

The Hidden Shadows of social media: Cyberbullying and Its Impact on Adolescent Mental Health

Zhaojin Zhu *

Department of Communication Arts and Sciences, PennState College of the Liberal Arts, The Pennsylvania State University, State College, United States of America

* Corresponding Author Email: z mz5317@psu.edu

Abstract. With the development of social media, cyberbullying has become a new form of bullying behavior that poses a great threat to adolescents' mental health. This study focuses on the relationship between social media and cyberbullying, and reveals the negative effects of cyberbullying on mental health, such as leading to anxiety, depression, or social isolation among adolescents, through different survey data, as well as analyzing the help of social media characteristics on cyberbullying behavior. This study was conducted by selecting 11 existing literature online, focusing on peer-reviewed articles and previous studies on cyberbullying and adolescent mental health. Survey data and qualitative interviews from other studies were analyzed to explore the relationship between social media and bullying behavior, focusing on the role of anonymity and information dissemination in aiding cyberbullying. The anonymity and high dissemination rate characteristics of social media increase the frequency and unknown nature of bullying behavior. Females and economically disadvantaged groups are more vulnerable to cyberbullying. In addition there are obvious deficiencies in the existing laws and policies to deal with cyberbullying. Cyberbullying has a serious impact on adolescents' mental health. Effective interventions, including digital ethics education, parental involvement, and strengthened legal measures, are essential to reduce cyberbullying and protect adolescents' mental and physical health.

Keywords: Cyberbullying, social media, adolescent mental health, depression.

1. Introduction

With the widespread use of social media, bullying has undergone many changes in terms of form and frequency. In particular, the emergence of cyberbullying has broken the time and space constraints of traditional bullying, causing more complex psychological harm to victims. This study aims to analyze the impact of social media on bullying behavior, especially cyberbullying, and explore its potential threat to adolescent mental health. In previous studies, cyberbullying has been found to have a significant negative impact on the mental health of victims, manifested in symptoms such as anxiety, depression, and social isolation. However, current laws and interventions are inadequate to deal with the complexity of cyberbullying. This study will analyze how the characteristics of social media contribute to bullying behavior through survey data from adolescents of different ages, and then explore possible prevention strategies, with the aim of providing effective references for education and legislation.

The term "bullying" refers to repeated acts of hostility that are made possible by a power imbalance between the one who bullies and the person who is bullied. Because of the imbalance of power that exists between the offender and the victim, result is as it is. The manifestations may vary and include verbal aggression, which can include insulting statements, ridicule, or intimidation; and physical violence, which can involve hitting, kicking, or damaging personal items. Perpetrators of social bullying protect themselves from their victims by spreading lies or inciting other innocent people. This psychological attack is known as social bullying. The perpetrator spreads false information or provocations that lead to the isolation of more victims. It is possible that this will elicit a feeling of having been achieved. A whole new kind of harassment, known as cyberbullying, has emerged as a consequence of the proliferation of digital technologies. Cyberbullying has become more prevalent as a result of the proliferation of digital technologies. By using channels like social media and communication tools, perpetrators have the ability to harass or threaten their victims in a manner that

remains anonymous. Cyberbullying is a kind of bullying that occurs online and transcends both physical boundaries temporal constraints. It often leads to substantial psychological distress, which may include feelings of hopelessness, anxiety, difficulties in school, and thoughts of suicide.

The mental health disease known as depression is rather common among teenagers. It is characterized by feelings of chronic sorrow and despair, as well as a lack of interest in things that were previously appreciated. Emotionally, it appears as poor self-esteem and feelings of worthlessness; physiologically, it displays as weariness, reduced appetite, and sleep difficulties; behaviorally, it manifests as social retreat and lower academic performance. The consequences of stressors like bullying, family conflict, academic pressure, and social rejection, which are commonly prompted by depression, further exacerbated via social media. Depression is typically precipitated by stresses like these. It is possible for platforms that promote idealized images of life to lead to negative social comparisons and fear of missing out (FOMO), while cyberbullying may make emotional misery even worse. In the absence of treatment, depression may cause disruptions in both emotional and cognitive development, which can result in long-term mental health issues and a diminished sense of contentment with life in adulthood.

2. Impact of Social Media on Bullying Behavior

Social media's usage has revolutionized the way bullying is expressed, increasing its frequency, anonymity, and difficulty to tackle. Unlike conventional types of bullying, which are restricted to certain contexts and direct encounters, social media allows bullying to happen at any time and to a great number of individuals. Consequently, especially among teenagers, cyberbullying has become one of the most damaging types of harassment. The specificities of social media, including anonymity and the rapid dissemination of information, exacerbate the psychological impact on victims, making it essential to provide individualized treatment programmes.

