One-way or Two-way Arrow?: A Bidirectional Relationship Between Adolescent's Social Media Use and Peer Pressure and the Gender Difference

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Abstract: Social media is a powerful tool and platform for the public to interact and exchange ideas and information. Its impact on adolescents is evident everywhere, and many researchers have made social media and adolescents a research topic. However, the relationship between teens using social media and peer pressure remains unclear. This review examined the specific relationships between the use of social media and peer pressure received by adolescents, including whether there is a gender-specific relationship. After organizing and summarizing previous studies, the results showed that social media use and peer pressure are positively correlated among adolescents and no gender-specific was found. This finding can be used to predict the social media usage of adolescents under high peer pressure and the level of peer pressure experienced by adolescents who frequently use social media. Since this study only is a review, the study's conclusions still need more quantitative research methods like experiments to prove.

Keywords: Social media use, Peer pressure, Adolescent, Gender, Review

1. Introduction

Social media is a powerful tool [1], offering users virtual communities and networks to share their ideas, connect with others, and interact online [2]. As we enter the information age, social media is becoming an increasingly important part of our daily lives. It transcends the barriers of time and place in communication, allowing people to access new information and communicate with friends and family anytime, anywhere [3]. This is something we didn't expect in an era when we could only write letters. At the same time, the virtual society built by social media also exaggerates people's social sphere, and we can meet many people with different hobbies and strengths on social media platforms [4]. In addition, social media also has a significant impact on adolescents. It can influence adolescents' purchasing behavior, mental health, the way of communication, and increase learning opportunities [5]. Due to the enormous influence of social media, a lot of adolescents are using social media. Take adolescents in China as an example. The China Internet Network Information Center (CNNIC) reports that the Internet penetration rate for Chinese teenagers has reached 94.9%, and the number of users of social media between the ages of 6 and 18 will reach a staggering 183 million by 2020. Advanced technology has brought about a significant change in the lives of teenagers compared to

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the past. Today's teens are social media natives, which means they are the first generation to have childhood exposure to social media. It has permeated various aspects of their lives, affecting the way they interact socially and emotionally with their parents and peers.

In recent years, peer pressure has become a prevalent issue. Peer pressure is the degree to which one's peers have an influence on one's attitudes, thoughts, and behaviors [6]. Adolescence is a time when peers have a significant influence on one's sensibilities. Since China has a large adolescent population and high Internet penetration rates, China represents a significant case of adolescent social media use and its influence on adolescents. In China, teenagers often face peer pressure.

Previous research has explored issues related to social media use and peer pressure. For example, Gajo et al.'s research examined the influence on adolescents' mental health of the use of social media applications, and they found that using TikTok can positively affect students' mental health and lives [7], while Kim and Lim examine the connection between peer pressure and the addiction of young people to social media, and the result of this study is that there is a positive correlation between peer pressure and addiction to social networking sites (SNS) [8]. However, there are no studies that have specifically looked at the relationship between peer pressure and the use of social media by adolescents, which means that the specific relationship between these two variables has not been thoroughly explored. If research indicates a relationship or association, this finding could lead to potential solutions for mitigating peer pressure or identifying the causes of excessive social media use. Additionally, a model or scale could be created to predict teen peer pressure based on social media use or infer personal use due to peer pressure. However, it is necessary to determine if there is a correlation between these two variables. Given the importance of gender in adolescent research [9], we will examine whether these associations are gender specific.

This study will build upon previous research on the use of social media and peer pressure to explore the relationship between social media use and peer pressure among adolescents and answer the following question: Does social media use among adolescents correlate with the peer pressure they experience? Which gender is more susceptible to peer pressure in comparison to males and females?

The goal of this study is to investigate whether there is a positive correlation between the use of social media and peer pressure among adolescents and whether this correlation varies by gender.

2. Theoretical Frameworks in Understanding Social Media and Peer Pressure

2.1. Social Learning Theory Revisited

Based on social learning and social identity theory, the reason for the continuous increase in the number of people using social media is easy to understand. Social learning theory, as presented by Bandura, proposes that people imitate the behaviors of those whom they favor [10]. Peers, as people of the same age group, have a significant influence on young people. Some adolescents use social media because their peers use it, and they want to follow suit and become part of the collective.

