

Social Media and Mental Health: Examining the Relationship of the Use of Social Media to Anxiety

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Abstract: There is no lack of information in this Post-truth era: everyone discloses, narrates, and comments whatever they want on social media. Granted, the convenience of social software allows people to access or share information with others at any time, but it also conditions them to form dependencies. Once this dependence is formed, people's level of concentration and independent thinking gradually decreases, and stories, news, and videos on the Internet increase the degree of influence on ideas and mindset. This paper aims to examine how social media augments people's anxiety through its various ways of influencing mindsets, especially focusing on adolescents. This objective is accomplished through literature research and a questionnaire to provide a theoretical basis for the relationship between social media and anxiety. The analyzed documents are selected to set up a framework to deconstruct how social media causes anxiety. The survey, presented in an online questionnaire, targets adolescents who spend time on social media. The questionnaire requires the respondents to describe their emotional experience on social media, including whether they detected negative feelings due to specific moments on things posted on the Internet.

Keywords: Social Media, FOMO, Information Anxiety, Social Currency, Cyber-harassment.

1. Introduction

With the widespread use of the Internet, short videos and texts prevailed in online social networking and gradually replaced people's reading time with paper books and in-depth reports. The presence of social media has accustomed people to see it as a way to attain information due to its accessible and entertaining features. Although social media constructs a new and convenient way for people to communicate, by its essence characteristic, there is a lack of control over the spreading of information. The fake and unreliable sources on social media are making people lose the ability to distinguish between right and wrong, state unbiased opinions, and explore new thoughts ceaselessly. When people become less independent in these skills, they rely more on social media, which influences and infiltrates their emotions and thoughts more. Various studies have shown that there is a positive correlation between people's use of social media and poor mental health, including anxiety, depression, and loneliness. For instance, a study in Hong Kong, China, reveals that students who spend more time on social networking sites experience more serious anxiety and depression issues [1]. Another report shows American young adults, aged 18 to 22, carried the greatest burden of loneliness due to screen time use [2].

This study is dedicated to focusing on the specific causation of social media that contributes to people's anxiety, combining and analyzing previous research to enrich the theory level of the media and mental health fields. Then, an additional survey provides contemporary quantitative data. The significance of this study lies in clarifying the ways social media is adopted to increase people's dependencies and anxiety, thus helping people to get less addicted to social networking sites and adjust their well-being.

2. The concept of Anxiety

2.1. Anxiety definition and causation

Anxiety disorder is one of the most prevalent mental problems in the world. The Anxiety and Depression Association of America (ADAA) once conducted a report, concluding that nearly 40 million people in the United States, which is around 19.1% of the population, have psychological issues related to anxiety disorder, which increases each year [3]. However, differing from anxiety disorder that needs to be clinically diagnosed, anxiety is the preliminary basis for developing into further severity. According to the American Psychological Association (APA), anxiety is "an emotion characterized by feelings of tension, worried thoughts, and physical changes such as increased blood pressure" [4]. Besides having anxiety conceptualized, it is also significant to recognize the basic causation of anxiety. Psychological doctor Adam Felman claimed that anxiety is a response to different situational factors by cognition and behavior change [5]. In other words, one might experience a body-aroused behavior change after a cognition of plights that thus leads to the formation of anxiety.

2.2. Information anxiety definition

This study focuses solely on information anxiety, simply referring to an anxiety response generated by potential negative experiences in social media. The popular use of the Internet has transformed people from seeking information offline through printed news, television, and radio to online digital services, including social software. Pew Research Center's Journalism Project conducted a survey in the United States and revealed 58% of Americans prefer a digital device, while 27% prefer TV, 6% prefer radio, and 5% prefer printed news [6]. This increased usage of the Internet spurred people's concern over the addiction to digital devices and even anxiety aroused by social software. A four-year national study examining undergraduate students' anxiety conducted by Project Information Literacy discovered that students reported being "tired, annoyed, intrigued, confused, stressed and overwhelmed" when using digital technologies to seek information [7]. This examination is consistent with a 2001 study led by Wurman that explores the potential side effects of digital technologies and the Internet [8]. The research teams then concluded the undergraduate students' response was "Information Anxiety", meaning the anxiety a person experiences when seeking information to complete daily tasks. In the case of social media—a type of online channel for seeking information, also naturally augments people's anxiety through daily visits.

3. The approaches that Social Media uses to cause information anxiety

This part of the content will address how social media has mounted people's anxiety with three different mechanics. The first method is that fake images and information on social media can deceive people and thus negatively impact their use experience. Secondly, as more people utilize social media as their main communication and trend promotion, people will experience fear of missing out, causing them to worry constantly. Last but not least, as social media cannot avoid cyber-harassment, people might be offended, frightened, or imitated by such experiences.

3.1. Social media leads to fake images and information

Social media is a place that allows freely spreading information and draws attention to bloggers from different fields to share their thoughts, pieces of life moments, and experiences. To this end, viewers are attracted by the distinct features of each blog. However, the levels of anonymity in social media have lessened the credibility of the bloggers. People who met on the Internet used to be irrelevant strangers, and thus nobody can guarantee the authenticity of the information being perceived, meaning that any positive image or content posted on social media can be fake. Therefore, it will be easy for bad actors to manipulate blogs to deceive viewers, influence their decisions, actions, and thoughts, and ultimately cause stress [9]. A study conducted by Allcott and Gentzkow in 2017 demonstrates that the average American adult reported seeing one or more fake reports around the 2016 U.S. election month, and half of them believed the fake news [10]. Manipulated content on social media can distort viewers' memory by affecting perception [11]. When memory is distorted, people's decision-making skills will also be affected. Take the case of the 2016 election as an example. People who believed in the fake news might change their vote in the election [12]. Along with memory distortion, beliefs in fake information can result in persistent damage to emotion. When people realize that they have changed their actions due to their seeking of false content, they might generate a negative image of themselves that eventually grows into anxiety.

