The Impact of Social Media on Teenagers
—— Take TikTok as an Example

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Abstract:

In the era of mobile Internet, TikTok has become a mainstream platform for teenagers with its amazing development speed. This paper will examine the positive and negative effects of TikTok on teenagers. On the positive side, TikTok provides teens with a creative outlet for self-expression and identity formation, which could fulfil the psychological needs for achievement and social belonging described in Maslow's ladder of needs. However, due to the addictive nature of the brain's dopamine response to short and fast-paced content, TikTok has also brought serious drawbacks to teenagers. This addictive phenomenon, dubbed "TikTok brain," can disrupt real-life activities, including studying and social interactions. In addition, the "Fear of Missing Out" (FOMO) caused by TikTok use is also fuelling anxiety among teenagers. By describing the duality of TikTok's effects, this paper highlights the need to balance the use of TikTok with awareness of its psychological impact on teenagers.

Keywords: TikTok, Teenagers, Social Media, Addiction, FOMO

1. Introduction

In the era of mobile Internet, which combines mobile communication with the Internet, this technology has penetrated into our daily life, and the field of mobile applications is also increasingly prosperous, becoming a platform for network explosion [1]. Due to the viewing habits and visual effects needs of Internet users, short videos ranging from 15 seconds to a few minutes with music and special effects have become a popular trend worldwide since 2017 [2]. These short videos are new and interesting to the video makers and viewers. Including TikTok, Musical.ly, and the now-popular dynamic short videos are all products of this trend, of which TikTok is the most prominent. TikTok, the international version of Chinese short video social networking app 'Douyin', has been downloaded more than 4.92 billion times globally as of April 2024, making it the fifth most popular social app in the world [3]. That feat, which took just seven years, is growing much faster than established social platforms such as Facebook, YouTube, and Instagram. TikTok is expected to reach 2 billion users worldwide by 2024 [4]. As a new kind of short video communication software, short video is an emerging product in the Internet environment. With the characteristics of low creation threshold, strong entertainment and information fragmentation, short video quickly penetrates into people's lives,

which has a very significant impact on teenagers who are easy to accept new things and have great imitation ability [5]. In this context, this paper will discuss what specific effects TikTok has on teenagers, including both positive and negative effects.

2. TikTok's Popularity Among Teenagers

As social media usage trends change, TikTok has risen rapidly among teenagers as a major information access and social platform. Facebook, Instagram's parent company, has come under widespread criticism since a former employee, Frances Haugen, leaked internal documents that revealed Instagram's adverse effects on the mental health of teenage girls [6]. In fact, Facebook has long been disliked by the Internet's youngest users. According to a report by Qustodio, teenagers in the United States will spend an average of 17 minutes a day on Facebook in 2020, down from 18 minutes in 2019. However, TikTok's screen time boosted from an average of 44 minutes per day to 87 minutes per day [7]. Moreover, According to the research, 28% of teenagers in the UK get news from TikTok, making it the most commonly used single source of news among this group. By comparison, 25 percent of this group get their news from YouTube and Instagram [8]. The research also highlighted that TikTok's popularity among teenagers is mainly due to its algorithm's ability to push personalized content according to users' preferences. As a result, TikTok has become one of the most important social and news access platforms for contemporary teenagers, and it plays an important role in shaping and influencing the cultural and social behaviors of contemporary teenagers.

3. Teenagers' Emotional Needs and Tiktok

In modern society, with the explosive development of new technologies, there are many similarities between teenagers' needs for Internet use and those of traditional media, including the need for emotional transfer. As a virtual space, the Internet allows teenagers to communicate with others, while being able to access information as they wish without revealing their identity [9]. Therefore, the Internet is often regarded as a kind of way to reduce the pressure of life. According to Bakhtin's theory, the social network can be seen as a carnival product. Carnival, in this context, is not just a festival but a second life created by people through humorous elements [10]. This means that, in everyday life, when the product creates such a sec-

ond life for everyone, it takes on a carnival quality. This product has its own unique time and space to help teenagers temporarily escape from real life and enter an imaginary world. In the symbolic carnival moment, teenagers feel liberated, see the world from a different perspective, enrich their vision and accumulate energy. This allows them to return to daily life with a new creative spirit. In this context, TikTok has the essence of a carnival product, as it combines images, music and colors in a virtual world according to different themes. In TikTok, teenagers can express themselves through videos they make, although this self may be different from their everyday self. This platform provides a space that blurs the line between reality and imagination, allowing for creative and personal exploration. As a result, one of tiktok's positive effects on teenagers is that it can help them change their minds and bring positive energy.