2.2. Social Identity Theory and Online Communities

According to the social identity theory, humans are social animals who require a sense of belonging to a group [11]. This need for conformity and peer acceptance can lead individuals to imitate the behavior of the majority. Consequently, since one's behavior can be influenced by one's peers, peer influence may be a factor in the increased use of social media among teens.

3. The Impact of Social Media on Peer Pressure

3.1. Motivations and Peer Pressure

When utilizing social media, a plethora of information and content, including content from peers, is readily available for consumption. The usage of social media and interaction with peers can subsequently foster peer influence and potentially place pressure on adolescents [12]. Kim and Lim studied the correlation between adolescents' peer pressure and their motives for using social media. It was found that the motives for using social media are positively correlated with the peer pressure that adolescents receive [8]. Based on this finding, the association between social media usage motivation and peer pressure has been revealed, that is, the higher the motives for using social media among adolescents, the higher the peer pressure they receive.

3.2. Peer-Induced Motivations

According to Ali et al., motives have a significant impact on human behavior, and therefore, increasing adolescents' motives for using social media to some extent indicates an increase in their use of social media [13]. Thus, based on the positive association between adolescents' motivation for social media use and peer pressure that was pointed out by Kim and Lim's study, adolescents' frequent use of social media could suggest that they suffer relatively high levels of pressure from their peers [8,13].

3.3. The Influence of Peer Pressure on Usage of Social Media

This study analyzed the relevant theories and past studies to understand whether peer pressure on adolescents affects their social media use. We found that numerous studies have demonstrated the peer pressure adolescents experience can influence their behavior on social media. For example, Xu et al. investigated the correlation between peer pressure to use mobile phones and addiction to mobile social media. The study by Xu et al. indicates that peer pressure is a significant predictor of adolescents' social media addiction via cell phone use, resulting in more and more adolescents using social media [14]. Similarly, Vlachopoulou and Boutsouki conducted a study that found a positive correlation between peer pressure and the intensity of Facebook usage among adolescents, given its popularity as a social media platform [15]. The study conducted by Kim and Lim demonstrated a positive correlation between peer pressure and addiction to social media networking sites. Therefore, we can conclude that peer pressure impacts social media use among adolescents and that greater pressure results in increased social media usage. Additionally, peer pressure itself can lead to social media use by adolescents, which can ultimately impact their behavior on these platforms [8,16]. Therefore, peer pressure and social media use to some extent, influence each other and a positive correlation exists between them.

4. Gender and Pressure from Peers

4.1. Gender Differences in Peer Influence

Considering the importance of gender factors in adolescent research, we analyze the relevant theories and previous studies for our third hypothesis. To understand this issue, we need to use the gender role theory, which is that children learn what is gender-appropriate behavior and gender norms from their parents and society [17]. It is hard to say that a boy plays ball for the first time because he wants to try it or his parents thought he should like it, so we start to question whether gender itself would influence humans. Some studies said that males are more likely to be influenced by peer pressure. For example, Jovičić Burić et al. explored whether peer relationships differ in predicting alcoholism

in adolescents with underlying gender differences, and the result was that peer pressure had a greater effect on alcoholism in boys [18]. In separate research, Eze, Chukwuorji, Idoko, and Ifeagwazi explored the role of peer influence in drug use and whether these variables have different effects on male and female adolescents exposed to trauma. The results from the study showed that the drug use of different genders had no significant difference when peer influence was low, and when peer influence increased, males used more substances than females [19]. Based on this study, it seems that male adolescents are more affected by peer pressure and females have higher tolerance for the pressure from peers. However, there are other findings that show that the influence of peer pressure won't be gender specific. Santor et al., for example, found that males and females did not differ on measures of depressed mood and self-worth due to peer pressure [20]. However, a small proportion said that women were more susceptible. For example, a study conducted by Sim and Koh found that adolescent females are more likely to suffer from peer pressure on family involvement than adolescent males [21]. Therefore, it is really difficult to say whether gender is a factor that influences susceptibility to peer pressure.

