General

Does TikTok Addiction exist? A qualitative study

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Health Psychology Research

Background

Problematic TikTok Use (PTU) is a psychological condition marked by compulsive and excessive engagement with the app, often characterized by prolonged scrolling, content interaction, and seeking user feedback.

Methods

This qualitative study, conducted from February to March 2024, explored factors driving TikTok addiction, its consequences, and strategies for mitigation. Data were collected through in-depth interviews and surveys with 56 participants (23 men, 33 women).

Results

Thematic analysis identified key addiction-related factors, including excessive time spent on the app, emotional attachment, and cognitive rumination over viewed content. Women demonstrated a higher likelihood of developing PTU, particularly when using TikTok for over six hours daily and displaying significant emotional and cognitive ties to its content. Despite its addictive potential, participants acknowledged positive aspects of TikTok, such as its capacity to disseminate cultural, educational, and artistic content. However, negative effects, including procrastination, attention deficits, and exposure to harmful content, were also noted.

Conclusion

This study highlights the dual nature of TikTok's impact, emphasizing the need for balanced use and targeted interventions to reduce addiction while leveraging its positive features.

1. INTRODUCTION

One of the most popular activities within the behavior of the new generations has been sharing aspects of their lives on the various social media platforms through the development of networks and web connections. An emerging problem that is increasingly causing concern worldwide, especially in the younger groups, is Problematic TikTok use (PTU).

TikTok allows users to create, view and share content of various kinds, including videos accompanied by background music, lip-synchronization on which to recreate famous dialogues (lyp-sinc), tutorials of all kinds to personal vlogs in which users share part of their lives online.[1] What distinguishes TikTok from other social media platforms available in the online market—which rely on content characterized by quality and complexity (such as intricate narratives, extended duration, and greater resources for editing and

production) - is the dynamism with which the content is oriented: short, immediate, rapid, and accessible videos.[2] This preference for shorter videos can be related, especially among younger users, with the increasing fast-paced modern life and the lack of individual time, starting to prefer an increasingly reduced experience of the mediated web environment.[3] In recent years, TikTok has experienced exponential growth, being downloaded over two billion times in 2021 alone and consistently ranking as the top entertainment applications for both Android and IOS.[4]

The scientific community has been investigating the phenomenon of deep immersion in the digital world, along with the mechanisms that locks users within a social spiral of addiction with the entertainment methods that push individuals to continuously use the content presented to them.[5] Problematic TikTok use (PTU) could be defined as a psychological condition characterized by recurrent compulsive behavior focused on the excessive use of the platform. Addicted spend most of their time scrolling videos, inter-

acting with the proposed content and continuously seeking feedback from other users.[6]

Epidemiological studies by Gu et al. (2022), indicate that this psychopathological model is experienced differently by the two sexes, confirming with a higher prevalence of addiction in the female population.[7] Some studies suggest that the insistent search for interpersonal relationships and the tendency to ruminate on social content can be included among the factors that largely justify the consumption of social media in women.[8] Further studies have identified different users types on TikTok including lurkers, who passively use the app, non-users or resisters who have never installed TikTok, rejector users who include those who have decided to delete the application, users with conditional resistance who interrupt and resume use of the application.[9,10] Other recent studies have also investigated the motivations behind TikTok use and two cognitive mechanisms that contribute to poor self-regulation, especially in young people, in the will to use and associated pathological conditions such as FOMO *(Fear of Missing Out)* and nomophobia (NMP).[11,12]

Researchers have noted the strong impact of TikTok addiction on daily activities, low level of warmth in the family and negative academic performance, ,particularly concerning o attention levels of procrastination.[13,14]

The objective of this study is to explore **Problematic TikTok Use (PTU)** by identifying the psychological and behavioral factors contributing to its development, its impacts on users, and potential strategies for mitigation. Specifically, the study aims to answer the following questions:

1. What are the negative psychological and behavioral consequences associated with prolonged TikTok use?
2. What factors attract users to TikTok compared to other platforms?
3. What mechanisms lead to excessive and problematic use of TikTok?
4. What strategies can be adopted to manage and control TikTok use in a healthy and balanced manner?

