

A Study on the Influencing Factors of New Media Short Video Platforms on Adolescent Mental Health

Yifan Wang

Scenography, Accademia Di Belle Arti Di Frosinone, Frosinone, Italy
Corresponding author: gongyun@ldy.edu.rs

Abstract:

With the rapid development of the Internet and mobile technology, new media short video platforms have rapidly become popular around the world and have become an important part of adolescents' daily lives. Short video platforms are popular among adolescents for their rich content and strong interactivity. However, the popularity of short video platforms also brings potential impacts on the mental health of adolescents. This study aims to discuss the specific influencing factors of new media short video platforms on adolescents' mental health. It uses a combination of questionnaire surveys and literature searches to study factors such as the frequency of adolescents' short video use, content preferences, and interactive behaviors. The results of this study show that new media short video platforms have a multi-faceted negative impact on the mental health of adolescents, mainly manifested in increased psychological stress, decreased sleep quality, and decreased academic performance. The research further concluded that when adolescents overuse short video platforms, their academic and social pressures increase significantly. In response to this type of problem, it is recommended that parents and educators provide more guidance, use short video platforms reasonably, and create a healthy online environment.

Keywords: Short video; adolescents; mental health; social interaction

1. Introduction

This study focuses on the rapid development of emerging media, in which short videos have become an indispensable part of adolescents' daily lives [1]. More than half of adolescents say they go online every day, and more than a quarter say they go online almost all the time [2]. As of July 2022, the number of active users of short video platforms exceeded 1 billion in a month, and nearly half of the users are adolescents. Many adolescents spend a lot of time every day browsing, liking, commenting, and sharing short video content on short video platforms [3]. This research is very meaningful for improving the psychological condition of adolescents. This study aims to discuss the specific factors affecting the mental health of adolescents through the new media short video platform, specifically from the aspects of the frequency of adolescents' use of short video platforms, the impact of different types of video content on adolescents' mental health, and the impact of interactions on the platform on adolescents' mental health. The literature analysis method is used to search and read relevant materials and documents. The advantage of this method is that it can analyze existing research results well and is conducive to in-depth research. The re-

search objectives of this study are to explore the complex relationship between short video platform use and adolescent mental health, analyze key factors, and propose effective strategies and suggestions to help adolescents use short video platforms more healthily. To achieve this goal, a questionnaire survey was conducted. The advantage of this method is that it collects rich data, which can be analyzed using statistical software to obtain more objective and scientific results to support the scientific nature and reliability of the research.

2. Study on the Psychological Factors of Short Video Platforms on Adolescents

2.1 The Impact of Short Video Platform Usage Frequency on Adolescent Mental Health

2.1.1 Time management and the risk of new media addiction

Short video platforms typically use highly personalized recommendation algorithms that continuously push video content that may appeal to users based on their viewing history and interest preferences [4]. This design makes

it easy for adolescents to become addicted to it and form a habit of “constantly swiping”. Because the content of short videos is short and varied, adolescents often spend a lot of time on them without realizing it. Many adolescents habitually pick up their mobile phones to watch short videos after completing their school tasks. This behavior may bring relaxation and pleasure in the short term [5]. In the long run, this will lead to psychological and physiological dependence, that is, addictive behavior [5, 6]. A total of 411 adolescents aged 10-18 were selected for a question-

naire survey, among which 54.01% of the adolescents chose to watch short videos for an average of 1-2 hours a day, and 7.06% of the adolescents chose to watch short videos for more than 4 hours a day (as shown in Figure 1). Long-term exposure to idealized images and lifestyles in entertainment videos may cause confusion influence adolescents’ self-identity and reduce their self-esteem. Adolescents may develop low self-esteem or resentment towards their family or friends.

