

Analysis of Coping Mechanisms and the Effects of Social Media on Teenagers

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Abstract: Adolescents' development of thought and conduct are severely impacted by the content on social media from both positive and negative aspects as a result of the development of numerous social media platforms in recent years. The purpose of the study is to determine the positive and negative influence of social media on teenagers and their coping strategies. The nature of social media, and conceptual theories such as filter bubbles, echo chambers, fear of missing out, the favourable and adverse effects of social media on adolescents and the corresponding strategies are all specifically investigated and evaluated in this study. Analytical research methodology and literature reviews are used to carry out the study to compile and summarise prior research related to adolescents' use of social media. Data from earlier studies that are relevant to the study issue are gathered. The findings of this study provide reasons and instructions for parents and educators to discover and promptly address the harm that social media has caused to young people. The public should pay attention to the breadth and depth of social media's detrimental effects on teenagers.

Keywords: social media, adolescents, positive impact, filter bubble, echo chamber

1. Introduction

People can communicate with one another using social media as a tool and platform to express their thoughts, perceptions, experiences, and viewpoints. Massive numbers of people utilize the Internet to contribute, gather, produce, and disseminate news and information. It mainly embodies the process of "sharing" and "dissemination". Social media, where participation is typically free, is thought to blur the lines between media and audience. The social function of social media is a key feature since it encourages users to broadcast their activities at any time and wants to communicate with people primarily for social networking. Making friends is one of the main purposes of social media, which also serves many other purposes. Social media is mostly used for friendship-making and connection in this sense. Teenagers today are members of a generation that was created alongside the Internet's rise. The network environment has an impact on how they think and behave. In addition to dealing with the existence of social media, adolescents must deal with the physical changes brought on by puberty, the reorganization of the brain, shifting expectations in romantic relationships, and the formation of their identities. In contrast to the past, when teens' development was primarily influenced by their living, learning, and social environments, media technology now has a close connection to people's development. The relationship between social media and humans

has gained increasing attention since social media's inception and growth. The use of social media can lead to several negative emotions, including isolation, anxiety, and sadness. The research question is to find out how social media affects adolescents and their coping mechanisms. In this research, the characteristics of social media, ideas like filter bubbles, echo chambers, and fear of missing out, ways for coping with social media's bad consequences, and the effects of social media on teenagers—both positive and negative—are specifically examined and analyzed along with coping mechanisms. The research is conducted with the method of analytical research method and literature reviews. Data is collected from previous research related to the research question. Personal conclusions are evaluated based on the other findings being conducted. The analytical research method is used to access the most relevant findings. The significance of this research is to guide and inform adolescents in order to raise awareness and reduce digital pressures. The expected outcome is to promote healthy relationships between adolescents and social media, as well as between friends and others within their family circle. Parents and supervisors should set appropriate limits on viewing and participating in social media.

2. Characteristics of Social Media

2.1. The Consumption of Content on Social Media

The consumption of content on social media is dominated by the filter bubble and echo chamber theories[1]. People frequently retain knowledge that is consistent with their values, disregard information that is inconsistent with their values, and reinforce their own opinions through personal preference. People tend to ignore the bad things and experiences and only care about what interests them. Because of arbitrary reasons, kids who use social media to connect with like-minded others are more likely to hear the same ideas from the same perspective or have similar experiences, which can lead to alternative occlusion. Teenagers in this situation will become increasingly dependent on the happiness and sorrows of their own intimate group while being unconcerned with social and political issues. The ideological division on social media is conceptually examined. The ideological polarization on social media is analyzed theoretically[2]. The hypothesis is that users are placed in the filter bubble due to the algorithm and personalized curation which reduces the possibility of encountering ideological cross-news content. The impact of ideological polarisation on information consumption is more clear as a result of social media's considerable involvement in news and information consumption. The polarization of ideology has brought dangerous symptoms from many aspects, posing a threat to the operation of a democratic society. The loss of diversity of opinions is the consequence of polarization. the community acts as a feedback loop or echo chamber, the feedback loop has become obvious in the consumption of American news television networks and newspapers. The concept of algorithmic management "dominating" the individuals' consumption of information is at the core of the controversial debate around news exposure and echo chambers. If individuals give up the process of actively contacting news content, they transfer their responsibility as informed citizens to their news feed algorithms and social media networks with limited diversity. The article appeals to the citizens to realize that people should consume news actively because news content with diversified ideology and high quality don't disseminate the individuals spontaneously. It is necessary to consciously look for different sources of political information. The willingness of listening to the other party's opinions is the basis of political discussion. The existence of echo chambers is quantified by using quantitative analysis towards two aspects, homogeneity in the interactive network and the deviation of information dissemination to potential peers [3]. News feed algorithms affects the selection process, content diversity is reduced and cause opinion polarization. Information dissemination is biased when people are stuck in the community with similar content consumption patterns, it is dominated by the confirmation bias,