This research is significant in addressing a growing societal concern about the impact of TikTok on mental health and daily functioning. By analyzing participant experiences, it sheds light on the interplay between individual behaviors and the platform's design, emphasizing both risks and opportunities for better regulation and personal use management.

2. MATERIALS AND METHODS

2.1. ETHICAL CONSIDERATIONS

The qualitative study was approved by the DISFOR, Section of Psychology, University of Catania ethics committee. Participants gave written informed consent prior to participation in the study. To ensure data protection and participant confidentiality, all data were collected and stored in compliance with the European Union's General Data Protection Regulation (GDPR). Personally identifiable information was pseudonymized or encrypted, and access to the data was restricted to authorized researchers involved in the study.

2.2. PURPOSE OF THE STUDY

This study aims to investigate **Problematic TikTok Use (PTU)** by focusing on the reasons, motivations, impressions, and opinions shared by individuals who have experienced it. The primary goal is to analyze the participants' experiences to gain an in-depth understanding of the phenomena associated with PTU, as described from the unique perspectives of those directly affected.

By adopting a qualitative approach, this research seeks to capture the reflexive modalities inherent in the participants' experiences, offering insights into the ways PTU influences their daily lives and interactions. This study positions itself within the broader context of social media research, aiming to enrich existing knowledge on this emerging issue.[15]

2.3. RESEARCH QUESTIONS

To establish the objective of the study, basic questions were developed that were used to guide the aforementioned research (**Table 1, 2**).

2.4. METHODOLOGY

Qualitative research is a methodological approach aimed at collecting data in non-numerical forms. This methodology consists of describing possible explanations for observed phenomena, thereby providing subjective information that offers researchers a contextual overview.[16]

2.5. ELIGIBILITY CRITERIA

The sample was selected based on the following eligibility criteria:

1. Age: Participants must be at least 18 years old
2. TikTok addiction experience: Participants must have experienced PTU.
   - At the time of the research, whether the application had been uninstalled or reinstalled was not consider a significant criterion
   - The key criterion was having had an intense experience with the application, like: temporal apperception, bodily apperception, attention difficulties, attachment feelings towards the application, forgetting to perform daily activities in favor of using the application, preferring the use of the application over family/friends, procrastination.

2.6. SAMPLING AND RECRUITMENT STRATEGY

Regarding sampling, non-probability sampling techniques, purposive sampling and quota sampling, was used. The sample size was predetermined: 56 participants were recruited near the University of Catania, Department of Psychology (DISFOR). According to Creswell (2018) five to 25

Table 1. Research questions.

1.	What are the negative consequences, physical and mental, associated with prolonged use of TikTok?
2.	What are the factors that determine users' attraction towards TikTok compared to other social platforms?
3.	What are the psychological and behavioral factors that can lead to excessive use of TikTok?
4.	What strategies can be implemented to help users manage and control their TikTok usage in a healthy and balanced way?

Table 2. Research sub-questions.

1.	Are you restless or irritable when trying to cut down or stop using TikTok, have you made repeated efforts to control and stop using TikTok, do you lie to conceal the extent of your involvement in using TikTok?
2.	Do you often use TikTok when you feel uncomfortable (e.g., anxious, depressed, helpless, guilty)?
3.	After closing the application, do you often open it again even though a short time has passed?

Table 3. Semi-structured interview.