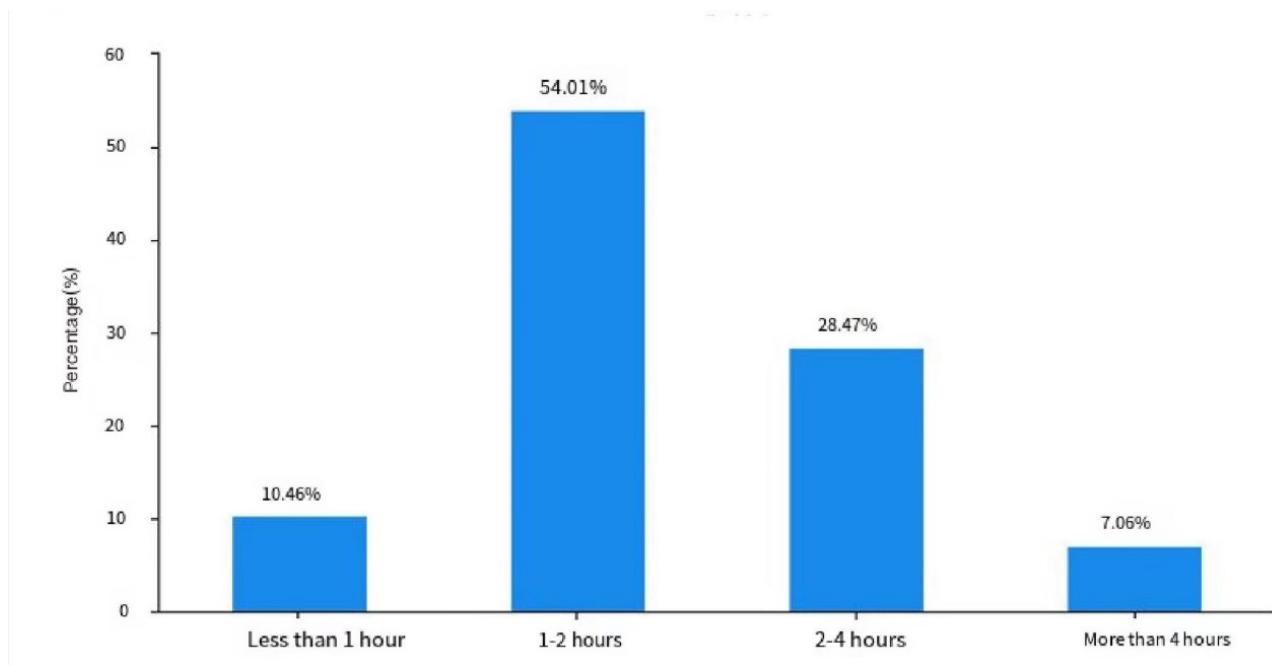


Fig. 1 Statistics of the time adolescents spend on short video platforms every day

2.1.2 Life impact

Because short videos take up more time, adolescents have less time for learning. Prolonged use of short video platforms may take up time that could be used for learning. Since the content of short videos is rich and constantly updated, the academic time of adolescents is squeezed, which often delays the time for homework and review of lessons, resulting in a decline in the quality of homework and academic performance. Excessive use of short videos may affect adolescents’ concentration and memory, further affecting their academic performance [7, 8].

The rapid switching and high stimulation of short videos can keep the brain in an excited state, further interfering with the process of falling asleep and the quality of sleep [8]. Many adolescents are used to watching videos in bed to relieve themselves from the stress of study and life. The

high intensity and entertainment of short videos [9]. make it difficult for an adolescent to put down their phones before going to bed, which often results in delayed bedtime. This study selected 411 adolescents aged 10-18 for a questionnaire survey. 40.88% of the adolescents chose to watch short videos at night, and 11.68% of the adolescents chose to watch them late at night (as shown in Figure 2). Short video platforms have a significant negative impact on adolescents’ sleep. Excessive use of short videos at night can lead to a lack of sleep, which can cause a series of problems during the day. Lack of sleep can make adolescents feel tired and lack energy during the day, which can affect their attention and learning efficiency in school [8]. Long-term lack of sleep may also cause health problems, such as decreased immunity, emotional instability, and memory loss [8]. To sum up, the frequent use of short

videos by adolescents will affect their sleep, academic performance, and the risk of new media addiction, leading

to negative psychological effects such as inferiority, arrogance, and lack of spirit among adolescents.