4. Self-Actualization and Social Needs on TikTok

Teenagers use TikTok during adolescence not just to leverage a platform, but to explore the space for their changing physical and psychological perceptions of the world. At this stage of transformation, their personalities, perspectives, and moral guidelines begin to take shape [11]. According to Maslow's hierarchy of needs theory, human needs can be basically divided into two categories, including basic needs and meta-needs [12]. Basic needs relate to physical factors such as the desire to get enough food, water and rest. Meta-needs, on the other hand, include many psychological factors, such as the desire for fairness, inner peace, security, happiness, social status, respect and admiration. At the peak of Maslow's hierarchy of needs, self-actualization is the vital one, which also means that individuals have to be innovative and show their talent in order to move themselves, express themselves, and get the approval of others. Nevertheless, teenagers tend to view themselves as more mature individuals who either want to control their lives or turn to others for happiness when it comes to approval and identity, so again, social media might serve as a tool in finding these things [13]. TikTok mainly functions as a crucial platform through which teenagers can clarify their moral stances and priorities through being who they truly are and getting involved in moral activities and missions that cater to their emotional needs. Those who do so are optimistic about the platform's potential for others in similar situations or seeking new opportunities to show off their abilities. In addition, TikTok's algorithmic capabilities improve the visibility of active users, increasing the chances that their

content will be seen by a wide audience [14]. This not only promotes connections among like-minded people, but also creates opportunities for offline gatherings and the formation of communities based on common interests. Therefore, the second impact of TikTok on teenagers is that they can meet their self-actualization and social needs through TikTok.

5. Negative Effects of TikTok on Teenagers

TikTok and other social media platforms have both positive and negative effects. For example, teens who are addicted to TikTok will have trouble focusing on activities that don't provide instant gratification, such as reading and writing [15]. This phenomenon is known as "Tiktok brain". Report pointed out that the short video platform acts like a "dopamine machine," a neurotransmitter released by the brain in anticipation of a reward [5]. The flood of dopamine increases cravings for pleasurable things, whether it's delicious food, drugs or a funny Tiktok video. In this case, the brain's reward system response prompts people to keep viewing short videos. When teenagers swipe a screen and see something that makes them laugh, their brains release dopamine; And when they see something they don't like, they can quickly move on to something else that gets the brain pumping with dopamine. This repetitive cycle eventually makes the brain crave rewards from shorter content, leading to addiction in adolescents. For instance, 60 percent of teens said they have cut back on other activities in their daily lives, including homework and face-to-face socializing, because of the instant gratification of social media [7]. This reflected that overuse of TikTok not only affected their attention and learning, but also their social skills and real-life relationships. Therefore, short videos on TikTok attract users through "transient stimulation", which may lead to the negative effects of addiction in teenagers. Under this circumstance, some nations, such as India, have taken only one action to control the use of TikTok when its admittance enslaves its own people [16]. The fact that mental health is facing modern challenges can be seen from the actions of a few countries, such as some Organisations were found to focus on studying issues such as the psychological effects social media has on children [17]. Such discourse is symptomatic of the growing realisation that over-usage of social technology by teenagers can be detrimental in terms of experiencing panic attacks, insomnia, and a growing sense of inferiority caused by the display of perfect lives by online platforms. TikTok was also quoted saying it has developed protective measures for

minors, including an age requirement, parental controls, and a 60-minute frame that automatically ends after every 18 years old as a solution to such problems.

6. FOMO and Tiktok Usage

Moreover, many teens download and use TikTok simply to keep up with trends and avoid being ostracized. This reflects the phenomenon of teenager suffering from FOMO (Fear of Missing Out). Over the past decade, with the growth of social media, FOMO has become a popular concept. FOMO is a psychological disorder that is particularly prevalent among teenagers as social networks expand. Specifically, some teenagers worry that their friends have mastered some new content that they have missed [18]. In the past, people communicated and received information mainly through face-to-face communication. However, with the development of the Internet, forms of human communication changed and expanded to the possibility of interacting on social networks. Modern technology, especially smartphones and social networking services, have provided open opportunities for people to engage in social activities at a very low cost, but this has also exacerbated FOMO syndrome. For example, statistics show that about 56% of social media users suffer from FOMO syndrome [19]. They use these apps to prove themselves and feel that interacting via social media is easier than communicating directly with others. For Gen Z in particular, the Internet is almost their entire life, and they see access to the Internet as a personal right. This generation is online within minutes of waking up and often ends the day in a virtual world. Even without a specific task, they will unconsciously surf the web, check notifications from various apps, and browse posts on social networks, otherwise they will feel uneasy. Thus, FOMO is an abnormal psychological phenomenon and has a great negative impact on teenagers' psychology when using social networks, especially TikTok. Faced with this fanatical trend of audiovisual consumption, we should reflect on whether we need to create a slow audiovisual trend similar to the "slow food" movement. A trend like this could combine pleasure with a video experience rather than trigger more anxiety.