1.	Do you use the TikTok app daily?
2.	Have you ever been unable to access TikTok for a long time? How did you feel? If not, how would you feel?
3.	How many hours do you spend on TikTok per day?
4.	Do you ever think about TikTok when you're not using it?
5.	Have you ever found yourself unable to stop using TikTok?
6.	Does using TikTok make you feel better?
7.	Do you feel lonely after closing the TikTok app?
8.	Does using TikTok interfere with your daily activities or interpersonal relationships?
9.	What do you think are the positive and negative aspects of TikTok?
10.	What do you think could be done to help users maintain a positive relationship with this platform without compromising their well-being?

participants are required for qualitative phenomenological studies.[17]

2.7. DATA COLLECTION AND PROCESSING

A semi-structured interview was used to collect the data. This interview was created and reviewed with input from three psychologists and a supervisor (**Table 3**). This type of interview is characterized by a set of predefined open-ended questions that allow for in-depth exploration through follow-up questions based on the participants' responses. Specifically, the interviews were guided by a semi-structured thematic framework based on the diagnostic criteria currently in use for the only behavioral addiction (new addiction) included in the latest version of the Diagnostic and Statistical Manual of Mental Disorders – DSM 5-TR. This framework covered aspects such as conditions of abstinence, craving, actions taken to limit use and changes in daily habits.

2.8. ANALYSIS

For data analysis, the method of Thematic Analysis was used. Braun and Clark describe this method as a technique for identifying, analyzing, and reporting themes within the data, and as a flexible and useful research tool that provides a rich and detailed, though complex, account of the data.[18]

The following analysis was conducted through the **six phases** of Braun and Clarke guidance (2006):

- Familiarization;
- Code generation;
- Theme Search;
- Theme Review;
- Theme Definition and Naming;
- Report Production.

3. RESULTS

We recruited and obtained a total of 56 participants face-to-face interviewed, from February to March 2024, of which 23 men (age range: 18–40 years, Average Age: ~21.4 years) and 33 women age range: 18–42 years, average age: ~21.6 years) recruited near the University of Catania, Department of Educational Sciences, Section of Psychology (DISFOR) (**Table 4**). Through the phases of the thematic analysis , the participants' responses were summarized into four themes, each with its respective codes and **Table 5** shows the themes and codes developed based on participants' responses.

Table 4. Participants' characteristics.

Characteristics	Total sample (n = 56)
Men: n (%)	23 (41%)
Women: n (%)	33 (59%)
Work	workers (6%), students (94%)
Education	high school (5%), university (95%)

Table 5. Themes and codes.

Themes	Codes
Addiction Factors Associated With TikTok	Waste of time/hours, Lack of awareness of space/time, Continuous/always use of TikTok, Behaviors implemented to try to reduce one's addiction: uninstalling the application
Secondary conditions related to the use of TikTok	Procrastination, Attention deficit, School problems, Impaired self-control, Hate proliferation on TikTok: cyberbullying, negative comments, inappropriate content, body-shaming, Presence of minors on TikTok
Positive perceptions on TikTok	Significant and personal factors attributed to TikTok, Knowledge tool\promotion of art-culture-science, Sharing method: any content\own work, Connection channel with distant people
Strategies and tips to reduce problematic TikTok use	Controlling content\age\language, Algorithm issues, Setting a timer to regulate the balanced use of this application (80%), Improving your self-control and/or distraction skills.

THEME 1 - *ADDICTION FACTORS ASSOCIATED WITH TIKTOK*

All participants have a negative view of using TikTok. In particular some data have shown with factors related to the problematic use of TikTok. Although the interviewees are aware of the problems related to its use, many of them continue to use it, with 2 participants having reduced its use and 3 having completely stopped interactions with this application by uninstalling it. Most of the participants (43 out of 56) report different time spent on TikTok. Of these, 25 participants (17 women and 8 men) introduced the theme of temporal alteration, particularly feeling unable to control how much time they spend on the application. About 9 participants report using TikTok "continuously" or "always". Following the users' motivations, the participants suggest that the usage time changes based on:

- Mood: used to pass the time, console oneself, motivate oneself;
- Boredom: one of the main uses;
- Relaxation or distraction.