4.2. Intersection of Gender and Social Media

Furthermore, according to Ali, Qamar, Habes, and Al Adwan, social media use is significantly difference between adolescents from different genders, female or male. In terms of purpose, communicating and interacting with others are the main reasons why male adolescents use social media, but female adolescents use it more for learning or other educational goals, and they found social media use is positively correlated to academic performance [22]. However, another study showed that despite social media being more attractive and addictive for males than females, the use of social media would affect the academic performance of females more [23], which could be positive or negative. Therefore, we cannot currently determine whether gender matters in the change in students' academic performance that is influenced by social media. No gender difference has been found in peer pressure and the academic performance of adolescents [24]. According to the findings of previous studies, we hypothesized that gender itself won't be the factor that influences the correlations between adolescents' social media use and peer pressure they receive. Still, other variables like the growing-up environment or family education may influence it. However, this hypothesis required more research to study and verify, and whether gender would be a factor is hard to determine.

5. Implications for Future Research

5.1. Unanswered Questions

This study mainly focuses on the adolescent population and does not involve other groups like age groups. Whether the connection between adolescents' social media use and peer pressure will be influenced by age can be the topic for future research. Researchers also can make the target group more specific, studying adolescents from different regions. In addition, from the analysis above, it can be seen that many studies have different conclusions on whether gender has an impact on peer pressure and social media use. Most studies have found that gender does not have an impact on the susceptibility to peer pressure and gender cannot be a factor that affects the influence of usage of social media. Therefore, the results from this study cannot support the claim that gender difference would matter the relationship between social media use and peer pressure among adolescents. However, due to various results from previous studies, future studies can also focus on studying whether gender will affect the association between adolescents' usage of social media and peer pressure and re-examine the findings of this study.

5.2. Methodological Advancements

This study is a summary of existing research and conclusions. Therefore, there is a lack of direct data support and comprehensive data argumentation. Future research can conduct an empirical study based on the conclusions drawn from this study to test the reliability of the conclusion of this research. In future studies, researchers can choose to use quantitative research methods, like the use of existing scales for measuring social media use and peer pressure, to obtain objective data and reduce researcher bias.

6. Conclusion

Social media is a tool and platform that has been used a lot by adolescents, some of them are even addicted to it. According to Social Learning Theory and Social Identity Theory, most teenagers need a sense of integration, they need to be accepted collectively, and their behavior may influenced by peers they interact with. To explore whether social media use is associated with peer pressure of adolescents and whether there is a gender difference are the aims of this study. After evaluating and analyzing previous articles, we find that adolescents could receive more peer pressure due to the use of social media, and the pressure they get from peers will also cause them to use more social media. Furthermore, some previous studies have shown that gender affects adolescents' susceptibility to peer pressure and the influence of social media use, but most studies have shown that gender plays no role in these relationships. Therefore, the effect of gender on the connection of adolescents' social media use and the pressure from their peer group cannot be proven since the variable gender is unstable. Namely, adolescents' social media use is positively correlated with peer pressure they receive and there is no gender-specific in this relationship. Based on this understanding, we can speculate that one of the reasons for high peer pressure among adolescents may be the excessive use of social media. Vice versa, adolescents' overuse of social media may be due to suffering too much pressure from peers. Thus, this study provides a foundation and general research approach for future research to explore solutions to alleviate peer pressure and intervene in social media usage issues in adolescents.

However, there are several limitations to the study. This study is based on the analysis and summary of previous research findings to get results, and no empirical research has been conducted to support this conclusion. Besides, as some libraries as well as article search platforms are not open to the general public, this study didn't comprehensively collect and analyze all the relevant research articles. Therefore, the accuracy of the findings and conclusions presented in this study and the role of gender need to be verified by more research. Further research and accumulation of evidence in the future can help reveal more details about the relationship between the use of social media and peer pressure. Moreover, the results of this review are hard to generalize on other populations since the studies that have been analyzed mainly focus on adolescents. Future research could continue to experimentally demonstrate that adolescent social media use is positively correlated to peer pressure or it can be extended to other populations such as adults or the elderly. Researchers can also focus on whether the study of different age groups would cause difference in the result.

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Tianyi Xu and Zixuan Li contributed equally to this work and should be considered co-first authors.

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