Cassidy et al. undertook a thorough investigation on cyberbullying [1]. The researchers observed that some unique characteristics set cyberbullying apart from conventional bullying. They also highlighted the fact that offenders might operate without fear of imminent sanctions thanks to the anonymity that internet platforms provide, which results in harassment being more intense and longer prolonged. The results of the research indicate that victims of cyberbullying frequently suffer more psychologically, including feelings of worry, melancholy, and total helplessness. Because cyberbullying often penetrates the victim's personal life and permeates the school environment, its consequences may be harder to prevent than those of conventional bullying. Online harassment is continuous, hence its emotional impact on victims is enhanced and it is more damaging than conventional kinds of bullying. The authors claimed that the current laws against bullying do not sufficiently handle the complexity of cyberbullying. They supported the implementation of initiatives for digital literacy and parental support into preventative actions [1].

Zhu et al. have made a major addition to this conversation by globally evaluating the frequency of cyberbullying among people in their teenage years [2]. Major countries include the United States, where studies have sample sizes ranging from hundreds to thousands, and several European countries, such as the United Kingdom, Spain, and Norway, where school samples are often used. In Asia, attention has been given to countries such as China, Japan, South Korea, and India, with sample sizes in China exceeding 10,000 in some cases. Studies from Australia and New Zealand typically involve hundreds to thousands of students, while studies in South America, including Brazil, typically use smaller regional samples. Studies from Africa are less frequent and focus on exploratory analyses with limited sample sizes. The results of their research showed that frequent use of social media channels raises the risk of either victimizing or causing cyberbullying. The results of the research underlined how general society expectations and gender stereotypes make women more susceptible and often be targets of violence. Zhu et al. stated that teenagers who overindulge in social media are not only more prone to victimizing but also more likely to participate in bullying activities under the impact of peer pressure and a search of social dominance [2]. The study discovered that views and

management of cyberbullying vary depending on cultural background. They also discovered that in certain areas, the absence of strict internet control aggravates the problem. The results of their research highlight the importance of implementing whole solutions, which should include the integration of educational activities with legal measures, in order to properly lower the prevalence of cyberbullying [2].

Particularly exploring the part social media plays in the incidence of bullying behaviors and conflicts among peers, the researchers examined the general effects it has on society [3]. Based on qualitative interviews with teenagers, the study revealed that the competitive dynamics of social media platforms—which are driven by the quest of likes and follows—often drive people to engage in bullying behavior in order to establish dominance or improve their social standing. "Social media creates a context in which validation is frequently linked to popularity, fostering a dynamic where bullying is perceived as a method to attain attention or dominance," the researchers noted in their study [3]. The results of the interview underlined the lack of digital responsibility among young users, many of whom are ignorant of the implications that follow from their activities. The writers underlined the importance of creating a society of respect and responsibility in online environments and advised including digital ethics and empathy training into school curricula to help to solve problems of bullying [3].

These investigations provide some light on the mechanisms and effects of cyberbullying, while other research gives additional understanding. Kwan et al. concluded from data from many systematic studies that cyberbullying significantly raises mental health problems like anxiety, depression, and suicidal thoughts [4]. This research revealed general trends even though it lacked primary data, like the greater susceptibility of teenagers from socioeconomic situations that are lower. Designed to be longitudinal in character, Garrett, Liu, and Young looked into the stress first-year college students experience related with cyberbullying [5]. Based on the results of their research, people who had experienced cyberbullying throughout their time in high school were more likely to report suffering chronic stress and problems in developing relationships based on trust after they moved to college. This research clarifies the long-term effects of cyberbullying and underlines the significance of giving early responses [5].

This analysis identified some recurring patterns. An examination of the demographics of offenders and victims indicates that some groups, notably women and those from economically disadvantaged areas, are disproportionately affected by the problem. This vulnerability is often linked to cultural norms, where diminished cultural awareness and acceptance render certain groups more susceptible to cyberbullying. Individuals subjected to cyberbullying may have significant psychological repercussions, such as emotional distress, social alienation, and diminished academic achievement. The persistence of cybercrime often leaves victims feeling powerless and confined, perhaps resulting in more catastrophic consequences.

Cyberbullying has exacerbated bullying. It has transitioned from a school issue to a lasting network. Cyberbullying surpasses conventional bullying in severity due to its anonymity and the rapid dissemination of information. Cyberbullying may induce anxiety, depression, and social isolation. People must identify superior solutions. Parents and educational institutions need to educate children in resilience. Social media businesses have to enhance their efforts to combat bullying.