In terms of average usage, there is a gender disparity in the sample. Men use TikTok for a time interval ranging from half an hour to two hours maximum, while women, - although 5 out of 33 report using it little, on average use it up to seven hours. Despite the relevance of these data, it is equally important to specify that 3 out of 56 participants (2 men and 1 woman) uninstalled the application precisely because of their strong attachment to it. The evidence shows a lot of concern about the disproportionate growth of FOMO, such as the fear of not using social media and feelings of alienation or exclusion perceived by others for those who do not specifically use TikTok. Furthermore, this study confirms what was reported by a previous study by Wu (2020) regarding the distorted passage of time on TikTok.[6] For example, as reported by Flavio (18 years old):

> *"well, for example, there are certain moments in the evening especially in which I would prefer to read but in reality I put myself on TikTok for 10 minutes and then it becomes an hour".*

Among the many testimonies collected, the following are the most significant for our work:

> *"(...) Many times you don't realize that a certain amount of time passes and that you have lost certain hours in which you could have studied, played or done anything except being on your phone." - Federico, 18 years old;*
> *"I wasted time uselessly." -Aurora, 21 years old;*
> *"(...) I completely lose track of time." – Carl, 23 years old;*

THEME 2 - *SECONDARY CONDITIONS RELATED TO THE USE OF TIKTOK*

Six participants (3 women and 3 men) report that the use of TikTok favors and helps procrastination, especially during studying and exam sessions. Similarly, seven participants (4 women and 3 men) place great emphasis on problems related to a general lowering of attention, and only one of them includes this condition among the positive factors related to the use of TikTok. In addition, further problems emerged, including the insistence of the algorithm and the proliferation of hate on the TikTok platform. Unexpectedly, all participants were efficiently aware of the TikTok algorithm and its functions.[19] Despite the various criticisms proposed by the data in the scientific panorama, many seem to appreciate it, especially for its ability to transport new content, its dynamism, and the ways in which it promotes knowledge. Furthermore, 18 participants (15 women and 3 men) show a high level of concern for the

proliferation of hate and other problems associated with the use of TikTok, especially due to the imposing presence of minors on this platform.

THEME 3 - *POSITIVE PERCEPTIONS OF TIKTOK*

According to most participants (36 out of 56), among the positive aspects related to TikTok, one of the main concerns the promotion of culture, art, science, philosophy and psychology. It is identified as an important sharing tool that allows the dissemination of important news from all over the world. The communication channel of TikTok also increases views on important topics, disseminates the work of others, and introduces many activities and hobbies never seen before. 3 women reported the importance of TikTok in improving their days, as it made them smile, laugh, relieved boredom, and increased socialization. In fact, among its many characteristics, finding or talking to people far from us was a recognized value. Furthermore, of the latter, only 2 associated TikTok with the positive transmission of information online.

Among the many testimonies:

> *"Positive, I think you still have a pastime and in any case on TikTok if there is the right feed you will pop up videos that can also be educational"* – Giovanni, 20 years old;
> *"The positive thing is that thanks to the algorithm they show you new content and therefore you can discover new things or at least refine your passions"* – Manuel, 18 years old.

THEME 4 – *STRATEGIES AND SUGGESTIONS TO REDUCE PROBLEMATIC USE OF TIKTOK*

Almost all participants, 44 out of 56 (80%), suggest technical strategies to reduce addiction to TikTok, including setting a timer within the application to control usage time, stricter controls on the ways of channeling and filtering content, age, and language, banning profiles when necessary. Many participants share that although the platform already as controls for rules and privacy, they are not fully respected. , Despite the presence of moderators, negative and dangerous content is still used. A subset of the sample (4 women and 2 men; 11%) reports that all the previous suggestions are negligible, as excessive use is the basis of the development and creation of the app. Therefore, it would be better to improve self-control and conscientiousness skills rather than rely on external control In addition, 4% of interviewees suggest replacing excessive TikTok use with other activities or distractions. Finally, 7% of interviewees did not know how to answer, specifying how difficult it is to control or apply measures capable of preventing an already too developed addiction.