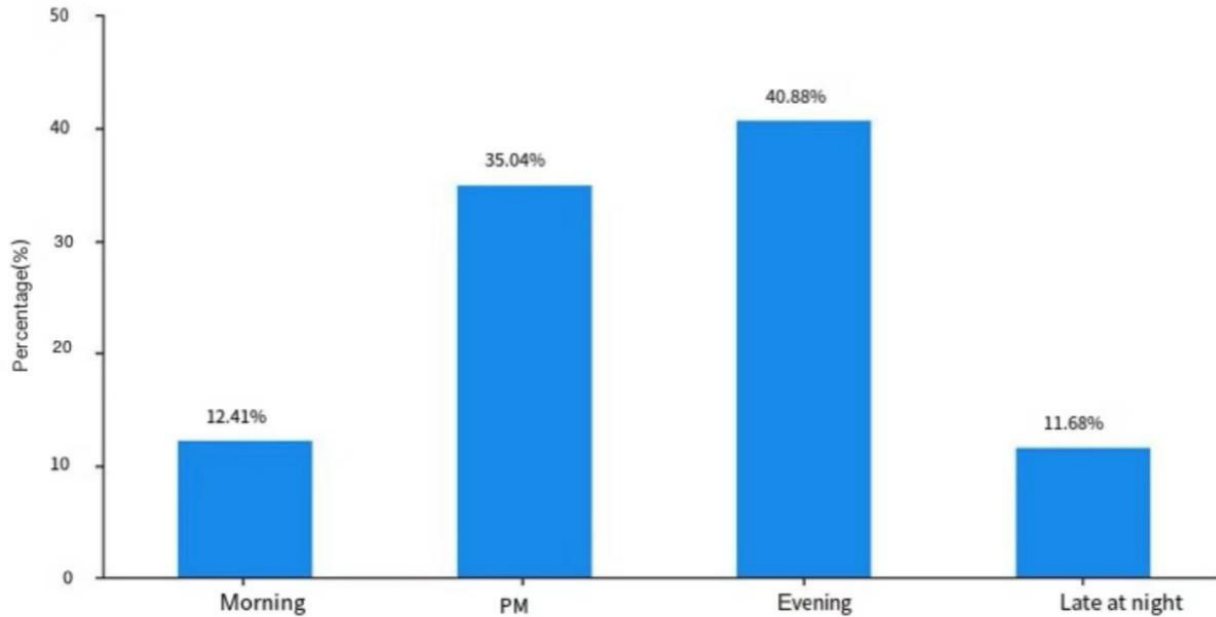


Fig. 2 Statistics of the periods when adolescents use short video platforms every day

2.2 The Impact of Different Types of Short Video Content on Adolescents’ Mental Health

2.2.1 Entertainment

This study conducted a questionnaire survey among 411 adolescents aged 10-18 years old. The results showed that 80.54% of the adolescents chose entertainment short videos (as shown in Figure 3). Entertainment short videos are very popular among adolescents. They can enrich their extracurricular life, reduce their study pressure, help them regulate their emotions and relax in their busy study and life, and alleviate their anxiety [9]. Funny videos and humorous content can trigger laughter, release happy hormones, and improve the overall mood of adolescents. At the same time, entertainment videos provide a brief way to escape reality, helping adolescents get rid of temporary stress and anxiety. This can relieve stress through the reg-

ulation of emotions and help adolescents maintain their mental health [10]. On short video platforms, there are often a variety of creative videos. The appearance of this type of video can stimulate adolescents’ positive emotions and gain happiness and satisfaction. The accumulation of this emotional value plays an important role in the long-term development of adolescent’s mental health. However, some entertainment videos may contain violent and bloody scenes that are not suitable for the mental health development of adolescents, which may cause emotional anxiety and fear in adolescents. If the scenes or music of these contents are too real, adolescents may suffer from long-term psychological trauma after watching them. These violent and bloody contents can also trigger emotions such as anxiety and depression in adolescents, especially for those who are sensitive to such video content. Repeatedly watching such content may aggravate their negative emotions [11].

