



MECHANISMS FOR MITIGATING THE NEGATIVE EFFECTS OF GADGET USE AMONG ADOLESCENTS: INTERNATIONAL EXPERIENCE

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Abstract: This article examines the mechanisms for mitigating the negative effects of gadget use among adolescents based on the experience of foreign countries. The study analyzes the social, psychological, and educational risks associated with excessive use of digital devices. Special attention is paid to preventive strategies implemented in developed countries, including parental control systems, digital literacy programs, school-based regulations, and psychological support measures. The article also highlights the role of cooperation between educational institutions, families, and society in promoting the rational and safe use of gadgets among adolescents.

Keywords: Adolescents, gadget use, negative effects, prevention mechanisms, digital literacy, international experience.

In the modern world, it is almost impossible to encounter a person without a gadget or mobile phone. From infancy to old age, people of all ages use computers, smartphones, headphones, gaming consoles, or tablets. Gadgets are closely integrated into our lives, making it very difficult to imagine life without them.

A gadget is a small device designed to simplify and enhance life. The scope of gadget use is vast, spanning medicine, education, engineering, business, sports, and even textile production. Often, we do not consider the purpose for which we use gadgets. For example, for modern parents, gadgets act as a sort of babysitter for children. While children are engaged with gadgets, adults occupy themselves with their own tasks, often overlooking the fact that watching television or having “background TV” negatively affects a child’s development and skill formation, particularly during the critical period of 8 to 16 months, as confirmed by reputable research.



Those who use such devices most actively are adolescents and young people. They set the “trends” for modern smartphones and other technology. This phenomenon is observed worldwide. According to a study conducted by Common Sense Media, 38% of American children begin using gadgets before they even start speaking.

Unfortunately, this trend has spread to our country as well as across the globe. Today, even preschoolers can be seen holding the latest model of an iPhone or iPad. Excessive interest in devices and their prolonged, unmoderated use often develops into a real addiction. This condition is called “nomophobia” — the fear of being without a smartphone or other digital device. This term emerged in a 2010 YouGov study. Although the term is relatively new — only 13 years old — the problem has already been studied in detail. Addiction begins when a person lacks time for household or work responsibilities and can eventually lead to suicidal thoughts, aggression, panic attacks, and even intense stress when separated from a smartphone, even briefly.

This phenomenon was confirmed by my own research. In 2020 and 2023, I conducted surveys among students at the school I attend. In 2020, 100 students from grades 5–7 participated. The results were alarming: 46% of the children admitted to being addicted to their phones and reported feelings of sadness, irritability, anger, resentment, fear, and disappointment when separated from them. In 2023, another survey was conducted among 100 students from grades 5–11, and the results were even more concerning: 68% of respondents considered themselves addicted to gadgets. Thus, a negative trend is observed — the level of addiction increased by 22% in just 3.5 years.

The results of my survey align with official data from Kaspersky Lab, which indicate that more than 31% of surveyed adolescents spend over five hours per day on social media. Equal shares of respondents (23%) spend 3–5 hours and 1–3 hours on social media. Among children aged 11–14, almost 84% are unwilling to give up their phones. According to my 2020 survey, among children aged 11–14, 39% spent 1–3 hours on gadgets, 29% spent more than 5 hours, and 26% spent 3–5 hours. It should be noted that the recommended daily screen time for children aged 12–14 is 2–2.5 hours. More than half of adolescents exceed this limit, which is also confirmed by statistical data.

Excessive indulgence in gadgets is dangerous for several reasons. According to research by Rospotrebnadzor, prolonged use of gadgets leads to impaired blood circulation and vision deterioration. When using gadgets, only two fingers are



actively involved, whereas molding clay engages the entire palm and develops fine motor skills in children. In addition, the use of computers, smartphones, and other digital devices negatively affects the development of the musculoskeletal system. Prolonged sitting at a computer causes blood stagnation in the pelvic organs, and the posture adopted while using a PC or laptop is unnatural for the body. Extended use of gadgets results in distraction and dependency.