4. DISCUSSION

The increasing popularity of TikTok has raised significant concerns globally, transforming into an emerging issue particularly relevant among younger generations.[4] The thematic analysis conducted on a sample of 56 participants revealed multiple aspects, both positive and negative, related to the use of this platform, providing a complex and multifaceted view of the motivations and consequences of its use. According to Omar & Wang (2020) the motivations for using TikTok included social interaction, archiving, escapism, voyeurism, and self-expression.[20] These motivations reflect a wide range of fundamental human needs, such as the need to communicate, preserve memories, alleviate boredom, and find pleasure in observing others' lives. The Fear of Missing Out (FOMO) emerges as a significant factor contributing to problematic use of the platform, driving users to stay constantly connected to avoid missing out on important opportunities or experiences.[21] Gender differences in TikTok use are evident: women tend to use the platform for longer periods than men and place greater importance on the content presented. The literature indicates that women are more likely to develop an addiction to TikTok, while men tend to view the app's use as less essential.[22] TikTok's structure can negatively impact users' attention and promote procrastination.[23] The impoverishment of social relationships is another critical aspect.[1] Despite the concerns raised, some participants acknowledged positive aspects of TikTok, such as promoting culture, art, science, and psychology, and the ability to spread important news and educational content. However, it is clear that there is a need to improve and regulate the use of the platform by implementing stricter controls on user age verification, published content, and language used. Furthermore, suggestions to reduce problematic use of TikTok include setting timers to monitor usage time and increasing personal self-control. Recent research has deepened our understanding of the psychological mechanisms contributing to TikTok addiction. Brand et al. (2019) highlighted the role of cognitive, emotional, and behavioral factors in addiction, emphasizing the interplay between these components in reinforcing addictive behaviors across various platforms, including social media like TikTok.[24] Similarly, Dong et al. (2015) discussed the imbalanced functional connection between executive control and reward networks, which may explain why users exhibit compulsive engagement in activities such as online gaming—this concept can be extended to TikTok addiction, where the same imbalance might drive repetitive use driven by immediate reward stimuli.[25] Furthermore, Conte et al. (2024) provided insights into how TikTok's algorithm might amplify vulnerability in adolescents, particularly when paired with the platform's highly engaging and emotionally rewarding nature.[26] This aligns with our findings, reinforcing the idea that TikTok's design can lead to compulsive use.

4.1. LIMITATIONS

This study has some limitations that need to be acknowledged. First, the sample was drawn from a specific geographic area which could limit the generalizability of the results to larger populations or different cultural backgrounds. Finally, the exclusive focus on TikTok, even if intentional, may reduce the applicability of the results to other social media platforms with different characteristics and behaviors. These limitations highlight the need for fu-

ture research employing more diverse samples, longitudinal designs, and mixed-method approaches to deepen understanding of problematic social media use.

5. CONCLUSIONS

TikTok represents a complex digital phenomenon that epitomizes the intricate relationship between technology, psychology, and social behavior in the contemporary digital landscape. Our qualitative study reveals that while the platform offers unprecedented opportunities for communication, entertainment, and knowledge dissemination, it simultaneously poses significant risks to psychological well-being, particularly among younger demographics. The research underscores the dual nature of TikTok: a powerful tool for cultural exchange and personal expression, yet potentially addictive and psychologically disruptive. The findings suggest that addiction is not merely a technological issue but a multifaceted psychological challenge requiring interdisciplinary approaches. Our research reveals the urgent need for a holistic approach to managing digital platform engagement. By understanding TikTok's psychological impact, we must simultaneously enhance digital literacy, improve platform safeguards, and cultivate individual awareness. The goal is not to demonize technology, but to develop more conscious, balanced interactions with social media that protect users' psychological well-being while preserving the platforms' innovative potential. This requires collaborative efforts from educators, technologists, and users themselves to create a healthier digital ecosystem. Ultimately, our study contributes to a growing body of research highlighting the need for a balanced, critical approach to digital platform engagement. As technology continues to evolve, understanding its psychological implications becomes increasingly crucial for individual and societal well-being. An important direction for future research involves delving deeper into the role of TikTok's algorithm in shaping user behavior, as the findings of this study suggest its significant influence on engagement and time distortion. Comparative studies focusing on the addictive potential of TikTok compared to other social media platforms would help identify whether specific design features, such as short-form video formats or algorithm-driven