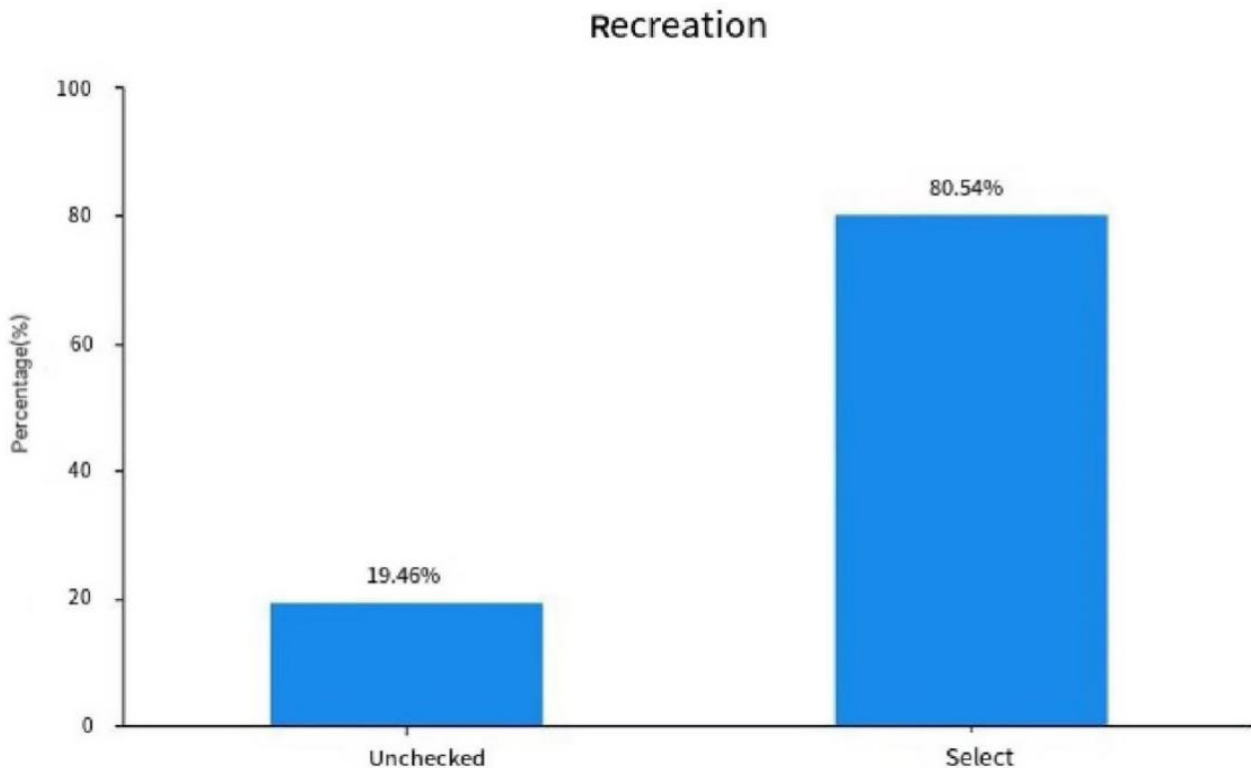


Fig. 3 Statistics of teenagers’ viewing content of entertainment short videos

2.2.2 Education

The results of the questionnaire survey show that 54.74% of adolescents choose educational short videos (as shown in Figure 4). This type of short video allows adolescents to learn new knowledge or skills after watching the video, which can effectively enhance adolescents’ self-confidence and motivate them to succeed in other areas of learning. Educational short video content is generally concise and clear and can provide effective help for an adolescent when they learn complex knowledge and concepts, reducing their stress in learning and frustration in acquiring knowledge. Now there are many interesting and creative educational videos on the market. These videos can inspire adolescents to have a strong interest in and motivation for learning knowledge, enable them to maintain their interest and enthusiasm in learning and improve their learning experience [12]. The emergence of such videos can help adolescent enhance their ability to regulate emotions during adolescence, allowing them to go through adolescence with a little more ease and joy. However, some educational short videos have also played