Irreversible changes also occur in a person's psychological state and perception of reality, and the nervous system is disrupted. Mass media frequently report on the alarming consequences of gadget addiction. For example, in December 2016, a schoolgirl in Moscow publicly beat her 13-year-old classmate to assert herself. She struck her peer for about 20 minutes in the schoolyard while bystanders cheered, and children recorded the incident on their phones. The fight was stopped by a passerby who called the police and emergency services. On January 19, 2018, a serious incident occurred at School No. 5 in Ulan-Ude: a ninth-grade student attacked fellow students and a teacher. Seven people, including the attacker, were injured. Before being apprehended, the student harmed himself and jumped out of a window. According to the teacher, the adolescent committed the attack due to poor grades: "His family did not support him — his stepfather said that these were the child's problems to handle on his own."

In foreign countries, especially in developed states, the level of gadget addiction is high, particularly among children and adolescents. The deep integration of digital technologies into daily life has shifted gadget use from a necessity to an addiction. In the United States, most adolescents spend several hours daily on smartphones, tablets, and computers. Studies show that a significant portion of teenagers spend more than 5–7 hours per day in front of screens. Many adolescents experience stress and anxiety when separated from their smartphones. The phenomenon of "nomophobia" (fear of being without a phone) is widespread.

South Korea is one of the countries with the highest levels of gadget addiction. Internet and smartphone dependence among adolescents is recognized as a national-level problem. The government has established special rehabilitation centers and "digital detox" camps. Gadget addiction is considered a psychological disorder.

In Japan, while gadget use is widespread, issues such as social withdrawal (hikikomori) among children and adolescents are associated with gadget



dependence. Prolonged screen exposure negatively affects mental health, and strict regulations on gadget use exist in schools.

The mechanisms for preventing the negative effects of gadget use in foreign countries have been extensively studied and their effectiveness confirmed in several developed states. For example, in South Korea, adolescents' internet and smartphone addiction is treated as a serious problem, with the government establishing rehabilitation centers and digital detox camps. At these centers, children and adolescents are engaged in programs designed to develop psychological support and social skills while limiting exposure to online games and gadgets. Moreover, their parents and families receive specialized training to promote responsible and informed gadget use.

In Japan, excessive gadget use has been linked to social withdrawal and mental health problems. Therefore, strict restrictions on smartphone use have been implemented in schools, children's daily screen time is monitored, and parents and teachers regularly oversee students' digital activity. Additionally, campaigns promoting digital literacy and responsible use have been widely introduced.

In the United States, gadget and social media addiction is considered a serious socio-psychological issue. Prolonged use of smartphones and tablets among adolescents leads to stress, anxiety, and concentration problems. As a result, many schools have implemented screen-time limits, provided guides for parents, offered psychological counseling, and introduced lessons on digital culture. Moreover, in some U.S. states, mobile applications and platforms are actively used to monitor and regulate children's online activity.

In European countries, mechanisms to ensure responsible gadget use are also widely applied. For instance, in Germany, Finland, and France, smartphone and tablet use is strictly restricted in schools, and students' digital activity is monitored in connection with the educational process. Interactive programs and educational modules aimed at increasing digital literacy among children have also been introduced. These mechanisms not only prevent addiction but also help cultivate adolescents as responsible and conscious digital users.

In China, gadget addiction is regarded as a social risk, and the government has imposed time limits on online games and digital device use for children. Parents and schools monitor children's activity and provide psychological guidance when necessary, reducing the risk of addiction.

Thus, the experience of foreign countries demonstrates several common principles in effectively developing and implementing mechanisms to reduce



gadget addiction: collaboration between schools and families, promotion of digital literacy, psychological support, time restrictions, and monitoring systems. These practices can serve as effective models for other countries as well.

The experience of foreign countries shows that developing and implementing mechanisms to prevent gadget addiction plays a crucial role. Research indicates that smartphone, tablet, and other digital device addiction among adolescents leads to social, psychological, and health-related problems. Effective mechanisms include school-family collaboration, increasing digital literacy, providing psychological support, limiting device usage time, and implementing monitoring systems. The experiences of South Korea, Japan, the United States, Europe, and China demonstrate that these approaches help educate children as responsible and conscious digital users. Moreover, these mechanisms can be applied as practical models in other countries.

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