personalization, play a unique role in **Problematic TikTok Use (PTU)**.

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AUTHOR CONTRIBUTIONS

Conceptualization: P.C. and A.F.

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All authors have read and agreed to the published version of the manuscript.

INSTITUTIONAL REVIEW BOARD STATEMENT

The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Review Board of University of Catania.

INFORMED CONSENT STATEMENT

Informed consent was obtained from all subjects involved in the study.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

REFERENCES

1. Pedrouzo SB, Krynski L. Hyperconnected: children and adolescents on social media. The TikTok phenomenon. *Arch Argent Pediatr*. 2023;121(4):e2674. doi:10.5546/aap.2022-02674.eng

2. Nong W, He Z, Ye JH, Wu YF, Wu YT, Ye JN, et al. The relationship between short video flow, addiction, serendipity, and achievement motivation among Chinese vocational school students: The post-epidemic era context. *Healthcare*. 2023;11(4):462. doi:10.3390/healthcare11040462

3. Wang Y. Humor and camera view on mobile short-form video apps influence user experience and technology-adoption intent, an example of TikTok (DouYin). *Computers Hum Behav*. 2020;110:106373. doi:10.1016/j.chb.2020.106373

4. Günlü A, Oral T, Yoo S, Chung S. Reliability and validity of the problematic TikTok use scale among the general population. *Front Psychiatry*. 2023;14:1068431. doi:10.3389/fpsyt.2023.1068431

5. Ye JH, Wu YT, Wu YF, Chen MY, Ye JN. Effects of short video addiction on the motivation and well-being of Chinese vocational college students. *Front Public Health*. 2022;10:847672. doi:10.3389/fpubh.2022.847672

6. Wu L. Comparative analysis of video stories and user behaviors on WeChat and TikTok. In: *Proceedings of the 2020 3rd International Conference on Humanities Education and Social Sciences (ICHESS 2020) [Internet]*. Atlantis Press; 2020. doi:10.2991/assehr.k.201214.518

7. Gu L, Gao X, Li Y. What drives me to use TikTok: A latent profile analysis of users' motives. *Front Psychol*. 2022;13:992824. doi:10.3389/fpsyg.2022.992824

8. Dam VAT, Dao NG, Nguyen DC, Vu TMT, Boyer L, Auquier P, et al. Quality of life and mental health of adolescents: Relationships with social media addiction, fear of missing out, and stress associated with neglect and negative reactions by online peers. Mortazavi F, ed. *PLoS One*. 2023;18(6):e0286766. doi:10.1371/journal.pone.0286766

9. Bucknell Bossen C, Kottasz R. Uses and gratifications sought by pre-adolescent and adolescent TikTok consumers. *Youth Cult*. 2020;21(4):463-478.