3. Influence of Social Media on Depression

The relationship between mental health and social media use has become an important area of research in contemporary psychology. Increasingly, the correlation between increased depressive symptoms and excessive social media use among young people has been examined. There is concern that the ubiquity of social media may lead to a general decline in mental health, as it contributes to negative self-perceptions and exacerbates depressive symptoms. Unfavorable social comparisons, exposure to inaccurate portrayals of other people's lives, and FOMO are among the many factors that

contribute to this correlation. These factors may exacerbate feelings of low self-esteem and unreasonable expectations.

Hunt et al. carried out a ground-breaking experimental investigation to determine if social media use and mental health outcomes are causally associated [6]. 143 undergraduate students from the University of Pennsylvania, a demographic recognized for their extensive use of social media and vulnerability to its possibly negative impacts, were included in the research sample. The researchers used factors including family income, parents' education level, and occupational background to measure the socioeconomic status of the participants. Because participants in the sample came from a range of socioeconomic situations, the research may be applied to a wider population of youth. In line with the average participation rates in psychology programs, women made up around 66% of the participants [6].

The individuals were randomly assigned to two groups by the researchers using a randomized controlled trial design. The experimental group was told to restrict their daily usage of Facebook, Instagram, and Snapchat to 30 minutes, while the control group was allowed to use these platforms as usual. The UCLA Loneliness Scale and the Beck Depression Inventory (BDI), two well-used measuring instruments, were utilized in the research to evaluate the intervention's effects both before and after it was implemented. Participants also recorded how much time they spent on screens each day to ensure that the rules were being observed [6].

The research discovered that those who used social media less had significant reductions in their degrees of loneliness and depressive symptoms when compared to the control group. Loneliness ratings and BDI scores, which measure depressed symptoms, decreased in the experimental group. Participants who used social media less often were less likely to experience social exclusion or unfavorably compare themselves to others, two prominent stressors linked to social media use. Therefore, the research suggests that even small cuts in social media use might have a significant favorable effect on mental health [6].

Coyne et al. conducted an eight-year longitudinal study to investigate the long-term effects of social media use on adolescent mental health, whereas Hunt et al. employed a short-term experimental approach [7]. The study monitored 500 adolescents in the United States from the age of 13, a critical developmental stage characterized by substantial psychological and social transformations. The study's representativeness was improved by the incorporation of individuals from a diverse range of socioeconomic and cultural contexts and a gender-balanced sample (50% female) [7].

Participants were evaluated for depressive symptoms using standardized instruments (e.g., the Center for Epidemiologic Studies Depression Scale CES-D) and were required to disclose their daily social media use, including the time spent and specific platforms used, on an annual basis. This longitudinal method allowed researchers to observe temporal variations and assess causal connections between social media use and mental health results [7]. The results showed no significant association between prolonged social media use and the development of depressive symptoms. This suggests that teenage depression may not primarily stem from the length of social media use. Coyne et al. contended that other elements likely influencing mental health outcomes include individual traits, offline stressors (such as family dynamics or academic demands), and the qualities (both beneficial and detrimental) of social media interactions [7]. Researchers highlight the intricacy of social media, underscoring its reliance on human experiences and environmental factors.

Vogel and his colleagues conducted research that was a cross-sectional investigation of the link between the usage of social media and mental health [8]. The study focused primarily on the function that social comparison plays in this relationship. A total of 145 undergraduate students from a university located in the Midwest of the United States took part in the research study. Approximately 67% of the participants were female [8]. The purpose of the study was to evaluate the influence of social comparison on Facebook, especially with regard to symptoms of depression and low self-esteem [8].

The participants filled out a detailed questionnaire that examined their social comparison tendencies, the frequency with which they used Facebook, their levels of self-esteem as determined

by the Rosenberg Self-Esteem Scale, and their symptoms of depression as determined by the Beck Depression Inventory. The investigators believed that it was necessary to include social comparison tendencies in order to investigate whether or not these tendencies boost people's sensitivity to material that is shared on social media [8].

Based on the findings of the research, it was shown that negative social comparison served as a mediator in the connection between higher Facebook usage and decreased self-esteem, in addition to increased depression symptoms. Individuals who often utilized social media for the purpose of social comparison saw a more significant decrease in both their self-esteem and their feelings of depression. This shows that people may acquire poor opinions of their own lives due to idealized portrayals of others' lives that are shown on social media. This might possibly lead to sentiments of despair, jealousy, and dissatisfaction from the person [8].

These results have been validated and expanded upon by other research, which has brought to light the complex nature of the association between depression and the usage of social media. In their study, Kreski et al. analyzed data from a sample of United States adolescents [9]. They discovered that greater levels of social media usage were related to more severe depression symptoms, especially among female adolescents. Considering this gender difference, it is possible that females are more susceptible to the adverse impacts of social media. This might be due to the fact that they participate in social comparisons more often, are more likely to be victims of cyberbullying, or are more likely to be subjected to social pressures associated with their beauty and social position [9].