humans tend to seek information consistent with their existing views. Echo chamber is defined based on the polarization of opinions on controversial topics, and the homogeneous interaction between like-minded users. The research results show that the emergence of echo chambers is favoured due to algorithms considering social feedback. The degree of polarization on social media should be quantified by determining the users' attitudes. The user's personal tendency is quantified by considering the recognition in how they click like to posts. When compared to articles read by people who visit news websites directly, information found through social media or internet search engines is associated with higher levels of ideological isolation[4].

2.2. Mental Disorders Caused by Fear of Missing Out Problem

People's usage of and reliance on social media has increased with the advancement of media technologies. Young users are able to obtain rich information and carry out diversified social activities without the limitation of time and space owing to the popularity of Internet and the continuous innovation of emerging mobile social media. In the emerging media environment that can obtain massive information in real time, many users are afraid of missing relevant information. "Fear of missing out" describes the combination of insecurity, annoyance, and anxiety that can erupt while browsing social media sites like Facebook, Twitter, Foursquare, and Instagram[5]. There have been some preliminary studies on fomo in the social media environment. Jenna Wortham proposed that fomo is part of the source of negative emotions and depression, because it will make people doubt whether they have made the best choice in life. Social media provides a method to interact with friends, which can get rid of the rigors and dullness of daily life. People replace one pressure with another, by escaping from one stressor, fear and stubbornness can be combined to form the FOMO phenomenon[1]. The basic individual manifestation of the fomo issue has eventually given way to a pervasive social syndrome. As a result, the Fomo problem has become more serious and catalysed, and it has begun to catch the public's and social scientists' attention. Overall life happiness and FoMo were adversely correlated; social media is utilised to amplify unfavourable social and emotional situations. Overall, Przybylski et al's empirical research on the fear of missing out contributes to a growing understanding that human behaviour is being affected by our easy access to social media and that this phenomena needs to be taken seriously and further studied[6].

3. An Examination of How Social Media Affects Teenagers

3.1. Positive Impacts

Frequent usage of social media has a good effect on users by enhancing communication effectiveness, increasing communication, widening the communication circle, increasing the amount of information, extending thought, presenting oneself more fully, and understanding others and society. The adolescents can benefit from using social media, they can manage their perceptions and impressions from others by revealing certain information about themselves, self disclosure is beneficial to explore and discovering self-identities. Teenagers' use of social media correlates positively with improvements in identity formation, social interactions, self-esteem, and peer participation[7]. Self-presentation is a critical skill to develop self-identity, it can be implemented successfully on social media by posting and sharing content. Young people gain confidence by using "selective self-presentation" to edit and update their profiles, they have the highest self-esteem when selecting the information which shows the best version of themselves when creating Facebook profiles[8]. Introverted young people can benefit from social media by learning how to socialize and empathize[8]. Media has positive potential to change teenagers' lives in all aspects of development, such as behaviours, including imitation and sharing, social aspects including making