10. Lu X, Lu Z, Liu C. Exploring TikTok use and non-use practices and experiences in China. In: Meiselwitz G, ed. *Social Computing and Social Media Participation, User Experience, Consumer Experience, and Applications of Social Computing*. Lecture Notes in Computer Science. Springer International Publishing; 2020:57-70. doi:10.1007/978-3-030-49576-3_5

11. Yao N, Chen J, Huang S, Montag C, Elhai JD. Depression and social anxiety in relation to problematic TikTok use severity: The mediating role of boredom proneness and distress intolerance. *Computers Hum Behav*. 2023;145:107751. doi:10.1016/j.chb.2023.107751

12. Aydin MK, Kuş M. Nomophobia and smartphone addiction amidst COVID-19 home confinement: The parallel mediating role of digital gaming and social media tools usage across secondary school students. *Front Psychol*. 2023;14:1175555. doi:10.3389/fpsyg.2023.1175555

13. Sharabati AAA, Al-Haddad S, Al-Khasawneh M, Nababteh N, Mohammad M, Abu Ghoush Q. The impact of TikTok user satisfaction on continuous intention to use the application. *J Open Innov Technol Market Complex*. 2022;8(3):125. doi:10.3390/joitmc8030125

14. Gupta AK, Upreti D, Shrestha S, Sawant S, Karki U, Shoib S. Adolescent-parent conflict in the era of 'TikTok': Case reports from Nepal. *J Affect Disord Rep*. 2021;6:100219. doi:10.1016/j.jadr.2021.100219

15. Churchill SD. Insegnare il metodo fenomenologico: la capacità di «cogliere il significato» nei percorsi di ricerca delle scienze umane. *Encyclopaideia*. 2019;23:1-25.

16. Gorman GE, Clayton PR, Shep SJ, Clayton A. *Qualitative Research for the Information Professional: A Practical Handbook*. Facet Publishing; 2005. doi:10.29085/9781856047982

17. Creswell JW, Poth CN. *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. 4th ed. Sage Publications; 2018.

18. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol*. 2006;3(2):77-101. doi:10.1191/1478088706qp063oa

19. Bhandari A, Bimo S. TikTok and the "algorithmized self": A new model of online interaction. *SPIR [Internet]*. Published online 2020. doi:10.5210/spir.v2020i0.11172

20. Omar B, Dequan W. Watch, share or create: The influence of personality traits and user motivation on TikTok mobile video usage. *Int J Interact Mob Technol*. 2020;14(04):121. doi:10.3991/ijim.v14i04.12429

21. Alutaybi A, Al-Thani D, McAlaney J, Ali R. Combating fear of missing out (FoMO) on social media: The FoMO-R method. *Int J Environ Res Public Health*. 2020;17(17):E3283. doi:10.3390/ijerph17176128

22. Scott CF, Bay-Cheng LY, Prince MA, Nochajski TH, Collins RL. Time spent online: Latent profile analyses of emerging adults' social media use. *Computers Hum Behav*. 2017;75:311-319. doi:10.1016/j.chb.2017.05.026

23. Li L, Gao H, Xu Y. The mediating and buffering effect of academic self-efficacy on the relationship between smartphone addiction and academic procrastination. *Computers Educ*. 2020;159:104001. doi:10.1016/j.compedu.2020.104001

24. Brand M, Wegmann E, Stark R, Muller A, Wolfling K, Robbins TW, et al. The interaction of person-affect-cognition-execution (I-PACE) model for addictive behaviors: Update, generalization to addictive behaviors beyond internet-use disorders, and specification of the process character of addictive behaviors. *Neurosci Biobehav Rev*. 2019;104:1-10. doi:10.1016/j.neubiorev.2019.06.032

25. Dong G, Lin X, Hu Y, Xie C, Du X. Imbalanced functional link between executive control network and reward network explain the online-game seeking behaviors in Internet gaming disorder. *Sci Rep*. 2015;5:9197. doi:10.1038/srep09197

26. Conte G, Iorio GD, Esposito D, Romano S, Panvino F, Maggi S, et al. Scrolling through adolescence: A systematic review of the impact of TikTok on adolescent mental health. *Eur Child Adolesc Psychiatry*. Published online 2024. doi:10.1007/s00787-024-02581-w