



THE IMPACT OF SMARTPHONES ON PSYCHOLOGICAL STABILITY

Akramova Gulrukh Alihanovna

Deputy Director for Spiritual and Educational Affairs

Secondary School No. 98 of Yunusabad District

Independent Researcher of the Tashkent State Pedagogical University

Abstract

This article examines the impact of smartphone usage on adolescents' psychological stability. Modern teenagers spend a significant amount of time using smartphones, tablets, and other digital devices, which can lead to stress, anxiety, decreased attention span, and emotional instability. The study analyzes both international research and empirical data on adolescents' digital habits, highlighting the risks of excessive screen time.

Keywords: Smartphones, adolescents, psychological stability, digital addiction, stress, anxiety, screen time, digital literacy, mental health.

Introduction

Smartphones also serve as a means for young people to satisfy their social needs. If adolescents do not acquire rich emotional experiences during the early stages of ontogeny, they tend to fulfill their needs through digital platforms. Therefore, a direct relationship is observed between smartphone addiction and social media dependence, which can be explained by the insufficient satisfaction of key psychological needs in real interpersonal interactions.

Excessive smartphone use increases stress in daily life. For example, the technical stress that arises from checking phone notifications or monitoring social media negatively affects adolescents' mental state. Studies show that using gadgets at night or before bedtime reduces sleep quality and can lead to anxiety, depression, and even weight gain.

Emotional intelligence plays a crucial role not only in substance-related behavior but also in behavioral addictions. Research by S. Chen and colleagues indicates that a low level of emotional intelligence is a significant risk factor for the development of addiction. This emphasizes the need to study the mechanisms



linking emotional intelligence and addiction more deeply, and to apply emotional intelligence development strategies in the prevention and treatment of addictive behaviors.¹.

The main negative consequences of smartphone addiction include family and personal conflicts, as well as academic underachievement. Adolescents with a high level of addiction tend to show weaknesses in managing interpersonal conflicts. Research also confirms a statistically significant direct relationship between smartphone addiction and stress coping strategies. For example, a study conducted by R. Alan and H. S. Guzel showed that young people who were not familiar with effective stress management techniques had higher levels of smartphone addiction compared to those who employed alternative strategies to address other problems². Smartphones also serve as a means for young people to fulfill their primary psychological needs through social networks. Research shows that adolescents who lack rich emotional experiences during the early stages of ontogeny tend to satisfy their needs via digital communication through smartphones. A strong correlation between smartphone and social media addiction, particularly influenced by the user's psychological state, indicates that young people are unable to adequately meet their social needs in real life. As a result, they attempt to fill this gap through smartphone use.

Studies conducted in Sweden indicate that constant use of mobile devices among adolescents is associated with sleep disturbances, depressive symptoms, and high stress levels. Approximately 70% of the study participants used social networks before going to bed, while 15% spent an hour or more staring at their smartphone screens. This demonstrates that gadget use at night and before sleep increases anxiety and sleep disturbances. Moreover, using devices outside of work or study hours also contributes to weight gain.

Researchers at the University of Pennsylvania found that limiting continuous use of Facebook and Instagram messaging improves individuals' mental well-being, reducing feelings of loneliness and depression. Adolescents who use smartphones during sleep experience decreased sleep quality and shorter sleep duration. Research also indicates that adolescents who actively use digital devices on a daily

¹ Шен С., и др. Эмоциональный интеллект и зависимость: теория и практика // Психологический журнал. – 2020. – Т. 41, № 3. – С. 45-58.

² Alan R., Guzel H.S. Smartphone addiction and stress coping strategies: empirical study // Journal of Behavioral Addictions. 2019. – Vol. 8, № 2. – P. 212-225.



basis are at a higher risk of developing mental health disorders. Contributing factors include difficulties in managing emotions and behavior, attention problems, and hyperactivity³.

Nowadays, smartphone and other digital device addiction among young people is a significant social and psychological issue. Research indicates that excessive smartphone use negatively affects adolescents' emotional intelligence, self-confidence, and interpersonal communication skills. Low levels of emotional intelligence and the lack of effective stress-coping strategies increase the risk of addiction, leading to sleep disturbances, psychological discomfort, depressive symptoms, and social isolation.

Moreover, smartphones have become a tool for fulfilling young people's core psychological needs, which further strengthens dependence on social networks. This tendency is particularly pronounced among individuals who lack rich emotional experiences during the early stages of ontogeny. Therefore, pedagogical and psychological preventive measures are essential, as they help develop decision-making skills, effective self-regulation mechanisms, and interpersonal communication competencies.