a negative role in adolescents’ psychological counseling and emotional management. Faced with a large number of educational videos, adolescents may feel that the amount of information is too much. Especially when they realize that they have to keep up with all the content, they may feel flustered and overly stressed, which may lead to learning anxiety and even resistance to learning [10]. In educational videos, what is shown are “role models” and “other people’s children” in real life. After watching educational videos, adolescent or their parents may ask them to imitate or reach these high standards, thus setting overly high or harsh demands on themselves, causing the psychological pressure on adolescents to continue to rise, which may make them feel inferior and frustrated. And because of the speed of short videos, the adolescent will feel that they must quickly absorb and master a large number of knowledge points and information in a short period, which increases their psychological burden. At the same time, long-term high-intensity learning may cause their nerves to become fatigued. If they cannot get enough rest, the adolescent may have more negative emotions, affecting their life and study.

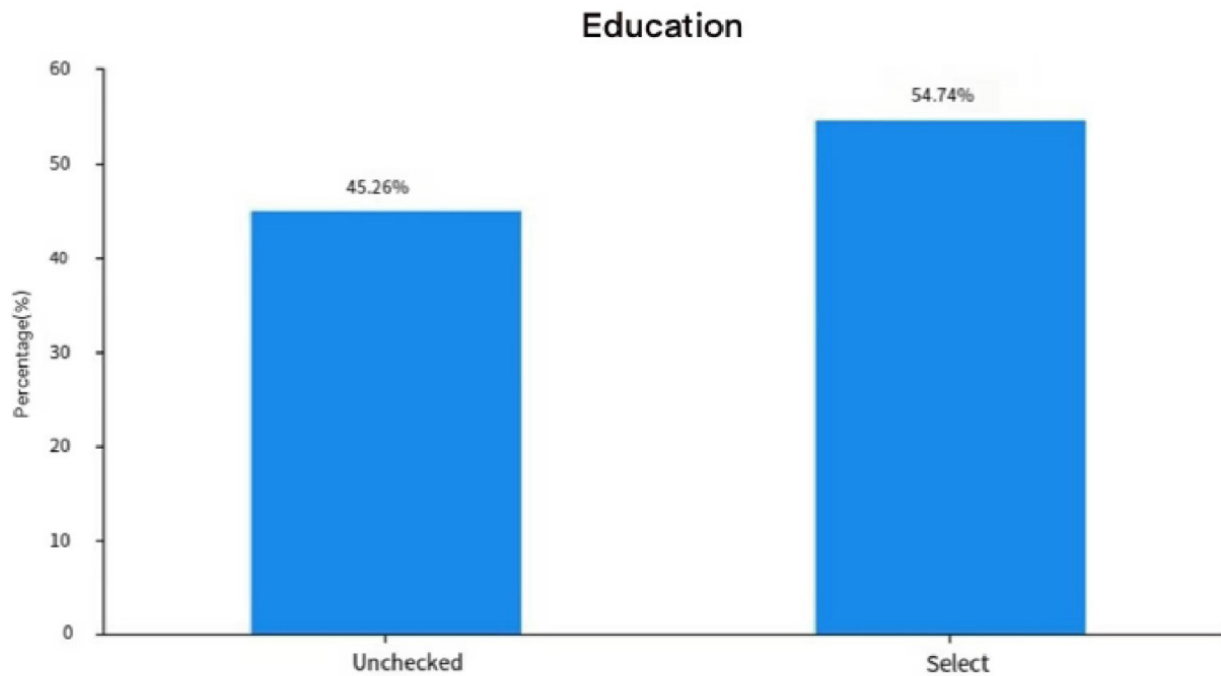


Fig. 4 The statistics of teenagers' viewing content is educational short videos

2.3 The Impact of Social Interaction on Short Video Platforms on Adolescents' Mental Health

Short video platforms provide a space for interaction and communication, through which adolescents can share their interests and hobbies, discuss topics with their peers, and thus build social circles. This kind of interaction can not only make adolescents feel understood and supported but also enhance their understanding and insight into things, gain the admiration of friends and thus increase their self-confidence. Adolescence is an important stage in the development of adolescents' lives, and their mental health is even more crucial. If not properly guided, it may lead to adolescents' emotional sensitivity and even rebellious psychology [13]. At this time, short videos provide them with an important platform for interaction and emotional relief. Through commenting, liking, and sharing, the adolescent can gain emotional support and encouragement from their peers. This positive social emotion helps to enhance the generation of positive emotions and helps them better cope with the pressure and challenges brought about by life and study. It is one of the important ways for them to relieve stress and anxiety. Positive interactions on short video platforms can provide adolescents with emotional support and help, and alleviate their loneliness and anxiety. Watching and sharing short videos can bring pleasure and satisfaction, and enhance adolescent's sense

of happiness and accomplishment. Especially when teens' video content receives recognition and appreciation from people other than their parents, this positive feedback can significantly impact mental health. Positive emotions help adolescents increase their vitality in life, thus enabling them to face the challenges of life calmly.