3.2. Social media leads to FOMO (Fear Of Missing Out)

Before diving into how social media leads to information overload and FOMO, a brief definition of FOMO is essential. FOMO, Fear of missing out, is defined as a pervasive apprehension that others might receive an award when one is absent [13]. FOMO reflects one's innate desire to be connected to others in environments [14]. Since social media is an environment with no time and space limitations, it serves as an important site for individuals to interact with others [15]. Thus, FOMO takes place in social media, which in turn may result in an addiction as individuals are eager to seek information. When people get addicted to content on social media, withdrawal from the content will cause them to feel anxious, irritated, and lose control [16].

3.3. Social media leads to potential Cyber-harassment

Cyber-harassment, in-person aggressive behaviors by using social media, has become one major problem introduced by the prevail of the Internet. The Internet appears to be an outlet for groups that are afraid to conduct violent action offline [17]. A research team led by Hinduja has found that Cyberbullying and harassment, such as threatening and sexual messages are usual among adolescents utilizing chatrooms on social media [18]. Besides sending harassing messages, many perpetrators begin to utilize social media to incite violent activities. Research suggests that street gangs often announce their aggregated violence and drug sellers promote illegal drugs via social media [19]. Moreover, as the Internet ensures anonymity and confidentiality of personal information, it will be easy for hate groups to spread verbal violence between race and gender [20]. According to Paw Research Center, around 41% of United States adults had experienced cyber-harassment (including stalking, threat messages, and harassment over some time) in 2021, and it is evident that the percentage of this persecution based on race, gender, and religion has increased since 2017 [21]. These victims were simply visiting social media sites and blogs, but then suddenly being verbally attacked and insulted by strangers. These harassments are trapping and affecting viewers' daily well-being and ability to function, causing them to feel distress, annoyance, and helplessness. Research conducted by the American Psychological Association has correlated constant exposure to violence to higher rates of anxiety, especially for those victims [22].

4. A supplementary survey

4.1. The questionnaire

As mentioned in the introductory section, a survey is included to provide quantitative data on people's real-life experiences using social media. This online survey is conducted anonymously, ensuring confidentiality, and participants will select and write answers as authentically as possible.

The questionnaire was implemented online on June 20, 2024, by social networking software and closed on June 24, 2024, with the last respondent submitting their answers. The total number of respondents is 88. There are 20 respondents in the age range of 10 to 17 years old, and 68 respondents in the age range of 18 years old and beyond.

Since the gender factor is not included as a measured variable in this study, the questionnaire allows participants to choose freely on whether to give their gender or not. The collected gender among the respondents is 67 women, 20 men and 1 with other genders or refraining from giving gender.

4.2. Summary of results

According to the questionnaire, the top three commonly used social media apps are WeChat, TikTok, and Little Red Book.

On the scale of 1 means least negative and 5 means most negative, 95% of respondents rate their social media experience above the number 3, and 27% rate a score of 5, meaning they had an extreme negative experience on social media apps.

36% of respondents have been cyber-harassed, 34% of respondents think there is an information overload on social media and they experienced FOMO, 78% of respondents have subconsciously fall into the fake content trap made by the internet. Some participants also reported having different negative experiences, such as having arguments with strangers online due to different opinions.

The proportion of people with increased anxiety to those with no anxiety is 80%–20%.

The last two questions are constructed to be free-response-based, and 40 of the responses are concluded to be valid. For those who experienced Cyber-harassment, they have been randomly harassed by strangers who were asking they privacy, and have been attacked by celebrity's radical fans. For those who were asking for their privacy and have been attacked by celebrities's radical fans. For those who experienced FOMO, they have been worried about missing popular trends or their friend groups's messages, especially if they were on planes where they could not have access to such information. For those who experienced fake and unreliable information, most concluded that they had been deceived by fake advertisements of products selling online.

The suggested solutions from the survey for adjusting anxiety are classified into two types. The first type maintained that people should uninstall social media that generates anxiety. The second type claimed that people should practice more sports, read more books and useful nonfictional texts, and be in contact with nature to transfer their attention from social media to relax.

5. Conclusion

Amid the examination of previous research, there are three ways in which social media pose anxiety to people: Fake information, FOMO, and Cyber-harassment. Through analyzing the responses collected from the complimentary survey, it is proven that participants have encountered all comparable experiences, with fake information outweighing the other two ways. Moreover, reflecting on the 78% of participants' self-rated negative feelings, the results are consistent with the definition of anxiety, which is the persistent feelings of tension and worrying thoughts. In

conclusion, the use of social media correlates with people's anxiety, at least with the participants who responded to the survey.

The deficit of this study lies principally in the questionnaire. The sample size is too small, and as the questionnaire is not a randomly assigned process, the results can only serve as a complementary supplement to show correlation instead of a conclusion that can show causation and generalize to the whole population.

There are two directions for future studies. Fundamentally, there can be a design for an experiment that can both generalize the sample to the population and determine the causation between the use of social media and anxiety. Besides, gender and age factors can also serve as measurements to determine if there is an existing difference between the use of social media and anxiety. In other words, people can examine whether different genders or different age groups will have different experiences on social media, and evaluate differences between anxiety levels.

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