new friends and maintaining friendship; cognitive aspect including learning school preparation skills, creativity including designing graphics, writing blogs, uploading videos, physical aspect including learning to balance nutrition[1]. Social media is a crucial instrument for growth because it allows young people to be themselves and share their feelings. Adolescents can realize self reflection, venting and verification feedback by using self-expression on social media. Teenagers also use social media to further their friendships and learn about topics that interest them[9]. Online peer interaction can encourage self-disclosure and a sense of community, both of which enhance the development of identity[10]. These online expression experiences such as posting casual stories and recording memorable photos help to generate positive emotions related to self identity.

3.2. Negative Impacts

The use of Internet social media has transformed the behavioural traits of teenagers who grew up in an Internet-based environment, including the learning style, thinking mode and social participation. Additionally, social media has an effect on how teenagers socialise, including how they interact with others, participate in society, use media, and develop morals. Social media is full of temptation for teenagers. Once they enjoy the convenience and joy of online interpersonal interaction, they are easy to overuse and indulge in it. They are tempted by social media and have more frequent contact and use. For teenagers, digital stress occurs in the process of brain development, which has caused widespread concern about chronic stress and anxiety[11]. The choices and behaviours of adolescents influence brain health during puberty.

3.2.1. Teenagers' Body-Shaming and Anxieties about Their Bodies are Exacerbated by Social Media

Young girls are consistently exposed to media related to ideal body images which directly cause eating disorders and body dissatisfaction[12]. They have more opportunities to compare and monitor the photos of disliked body parts dysfunctionally owing to the fact that they can access thin-idealized images with no limitation of space or time. The form and characteristics of social media indicate that it plays a significant role in affecting body image problems. Body shaming and eating disorders: the impact of social media use and other factors. Bandura attaches great importance to the media, suggesting that exposure to media information may produce aesthetic standards of female bodies which are unrealistic[13]. Smolak and Thompson stated that the internalization of female body images which are distorted is worrisome, it results in body shaming, which is a contributing factor to the eating disorder[14]. The media's description of ideal body shape has an impact on body image issues[12]. The extent that people are exposed to media content has always been associated with female body dissatisfaction, internalization of slimming ideals, and dietary behaviour[15]. Girls have learned to objectify themselves and internalize the social psychological stage on the basis of paying more attention to appearance rather than internal quality; Female are more inclined to appearance management than male to meet the stereotyped ideal of physical attractiveness[16]. Tiggemann states that being unrealistically slim is the core element of the idealized female body shape for over twenty years[17]. According to research, people who follow fitness boards on Pinterest are more likely to engage in extreme weight control behaviours. The desire to lose weight is positively related to the recognition of an ideal female figure. Social media conversations, picture sharing and tweets focusing on fashion affect the slimming ideals potentially[18]. Owing to the abundant research recording how social media affects women's body dissatisfaction, taking young women as the research subject is a pioneering exploration aimed at studying the effects of social media. Social media systems provide for constant access to, editing of, and viewing of content, which exacerbate the social comparison, dysfunctional monitoring of

distorted body images and unwanted body parts are multiplied. Female students who are exposed to pro-ana and pro bulimia websites demonstrate the decrease of self-esteem and perceived attractiveness[19]. Young women intentionally expose themselves to social media in order to mitigate the negative impact and seek more recognition, they compare with other women's body images and struggle with their own unsatisfied body parts, the "mutually reinforcing" relations intensify and aggravate the harmful effects[20].