However, social interactions on short video platforms also have a significant negative impact on the mental health of adolescents. Short video platforms often show people's idealized lives, appearances, and achievements. However, in real life, the level of these lives or achievements is often difficult for ordinary people to achieve. This may cause adolescents to compare themselves with these idealized images, resulting in feelings of inferiority and dissatisfaction with their lives and studies [13]. Especially during adolescence, when adolescents' mental health is not fully developed, they are easily influenced by the outside world. If they feel that they cannot live up to these ideal standards, they may begin to doubt themselves, and this long-term negative emotion can seriously affect the mental health of adolescents. At the same time, in an era of developed online information, everyone can speak freely on short video platforms, and adolescents may be subjected to cyberbullying and negative comments, and be insulted and humiliated through comments, private messages, or public posts. These languages involve many aspects, some of which may contain dirty words, caus-

ing great psychological harm to adolescents [14]. If they are not discovered or guided in time, they may develop depression and anxiety. Spreading false information or rumors about adolescents on the Internet to damage their reputation and image may cause the victims to be ostracized by their peers. Continuous psychological pressure and emotional distress may affect adolescents' enthusiasm for learning, leading to a decline in academic performance and aggravation of negative psychological emotions [13]. In addition, on short video platforms, to gain likes and attention, they may constantly try to produce more popular content to gain recognition from many netizens. This excessive pursuit of and concern for external attention may cause greater stress for adolescents. Especially when adolescents' videos do not receive prior feedback, they often feel a strong sense of disappointment and loss, which may further increase their negative emotions and stress.

3. Suggestion

The negative impact of short video platforms on the mental health of adolescents is mainly reflected in three aspects: psychological factors, bad content, and interaction. Long-term use of short video platforms may lead to Internet addiction among adolescent, affect their academic and social life, and even cause anxiety and depression. To mitigate these effects, it is recommended to set daily time limits for using short video platforms and a break reminder function after using them for some time, to help adolescents arrange their time reasonably and prevent long-term addiction. Schools and parents should provide mental health education and counseling to help adolescents correctly understand and actively deal with psychological problems and cultivate their psychological adjustment abilities. At the same time, parents should also pay attention to adolescent's short video usage and mental health status. Different types of short videos can also hurt the mental health of adolescents. In response to this situation, the platform should improve the content recommendation algorithm, give priority to educational, positive, and beneficial content, and reduce exposure to negative content. At the same time, parents can also use parental control functions to filter out content suitable for adolescents, ensure that they are exposed to healthy and safe information, and teach adolescents to learn to distinguish the authenticity of information and avoid being misled by false or harmful content.