Excessive use of digital devices not only affects individuals but also impacts social well-being. Accordingly, it is necessary to implement comprehensive preventive measures in schools and universities aimed at developing emotional intelligence, managing stress, and preventing smartphone addiction. This approach can have a significant positive effect on adolescents' personal, psychological, and social development.

In recent years, the rapid development of smartphone technology has significantly increased interest in these devices across all layers of society, especially among adolescents. However, excessive smartphone use can sometimes lead to problematic behaviors and addiction-like states, negatively affecting an individual's psychological well-being and overall health. The term "smartphone" refers to devices that are fundamentally different from traditional mobile phones due to their expanded functional capabilities. This term was first introduced into scientific usage in 1997 by Ericsson during the description of the GS 88 "Penelope" concept. Smartphones are a new generation of mobile devices that integrate communication services on a single platform, including text messaging, voice

³ University of Pennsylvania Research Team. Social Media Usage and Psychological Well-being. – Philadelphia, 2020. –P.28.



communication, online gaming, e-commerce, access to web resources, social networks, personal data management applications, and wireless communication technologies.

Observations indicate that currently, adults and adolescents check their smartphones about 150 times a day, i.e., once every six minutes. According to data from the Philippines in 2020, smartphone addiction among adults reached 60%. The high prevalence of smartphone addiction among young people is driven by multiple factors, including a heavy and complex academic workload, frequent exams in higher education, long study hours, and anxiety about the future, which contribute to high levels of stress. In such situations, students tend to use smartphones as a means to relieve stress. Additionally, abundant free time and limited parental supervision increase smartphone use. Consequently, students may immerse themselves in the virtual world and distance themselves from real life, which negatively affects their physical and mental health.

Research conducted in China found that 21.3% of students were addicted to smartphones. In South Korea, surveys revealed that 25.5% of students were at risk of smartphone addiction. Therefore, smartphone addiction among students has attracted considerable scientific attention. One of the main causes of smartphone addiction among students is loneliness, being away from family, and adaptation stress. International students, living far from their families and home countries in a new cultural environment, often experience boredom, loneliness, stress, and concerns about the health of family members. In such situations, smartphones often serve as a coping mechanism. Smartphone use helps alleviate stress and anxiety, as well as challenges related to academic workload and social interactions.

Alongside their negative aspects, gadgets also have features that positively influence personal development and the educational process. Numerous studies in modern pedagogy and psychology emphasize that purposeful and moderate use of gadgets can enhance children's cognitive activity, intellectual development, and information competencies. In particular, analyses conducted by the founder of New Parent Academy note that gadgets serve as important tools for helping children adapt to the digital environment, develop independent learning skills, and expand their knowledge base. Educational mobile applications, interactive games, and electronic programs allow children to acquire initial concepts about colors, shapes, numbers, sounds, and environmental phenomena. For example, applications for



distinguishing colors help develop children’s visual perception and activate their observational and reasoning processes.

Based on the cognitive development theory of American pedagogue and psychologist J. Piaget, researchers emphasize that an interactive digital environment supports active learning in children. Interactive content delivered through gadgets transforms the child from a passive listener into an active participant. This facilitates the development of logical thinking, problem-solving, and decision-making skills. Furthermore, according to the theory of the “zone of proximal development” by prominent scholar L.S. Vygotsky, technological tools, including gadgets, can serve as aids in mastering complex knowledge. Educational applications allow children to learn at an individual pace, matching their personal abilities and needs.

Another important positive aspect of gadgets is their effectiveness in learning foreign languages. Many mobile applications and programs are presented in English and other foreign languages, which increases children’s interest in language learning and improves their listening and pronunciation skills. According to linguist S. Krashen’s theory of natural language acquisition, learning a language in a real, engaging, and natural context yields better results, and gadgets provide such an opportunity.

Moreover, digital technologies help children develop an information literacy culture. UNESCO specialists emphasize that in the 21st century, the ability to search, analyze, and critically evaluate information is among the key competencies. The prudent use of gadgets contributes to the development of these competencies. Therefore, gadgets for children are not solely negative factors; when properly guided and supervised, they serve as educational, developmental, and nurturing tools. Importantly, gadget use should be organized in accordance with children’s age, time limits, and pedagogical goals.

Analyzing these positive attributes reveals that excessive and uncontrolled use of gadgets can lead to psychological addiction. Devices such as smartphones or tablets provide children with an engaging and easy-to-use interactive environment, which can lead them to spend extended periods in the virtual world. While gadgets enhance children’s ability to independently manage creative and learning activities, excessive use can isolate them from real-life interaction and increase negative psychological states such as loneliness, anxiety, and stress.