7. Conclusion

In conclusion, TikTok has had a significant impact on teenagers in the digital age, both positively and negatively. TikTok's meteoric rise highlights the huge impact it has had on teenagers around the world by providing a platform for creativity and self-expression. For example, in TikTok, teenagers can team up together to get free from daily life problems and they can experiment with differ-

ent identities and establish communication with others through common interests and skills sharing. As for the positive effect, Teenagers are given the opportunity, thanks to TikTok, to display their talents, popularise navigation, and show their identity to a global process. In accordance with the Maslow's hierarchy of needs, TikTok could fulfill teenagers' psychological needs for personal achievement, recognition, and social belonging. Nevertheless, as for the negative side, TikTok's addictive nature, which is triggered by the constant dopamine release from short and fast videos, has posed the major challenge in teenagers. This "dopamine machine" can lead to excessive screen time, which can interfere with real-life activities such as learning and face-to-face interactions. Additionally, the FOMO phenomenon has increased and caused anxiety among teens who fear missing out on trends and social acceptance.

References

[1] Goggin, G. (2021). *Apps: From mobile phones to digital lives.* John Wiley & Sons.

[2] Schellewald, A. (2023). Understanding the popularity and affordances of TikTok through user experiences. *Media, Culture & Society,* 45(8), 1568-1582.

[3] Montag, C., Yang, H., & Elhai, J. D. (2021). On the psychology of TikTok use: A first glimpse from empirical findings. *Frontiers in public health,* 9, 641673.

[4] Labudová, L. (2024, May). Current Leading Social Media Platforms Used by Marketers and its Benefits. In *European Conference on Social Media* (Vol. 11, No. 1, pp. 394-401).

[5] Lin, Z. (2023). Analysis of the Psychological Impact of Tiktok on Contemporary Teenagers. In *SHS Web of Conferences* (Vol. 157, p. 01024). EDP Sciences.

[6] McClure, K. (2022). A Case for Protecting Youth from the Harmful Mental Effects of Social Media. *Chap. L. Rev.,* 26, 325.

[7] Chao, M., Lei, J., He, R., Jiang, Y., & Yang, H. (2023). TikTok use and psychosocial factors among adolescents: Comparisons of non-users, moderate users, and addictive users. *Psychiatry research,* 325, 115247.

[8] Yanardağoğlu, E. (2021). 'Just the way my generation reads the news': News consumption habits of youth in Turkey and the UK. *Global Media and Communication,* 17(2), 149-166.

[9] Torrijos-Fincias, P., Serrate-González, S., Martín-Lucas, J., & Muñoz-Rodríguez, J. M. (2021). Perception of risk in the use of technologies and social media. Implications for identity building during adolescence. *Education Sciences,* 11(9), 523.

[10] Kalaman, S., & Batu, M. (2020). Carnivalesque Theory and Social Networks: A Qualitative Research on Twitter Accounts in Turkey. In *New Media and Visual Communication in Social Networks* (pp. 270-288). IGI Global.

[11] Mahmudah, S. M., Rahayu, M., & Prasetyo, K. (2023). Virtual identity in the use of Tiktok for youth in Jakarta, Indonesia. *Bricolage: Jurnal Magister Ilmu Komunikasi,* 9(2), 209-218.

[12] McLeod, S. (2007). Maslow's hierarchy of needs. *Simply psychology,* 1(1-18).

[13] Ghatak, S., & Singh, S. (2019). Examining Maslow's hierarchy need theory in the social media adoption. *FIIB Business Review,* 8(4), 292-302.

[14] Liang, X., Tao, X., & Wang, Y. (2021, February). Impact Analysis of Short Video on Users Behavior: Users Behavior Factors of Short VideoEvidence from Users Data of Tik Tok. In *2021 7th International Conference on E-Business and Applications* (pp. 18-24).

[15] Yang, Y. (2023). Reasons for Teenagers' Habitual Use of Social Media: A Case Study of TikTok. In *SHS Web of Conferences* (Vol. 155, p. 02006). EDP Sciences.

[16] Chakraborty, I., Kapoor, U., & Ilavarasan, P. V. (2020). There is nothing real! A study of nonuse of TikTok in India. In *Re-imagining Diffusion and Adoption of Information Technology and Systems: A Continuing Conversation: IFIP WG 8.6 International Conference on Transfer and Diffusion of IT, TDIT 2020, Tiruchirappalli, India, December 18–19, 2020, Proceedings, Part II* (pp. 287-302). Springer International Publishing.

[17] Patnaik, S., & Litan, R. E. (2023). TikTok shows why social media companies need more regulation. *The Brookings Institution, Policy Brief, May.*

[18] Bloemen, N., & De Coninck, D. (2020). Social media and fear of missing out in adolescents: The role of family characteristics. *Social Media+ Society, 6(4), 2056305120965517.*

[19] Wirman, W., Yozani, R. E., Angela, S., & Surbakti, R. S. (2023). Study of communication phenomenology of Tiktok users who have experienced fear of missing out on behavior. *Bricolage: Jurnal Magister Ilmu Komunikasi,* 9(1), 53-66.