3.2.2. Cause Abnormal Social Behaviour or Social Anxiety

The specific behaviours of users using mobile social media include entertainment, social networking and information, which can directly reflect the specific contents that fomo users are afraid of missing in the mobile social media environment. For instance, users who use social media for entertainment are afraid to miss the latest information about gaming and celebrity trends. Social behavior: users who use social media to maintain social interactions are afraid to miss other people's comments, posts and opportunities for others to know themselves. The corresponding behaviors are chatting, posting pictures, commenting, knowing what happens in the friend circle; Users who use social media to get information are afraid to miss the latest news and knowledge, the corresponding behaviors are frequently browsing news, and twitter. Social media causes anxiety and inadequacy by forcing users to keep participating and updating because they are worried about being left out[21]. Different behaviors show different situational characteristics, and the relationship between specific behaviors and fomo also needs to be comprehensively considered in combination with specific use situations and behavior results. The negative effects of users include wasting time, losing concentration, reducing work and learning efficiency, weakening the effect of face-to-face communication. The degree of impact is positively related to the severity of Fomo. Adolescents' fomo may lead to social media addiction[22]. Fomo has been shown to predict smartphone addiction; The study on social media and the mental health of young people claims that released by the Royal College of public health in 2018 claims that , 91% of users aged 16-24 use social media to obtain more emotional support, leading to anxiety, depression and lack of sleep[23]. Young people are more addicted to social media than cigarettes and alcohol. In 2011, the research department of JWT intelligence fomo as "feeling uneasy when you don't know what your friends are doing, what you know, or what your friends have more or better, and this uneasiness is sometimes very strong"; Fomo is described as "a widespread anxiety generated when individuals fail to obtain the experience they want to know in the event of their absence, which is mainly manifested in the desire to continue to understand what others are doing"[24]. Zhao Yuxiang and others defined FOMO as "people use or rely on various mobile intelligent terminals to carry out a series of user information behaviours, including browsing, search and social networking, so as to maintain an instant connection with the real world or virtual world. When this instant connection cannot be satisfied, people will subconsciously or psychologically produce a series of anxiety to varying degrees, including discomfort, uneasiness, irritability or panic[25].

3.2.3. The Dissemination of Pornographic Information

Among the many influencing factors, the influence of sexual content in the media environment on adolescents' sexual attitudes can not be ignored. Especially that pornographic information that cannot be eradicated, which disturbs society. From the perspective of media, each era has different inheritances, Internet information is mixed, and female teenagers may be affected by their exposure to bad information, which has aroused the deep concern of the society that minors are vulnerable to the infringement of network information. The dissemination of sexual content in the media is deepened and penetrated with the development of the media. At first, magazines and newspapers

began to open up sections to discuss sexual topics. Subsequently, the television media appeared and no longer covered up the topic of sex. With the help of information search, any "online" crowd can search various forms of sexual topics at any time. A large number of studies abroad have shown that exposure to non-violent and obvious sexual content in the media will affect people's various attitudes and values in terms of sex. In addition, sexual content can shape people's attitudes towards sexual activities. Through experiments, Bryant and Rockwell found that teenagers who watched prime-time programs with sexual content had a more relaxed attitude when judging inappropriate sexual behaviour and the extent of victims' harm than the control group, pornographic culture on the Internet will have an impact on Teenagers' sexual morality. Online pornography continues to subvert the traditional sexual morality and ethics and disintegrate the traditional sexual morality[26]. Sexual responsibility is weakened and sexual morality is lost. Internet pornography can produce the effect of "de responsibility", which makes teenagers ignore the sexual behaviour in real life, which is based on a certain responsibility[27]. Adolescents would be misguided to ignore love experience and pursue intense sexual pleasure. Adolescents are curious about sex. Under the strong sound and colour stimulation of the Internet, immature values and morality can be disintegrated easily. While "Internet pornography" makes them experience stimulation, it produces a sense of dissatisfaction divorced from reality. In order to obtain sexual pleasure in real life, they do not hesitate to take risks, and even sexual crimes may occur. In addition, female teenagers are in the growth stage of active thinking and vulnerable to external influence. The sexual content in the network has become an important way for female teenagers to understand sexual knowledge. On the other hand, it will also imperceptibly affect their attitude and behaviour towards sex in a negative way.