Gadgets can serve as a positive motivational tool, for example, exercises in color recognition or language learning can actively engage children in the learning process. However, the psychological mechanism of addiction is that children experience a sense of reward through these positive experiences, which fosters attachment to the device. They gain continual satisfaction from expanding knowledge or learning a new language, which draws them further into virtual activity and promotes overuse. Additionally, gadgets help develop children's social connections, enabling interactive learning with family and friends online. However, prolonged engagement in this activity reduces face-to-face interactions with peers, decreases social satisfaction, and strengthens the mechanism of addiction.

Thus, the positive features of gadgets – knowledge acquisition, language learning, interactive learning, and creative development – when combined with excessive use, can contribute to the development of psychological addiction. Therefore, it is crucial for educators and parents to monitor gadget use, set time limits, and encourage children to engage in real-life activities.

In contemporary youth life, gadgets and smartphones serve not only as tools for social interaction, learning, and entertainment but also increase access to online gambling. Research indicates that gadget addiction among young people enhances impulsive behavior and the desire for immediate rewards, which attracts them to gambling. Accessing online gambling through gadgets has become easier: mobile applications and web platforms are available 24/7, allowing young people to detach from the real world and experience rapid success and reward in virtual games. The psychological mechanism is as follows: youth increase dopamine levels through rewards obtained via gadgets, which heightens interest in gambling compared to ordinary activities.

In Uzbekistan, an increasing interest in online gambling among young people has also been observed. According to national research, among internet users aged 16–24, 18–20% access online gaming platforms, with some engaging in this activity several times per week. The easy accessibility of gadgets and the interactive nature of online games enhance addiction risk among youth. Such negative behaviors give young people and adults the impression of quick monetary rewards and easy winnings, but they often lead to financial losses. Since young people may not manage their finances effectively, they can fall into debt. The rapid-reward mechanism of gambling stimulates the dopamine system, promoting the



development of addiction. As a result, psychological problems such as stress, anxiety, depression, and mood swings increase among young people.

Prolonged and excessive online gambling can lead to behavioral disorders such as impulsivity, impatience, and diminished engagement in real-life goals. This, in turn, negatively affects academic performance and social relationships. When youth devote excessive time to online gambling, attention to studies or work decreases, homework and academic achievements decline. In some countries, online gambling may be illegal or take place on unlicensed platforms, exposing young users to legal risks and potentially leading to criminal behavior. The availability of online gambling, money-making applications, and “get-rich-quick” platforms via gadgets also poses a risk of financially hazardous behavior, including fraud, theft, or manipulative online transactions.

Today, gadgets serve not only as tools for learning, communication, and creative activity but also emerge as a significant social issue by becoming a source of psychological addiction among young people. Research shows that excessive gadget use negatively affects cognitive and emotional processes, social relationships, and physio-psychological well-being. The main mechanisms of this process include: generating rapid and rewarding satisfaction via dopamine release, escaping into virtual environments to cope with emotional stress, seeking social recognition, and neglecting real-life communication.

Psychological studies indicate that the development of gadget addiction results from the interaction of biological, cognitive, emotional, and social factors. Therefore, an effective mechanism to counter it should rely on an integrative approach, which includes the following stages:

Cognitive stage – Ensuring that the child becomes aware of their gadget usage habits, develops time-management skills, and practices conscious decision-making.

Neuropsychological stage – Replacing dopamine release from gadgets with healthy activities, such as physical exercise, creative projects, and small achievements to recalibrate the reward system.

Affective stage – Recognizing and managing emotions, coping with stress in a healthy way, and preventing the use of gadgets as “emotional drugs.”



Social stage – Complementing virtual social interactions with real-world experiences, such as family communication, group games, and team activities, to satisfy social needs.

It is also important that the mechanism is age-appropriate: for young children – focusing on sensory and creative development; for adolescents and youth – emphasizing responsibility, choice, and accountability. Research shows that prevention of gadget addiction is more effective than treatment. Active involvement of parents and educators, combined with psychological and pedagogical strategies, can significantly reduce the risk of addiction among children and adolescents.

Understanding gadget addiction from psychological and pedagogical perspectives, developing effective prevention mechanisms, and implementing them in family, educational, and social environments is a key task in ensuring the mental health and social adaptation of children in modern society. An integrative and systematic approach can not only prevent addiction but also promote conscious and responsible participation of youth in the digital world.

References

1. Шен С., и др. Эмоциональный интеллект и зависимость: теория и практика // Психологический журнал. – 2020. – Т. 41, № 3. – С. 45-58.
2. Alan R., Guzel H.S. Smartphone addiction and stress coping strategies: empirical study // Journal of Behavioral Addictions. 2019. – Vol. 8, № 2. – P. 212-225.
3. University of Pennsylvania Research Team. Social Media Usage and Psychological Well-being. – Philadelphia, 2020. –P.28.