Interactions on short video platforms may also hurt the mental health of adolescents. Some bad comments and cyberbullying can cause psychological harm to adolescent, undermine their self-esteem, and reduce their self-confidence. In response to this phenomenon, the platform

should advocate positive interactions, reduce the generation of negative comments, and create a healthy interactive environment. At the same time, parents and schools can also help adolescents develop good social skills, enhance their self-confidence and stress resistance, and teach them how to respond positively when encountering negative activities.

4. Conclusion

The research results of this study show that new media short video platforms have a multi-faceted negative impact on the mental health of adolescents, which is mainly reflected in increased psychological stress, decreased sleep quality, and decreased academic performance. It further concludes that when adolescents excessively use short video platforms, their academic and social pressures increase significantly. At the same time, the interactive functions on the short video platform for adolescents, such as likes, comments, and sharing, also have a significant impact on the mental health of adolescents. Positive interactions may enhance adolescents' self-confidence and social skills, but they may also make them care too much about the outside world's evaluation, leading to an inferiority complex. If they encounter negative comments, it will cause serious psychological damage to adolescents. This study provides many valuable references for future research in this direction. It mainly provides reference suggestions for parents to guide and supervise adolescents in using short video platforms, which is helpful for parents to help adolescents establish healthy usage habits. Future research should focus more on studying limited intervention strategies and methods, and conduct in-depth exploration to help adolescents healthily use short video platforms.

References

- [1] Liu M., Zhuang A., Norvilitis J.M., & Xiao T. Usage patterns of short videos and social media among adolescents and psychological health: A latent profile analysis. *Comput. Hum. Behav.*, 2023, 151, 108007.
- [2] Shychuk, M., Joseph, N., & Thompson, L.A. Social Media Use in Children and Adolescents. *JAMA pediatrics*, 2022.
- [3] Bhandari A., & Bimo S. Tiktok and the "algorithmized self": a new model of online interaction. *AoIR Selected Papers of Internet Research*, 2020.
- [4] Tao X. Entertainment First—Influencing Factors of College Students' Motivation to Use Short Video Software. *Advances in Education*, 2022.
- [5] Zhang P., Wang Y., Chen, X., Yan W., Zhu Y., & Peng K. Beyond the bell: exploring the link between time allocation on extracurricular activities and academic performance in Chinese

- adolescents. *International Journal of Adolescence and Youth*, 2023, 28.
- [6] Chao M., Lei J., He R., Jiang Y., & Yang H. TikTok use and psychosocial factors among adolescents: Comparisons of non-users, moderate users, and addictive users. *Psychiatry Research*, 2023, 325.
- [7] Kirchoff S., Frejjan A.M., Okan O., & Bauer U. Evaluating the effect of an adapted mental health literacy intervention on mental health related stigma among secondary students in Germany: results of a pre-post evaluation study. *BMC Public Health*, 2023, 23.
- [8] Brandon Doyle. *TikTok Statistics*, 2021.
- [9] Eissa H., Hazzaa, N., Shalaby, A.A., & Galal, E.M. Effect of mobile device usage on central auditory processing in children. *Ain Shams Medical Journal*, 2022.
- [10] Li Q. *The Prosperous Short Video Environment: Hidden Threats to Young People's Mental Health*. *Lecture Notes in Education Psychology and Public Media*, 2024.
- [11] Akel M., Fahs I.M., Haddad C., Kheir N., Obeid S., & Hallit S. Association of violent video gaming with mental health among male teenagers in Lebanon. *Vulnerable Children and Youth Studies*, 2022, 18, 76-86.
- [12] Meziane Cherif K., Azzouz L., & Bendania A. Algerian secondary school students' preferences for the use of YouTube in their informal learning. *Educational Technology Quarterly*, 2024.
- [13] Fang Y. *Research on the Influence of Douyin on Teenagers in China*. *Lecture Notes in Education Psychology and Public Media*, 2023.
- [14] Lin Z. *Analysis of the Psychological Impact of Tiktok on Contemporary Teenagers*. *SHS Web of Conferences*, 2023.