4. Strategies for Adolescents to Deal with the Adverse Effects of Social Media

There is a significant positive correlation between online time and the frequency of accessing sexual content, the online time of female adolescents should be reasonably restricted in an attempt to prevent them from becoming overly dependent on the Internet. The negative impact of online sexual content on the sexual attitude of female adolescents should not be exaggerated, female adolescents should not be forced to stay away from the Internet because of the sexual content. Purifying the network environment is the best way to both ensure adolescents' usage and eliminate social concerns. The control of sexual content on the Internet mainly focuses on the regulation of online pornography. Technique skills can also be used to protect teenagers besides legal constraints. Many countries attach great importance to purifying the network environment. For instance, the UK launched the "network filtering system" on December 31, 2012 to prevent children from Internet pornography, the computer system automatically pops up a window to ask whether there are adolescents at home when the computer is open. Users can set up "network filtering system", in order to prevent the access of some network sexual content or pornographic websites. In china, the domestic 360 desktop software provides the children's mode with animation and cartoon pictures. The strength and influence of only one individual is limited, the government, institutions and parents are required to cooperate jointly, in order to provide a green and healthy network environment for adolescents. Additionally, the content of online games, online novels, online video games and online news should be censored.

5. Conclusion

In conclusion, the research article demonstrates the characteristics of social media, the positive and negative influence on young people, and the coping strategies to balance the relations between teenagers and social media. The methods of harnessing social media are described in order to enlighten young girls adopt a better attitude towards body shapes. The use of social media requires

a degree of awareness and understanding to promote better potentials for adolescents. The reason, the method and the situation to help adolescents handle the complexity of social media are illustrated, to inform and remind the public of the potential merits and risks of social media for children and young people, with the purpose to urge the specialists to improve the theoretical understanding, raise social awareness, and provide practical guidance for the professionals such as parents and website developers. Future studies can focus on exploring how the digital pressures of social media use affect adolescents' identities with respect to behaviours and social relationships.

