into their personal growth and consciously engage in social media use to extract energy for self-improvement, rather than merely passing time on social media. Therefore, analyzing students' feelings of loneliness and well-being from the perspective of social media dependence indicates that second-year students are less influenced by social media. However, the use of social media can inadvertently lead individuals to engage in social comparison behaviors. As students progress through their university years, they tend to contemplate their future development and career plans more deeply. During social media use and communication, students compare their situations and status with others. Due to differences in cognition, emotions, and behaviors, individuals experience various emotions during this comparison process. In the process of using social media, individuals are inclined to present their better side and seek feedback and support from others. Under this premise, positive or negative feedback from others can have different effects on an individual's feelings of loneliness and well-being. For instance, with the rapid development of platforms like TikTok that encourage young

creators, many students showcase their strengths on internet platforms, gaining more attention and praise. In this process, students can experience increased happiness and reduced loneliness through praise and compliments from strangers, achieving a sense of self-identity. However, the online environment is complex, and the groups individuals face are diverse. Alongside positive feedback, there may also be negative voices influencing individuals' emotions and attitudes toward social media. Therefore, in the process of personal development, having a correct perspective on social media can effectively help individuals reduce loneliness and foster subjective well-being [5].

4.3. Impact of Social Media Usage on Feelings of Loneliness and Psychological Well-being in the Elderly Stage

In the process of maturity and development, individuals in the elderly stage have formed well-established cognitive abilities that are challenging to change. In-depth understanding of elderly psychology allows for an analysis of feelings of loneliness and psychological well-being. It is observed that in the reception and learning process of new things during the elderly stage, some individuals may exhibit resistance due to slower cognitive development and gradually delayed thinking. Additionally, certain individuals may reject new things due to difficulty in learning or mastering them. However, in the context of societal progress, the use of social media has become a necessary skill for every individual. For example, in the current societal development, assignments for kindergarten students are distributed by teachers through social media platforms such as WeChat or DingTalk. Some students who are taken care of by their grandparents may face difficulties in their learning process and completing assignments due to the grandparents' lack of proficiency in using social media and smart devices. Under such pressures, elderly individuals may forcefully attempt to learn social media. However, due to learning difficulties or unfamiliarity with various functions, they may experience a higher sense of loneliness and a lower happiness index at the psychological level.

Meanwhile, opinions on the use of social media vary among the elderly population. Objectively analyzing the situation, social media usage is not restricted by age or type, granting individuals in the elderly stage the right to freely express their thoughts and attitudes toward life. For instance, on platforms like TikTok, some older individuals share their lives, interact well with younger users, and showcase various talents. However, during the process of publishing their works, they may face multiple evaluations from both familiar and unfamiliar individuals. Criticism from familiar individuals may even surpass that from unfamiliar ones. Elderly individuals not only encounter the pressure of showcasing their happiness on the internet but also cope with societal expectations. The collision between traditional beliefs and the development of modern technology can lead to a sense of loneliness in the elderly during the use of social media. However, social media usage can also provide emotional value for the elderly, helping them enhance their psychological well-being [6].

5. Using Social Media Correctly to Reduce Loneliness and Enhance Psychological Well-being

5.1. Proper Perspective on Social Media

In the actual usage of social media, social interaction behaviors and usage patterns are closely linked to individual feelings of happiness and loneliness. During the specific usage process, there are two main ways individuals engage with social media. Some individuals use social media without leaving any actual content, merely observing the social accounts and updates of others. For this group, the impact of social media on feelings of loneliness and happiness is relatively small. This is because they can subjectively derive emotional value from social media. When in a positive emotional state, they can selectively consume positive information, minimizing the influence of social media. Simultaneously, another group actively expresses their opinions through likes and comments,

articulating their own viewpoints. In this process, their opinions are subject to the comments and attention of others. Unpredictable emotional value provided in this manner can influence individuals' experiences in the process of social media use, subsequently affecting their feelings of loneliness and happiness. Individuals who actively express themselves on social media and have a certain fan base are more significantly influenced by social media. From both a benefit and emotional value perspective, individuals who use social media more frequently and invest more are more susceptible to its impact. Therefore, individuals should first have a correct understanding of social media, considering it as a channel for obtaining information and endeavoring to avoid excessive dependence on it. Existing research defines the relationships between individuals on social media as "weak ties," contrasting them with "strong ties" in real-life interactions. It is noted that strong ties have a greater capacity to enhance an individual's psychological well-being. Thus, individuals, with a proper perspective on social media, should better integrate online interactions with offline social interactions to comprehensively enhance their sense of well-being and reduce experiences of loneliness.

5.2. Integrating Online and Offline Social Interactions

Communication on social media can only provide individuals with brief emotional value and influence. However, in face-to-face interactions, individuals can engage in deeper conversations with friends or others, thereby enhancing their subjective sense of well-being. Therefore, in actual social interactions, individuals should be encouraged to engage in deeper communication with friends to elevate their sense of happiness. Simultaneously, when interacting on social media, individuals can also engage in more profound conversations, continuously strengthening weak ties, and establishing deeper friendships or intimate relationships with others. This is particularly crucial for teenagers who should avoid excessive use of social media and not neglect emotional communication and connections with other individuals in their lives. It is essential to leverage hot topics on social media to engage in friendly and deep conversations with friends. By doing so, individuals can not only better establish friendship but also express their thoughts on trending topics, shaping their personal image. In the continuous process of growth and development, this approach can contribute to the maturity and development of individual cognition, indirectly enhancing their subjective sense of well-being. Through the collision of ideas and in-depth communication on a spiritual level during interactions with others, individuals can effectively reduce feelings of loneliness [7].

5.3. Enhancing Individual Media Literacy

In the era of mass media, both young and elderly individuals need a fundamental understanding and application of smartphones and the internet. Throughout the usage process, it is crucial to continually improve personal literacy and express positive opinions and views on the internet. Particularly for older individuals, during the period of internet development, maintaining a lifelong learning mindset is essential. Actively seeking to understand the use of social media and breaking age barriers to communicate with younger people can significantly reduce the mental stress associated with the use of social media by the elderly. Moreover, it can help them form greater self-identity in the process of usage, thereby enhancing their psychological well-being and reducing the loneliness experienced by older individuals due to barriers in social media use [8-9].

6. Conclusion

There is a correlation between the use of social media and individual feelings of loneliness and psychological well-being. Within a reasonable scope, the use of social media can effectively enhance an individual's psychological well-being, assisting them in acquiring positive emotional value and further promoting the development of internet technology. However, excessive use or rejection of

social media can lead to an imbalance between online and offline social interactions, resulting in feelings of loneliness. Analyzing the results from surveys and interviews, it is evident that the impact of social media on feelings of loneliness varies significantly based on educational levels. Therefore, in the process of using social media, greater attention should be paid to individual media literacy and the enhancement of media skills. Efforts should be made to assist each individual in fully utilizing social media and deriving positive emotional value from it, aiming to address the potential negative impacts of social media use on feelings of loneliness.

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