In a similar vein, Primack et al. investigated the nature of social media experiences and their influence on the degree to which young people perceive themselves to be socially isolated [10]. They discovered that negative experiences on social media (such as being harassed or excluded) were more strongly associated with social isolation than positive experiences were with reduced isolation. Based on this asymmetric effect, it seems that negative contacts may have a more significant influence on mental health than the good interactions that might help ameliorate the negative effects [10].

Furthermore, Twenge and Farley used data from a nationwide survey to investigate the various impacts that different forms of screen time have on the mental health of teenagers [11]. They discovered that passive use of social media, such as browsing the news feed without interacting with other users, was significantly more strongly associated with depressive symptoms than active participation, such as messaging or posting content with friends. Additionally, they found significant gender differences, with females experiencing more negative effects from passive use. According to the findings of the study, people who passively receive bullying are more likely to make unfavorable social comparisons and to develop low self-esteem [11].

4. Discussions

Although there are benefits to enhancing interpersonal relationships via the use of social media, there are also risks to mental health, such as an increase in feelings of isolation and the tendency to compare one's own culture to that of others. Last but not least, the usage of social media may have both positive and negative effects on one's mental health outcomes. The research that has been done so far indicates that frequent use of social media is associated with decreased levels of self-esteem and increased levels of sadness, girls being more susceptible to these effects.

Despite the fact that these studies are quite informative, they do have certain limitations, such as bias in the data. For the purpose of effectively enhancing mental health and well-being in the digital age via the development of tailored therapies, it is recommended that future study focus on a wider range of persons and the effects that they have over longer periods of time. It is possible that this will result in the creation of drugs that are more effective.

The following may be considered to be the broad conclusions that can be made from the findings of this study: Cyberbullying has developed into a phenomenon that is more serious and intricate than traditional bullying. This is due to the fact that social media platforms provide users the ability to remain anonymous and the speed with which information can be shared. The victims are unable to

escape the continuous and pervasive bullying, which may lead to more serious psychological harm, such as emotions of concern and unhappiness, feelings of social isolation, and even thoughts of attempting suicide. There are some groups of people who are more likely to be affected negatively by the negative effects of cyberbullying. These groups include young women and adolescents who come from households with a low socioeconomic position. The societal norms and gender stereotypes that are linked with this occurrence contribute to an increase in their sensitivity to the condition. The use of social media platforms to an excessive degree is directly connected to mental health difficulties among adolescents, which in turn boosts the risk that these adolescents may either personally suffer cyberbullying or participate in it themselves. Negative social comparisons, FOMO, and habits of passive use are all potential factors that might lead to the exacerbation of symptoms of depression and a drop in self-esteem. Laws and preventive measures that are presently in place are not sufficient to fully handle the complexity of cyberbullying because of the nature of the phenomenon.

On the basis of the findings that were shown before, the following are some proposals that have been offered: A stronger emphasis should be placed on the inclusion of digital literacy and ethics education into the curriculum of schools in order to encourage adolescents to develop proper patterns of behavior while using the internet. One of the most essential things that can be done to reduce the number of opportunities for unfavorable social comparison is to promote the use of social media in a responsible and restricted manner. Increasing the amount of parental involvement and advise should be offer in order to provide assistance to children and adolescents in dealing with cyberbullying and other dangers that may be discovered on the internet. The efficacy of law enforcement should be improved, the consequences should be made clearer, and the laws and regulations that apply to cyberbullying should be improved. Not only should social media platforms take on the role of social responsibility, but they should also make use of cutting-edge technology to identify and filter potentially harmful material. Furthermore, they should provide easily accessible reporting and help services. Establishing a community support network that will give psychological treatment and support services is an essential step that should be taken in addition to bringing the problem of cyberbullying to the attention of the general public.

The following are some of the directions that need to be the primary focus of research in the future: In order to evaluate the long-term impact of cyberbullying and the use of social media on the mental health of adolescents, it is essential to conduct research that is longitudinal in nature. In order to study the ways in which cultural variations impact the link between cyberbullying and mental health, it is essential to carry out intercultural comparative research that spans across cultures. In order to determine which strategies have shown to be the most effective, it is necessary to conduct an evaluation of the effectiveness of a variety of various approaches. In order to provide guidance, it is vital to do in-depth research on the effect that certain characteristics of social media have on the behavior and mental health of users.

5. Conclusion

This study shows that the anonymity and persistence of cyberbullying and its significant impact on adolescents and is a cause of long-term problems such as anxiety, depression and low self-esteem in adolescents, with a greater impact on females and low-income groups. Adolescents' transitional use of social media is closely related to their mental health. Therefore, strengthening digital ethics education, reducing social media use, raising parental awareness, and improving laws can better reduce cyberbullying and protect adolescents' mental health.

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