References

- [1] Doble, K.(2018). "Social Media's Influence on Adolescent Identity". Lesley University Community of Scholars Day. 17. https://digitalcommons.lesley.edu/community_of_scholars/2018/session_e/17
- [2] Spohr, D. (2017). Fake news and ideological polarization: Filter bubbles and selective exposure on social media. *Business Information Review*, 34(3), 150–160. <https://doi.org/10.1177/0266382117722446>
- [3] Cinelli, M., Morales, G.D., Galeazzi, A., Quattrocioni, W., & Starnini, M. (2020). Echo Chambers on Social Media: A comparative analysis. *ArXiv*, abs/2004.09603.
- [4] Flaxman, S., Goel, S., Rao, J.M.(2016). Filter Bubbles, Echo Chambers, and Online News Consumption, *Public Opinion Quarterly*, Volume 80, Issue S1, Pages 298–320.
- [5] Wortham, J. (2011) *Feel Like a Wallflower? Maybe It's Your Facebook Wall*. *The New York Times*
- [6] Elhai JD, Yang H, Montag C.(2021). Fear of missing out (FOMO): overview, theoretical underpinnings, and literature review on relations with severity of negative affectivity and problematic technology use. *Braz J Psychiatry*.43(2):203-209.
- [7] Uhls, Yalda & Ellison, Nicole & Subrahmanyam, Kaveri. (2017). Benefits and Costs of Social Media in Adolescence. *Pediatrics*. 140. S67-S70. 10.1542/peds.2016-1758E.
- [8] Richards D, Caldwell PH, Go H.(2015). Impact of social media on the health of children and young people. *J Paediatr Child Health*. 51(12):1152-7. doi: 10.1111/jpc.13023. Epub 2015 Nov 26. PMID: 26607861.
- [9] Weinstein, E. (2018). The social media see-saw: Positive and negative influences on adolescents' affective well-being. 20(10).
- [10] Davis K. (2012). Friendship 2.0: adolescents' experiences of belonging and self-disclosure online. *J Adolesc*. 35(6):1527-36. doi: 10.1016/j.adolescence.2012.02.013.
- [11] Siegel, Daniel J. (2015). *Brainstorm: the power and purpose of the teenage brain*. New York: Jeremy P. Tarcher/Penguin, a member of Penguin Group (USA). xviii, 334.
- [12] Perloff, R.M.(2014). Social Media Effects on Young Women's Body Image Concerns: Theoretical Perspectives and an Agenda for Research. *Sex Roles* 71, 363–377.
- [13] Bandura, A.(2008). *Social Cognitive Theory of Mass Communication*. 265-299, 3rd Edition.
- [14] Smolak, L., & Thompson, J. K. (Eds.). (2009). *Body image, eating disorders, and obesity in youth: Assessment, prevention, and treatment*, 2nd ed.(2nd ed.). American Psychological Association.
- [15] Holmstrom, A. (2004). The Effects of the Media on Body Image: A Meta-Analysis. *Journal of Broadcasting & Electronic Media - J BROADCAST ELECTRON MEDIA*. 48. 196-217.
- [16] Dion, K. L., Dion, K. K., & Keelan, J. P. (1990). Appearance anxiety as a dimension of social-evaluative anxiety: Exploring the ugly duckling syndrome. *Contemporary Social Psychology*, 14(4), 220–224.
- [17] Tiggemann, M. (2011). Sociocultural perspectives on human appearance and body image. In T. F. Cash & L. Smolak (Eds.), *Body image: A handbook of science, practice, and prevention* (pp. 12–19). The Guilford Press.
- [18] Lewallen, J., & Behm-Morawitz, E. (2016). Pinterest or Thinterest?: Social Comparison and Body Image on Social Media. *Social Media + Society*, 2(1). <https://doi.org/10.1177/2056305116640559>
- [19] Bardone-Cone, A. M., & Cass, K. M. (2007) What Does Viewing a Pro-Anorexia Website Do? An Experimental Examination of Website Exposure and Moderating Effects. *International Journal of Eating Disorders*, 40, 537-548.
- [20] Slater, M. (2007). Reinforcing Spirals: The Mutual Influence of Media Selectivity and Media Effects and Their Impact on Individual Behavior and Social Identity, *Communication Theory*, 17(3), 281–303.
- [21] Sultan, A. J. (2021). Fear of missing out and self-disclosure on social media: the paradox of tie strength and social media addiction among young users, *Young Consumers*, 22(4).
- [22] Franchina V, Vanden Abeele M, van Rooij AJ, Lo Coco G, De Marez L. (2018). Fear of Missing Out as a Predictor of Problematic Social Media Use and Phubbing Behavior among Flemish Adolescents. *Int J Environ Res Public Health*.15(10):2319.
- [23] Martinez, J.L.V.(2018). #StatusofMind: Social Media and Young People's Mental Health and Wellbeing. *Royal Society for Public Health*.

- [24] Argan, M., Argan, M.T., Aydinoğlu, N.Z., Özer, A.(2022). *The delicate balance of social influences on consumption: A comprehensive model of consumer-centric fear of missing out*, *Personality and Individual Differences*, Volume 194.
- [25] Song, X., Zhang, X., Zhao, Y., & Song, S. (2017). *Fearing of Missing Out (FoMO) in Mobile Social Media Environment: Conceptual Development and Measurement Scale*. In *iConference 2017 Proceedings* (pp. 733-738).
- [26] Lo, Ven-Hwei & Wei, Ran. (2005). *Exposure to Internet Pornography and Taiwanese Adolescents' Sexual Attitudes and Behavior*. *Journal of Broadcasting & Electronic Media*. 49. 221-237.
- [27] Ashraaf, M. A., & Othman, N.(2019). *Factors for Pornography Addiction and Its Implication on Teenager Personality*. *International Journal of Academic Research in Business and Social Sciences*, 9(11), 1148–1160.