



The Impact Of Excessive Use Of Social Media On Mental Health Among Youth In Uzbekistan

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Abstract; This article analyzes the impact of excessive use of social networks on mental health among Uzbek youth. The article provides information on the impact of social networks on the reward system of the human brain, the effect of dopamine release on mental state, and the increase in conditions such as stress, anxiety, and depression. The study highlights the main psychological problems observed among Uzbek youth - decreased motivation, inability to concentrate, and low self-esteem. The article also analyzes the medical and psychological aspects of these conditions and provides effective recommendations for maintaining mental health using social networks.

Keywords: social networks, mental health, youth psychology, dopamine, stress, depression, Uzbek youth.

Introduction; In modern times, digital technologies and social networks have become an integral part of human life. Today, most young people in Uzbekistan spend several hours every day on platforms such as Telegram, Instagram, TikTok. Although social networks facilitate the process of exchanging information, communicating with friends and learning, their excessive use has a significant impact on the human psyche.

Main part: Psychological and biological impact of social networks

Social networks have become an integral part of modern society. According to the Ministry of Digital Technologies of the Republic of Uzbekistan (2024), more than 80 percent of active Internet users in the country use at least one social network every day. The most widely used platforms are Telegram, Instagram and TikTok, and the average time of their use among young people is 3–5 hours. This indicator has a significant impact not only on communication, but also on mental health.

From a psychological point of view, social networks form a state of “virtual identity” in a person. That is, a person begins to evaluate himself not through his real-life image, but through his online image - photos, likes and comments. As a result, a person’s sense of self (self-identity) gradually weakens. During this process, dopamine production in the brain becomes uneven. Every time a new message or like arrives, the reward system is activated, but over time this effect decreases. Therefore, the user is forced to log in to the network more often to experience this “pleasant feeling” again. From a neurobiological point of view, this situation creates a permanent dopamine imbalance (Volkow, 2021).

Prolonged such stimulation increases the level of cortisol (stress hormone), which can disrupt the functioning of the cardiovascular system, reduce immunity and worsen sleep quality (WHO, 2023). As a result, a person feels irritable, tired and emotionally unstable. This condition is especially observed among schoolchildren and students aged 16–25.

Linkage to sleep and attention disorders; Sleep problems are one of the most common consequences of excessive dependence on social networks. A study published in the journal Sleep Health (2022) found that 45% of participants who used their phones after 10:00 PM



complained of insomnia. Blue light emitted from screens reduces the production of the hormone melatonin, which disrupts the biological clock (circadian rhythm).

People with low melatonin levels have a longer time to fall asleep, sleep phases (NREM/REM) are disrupted, and the body cannot fully recover. This is also observed among young people in Uzbekistan - in a survey of 350 students in Tashkent (TMA, 2024), 60% of participants reported that they “have the habit of falling asleep looking at their phones at night.” This group also had a lower level of morning concentration (by an average of 25%), slower reaction times, and more emotional instability.

Disruption of sleep quality significantly reduces attention, memory, and emotional stability. This situation also affects the learning process and reduces academic performance. Several international studies (Carter et al., 2023) show that every additional 1 hour of screen time causes an average loss of 7–9 minutes of sleep.

Depression and social comparison syndrome; As a result of constantly observing content on social networks that depict an “ideal” lifestyle, social comparison syndrome develops in users. According to Festinger’s social comparison theory (1954), a person determines his or her self-worth by comparing himself or herself with those around him or her. However, since the life reflected in the online environment is idealized, the user feels “inadequate”.

If this situation continues for a long time, depressive symptoms appear: low self-esteem, social withdrawal, loss of motivation. Observations conducted in Uzbekistan show that depressive states are 30–35% more common among students who use social networks for more than 4 hours a day (UNICEF, 2023).

There is also a tendency to evaluate oneself on networks through the number of “likes” and “comments”. This psychologically ties the “reward system” to external factors, as a result of which a person cannot independently evaluate himself. This leads to virtual self-syndrome and emotional burnout.

The connection between mental health and physical condition; Mental stress leaves its mark not only on the psychological level, but also on physiological systems. When the cortisol hormone is high, the heart rate increases, blood pressure rises, and the gastrointestinal system is disrupted. If this condition is prolonged, the balance of the autonomic nervous system is disrupted, and a person lives in a state of constant fatigue and anxiety. It has also been found that the level of physical activity is significantly lower among people who are overly dependent on social networks. According to the results of a 2024 survey, 70% of young people who use their phones for more than 4 hours a day do not engage in regular sports. This further weakens overall mental health.

The need for digital hygiene and psychoprophylactic measures; It is important to form a culture of digital hygiene to maintain mental health. Psychologists (Kuss & Griffiths, 2021) recommend the following preventive measures:

1. Control screen time. Studies (Pew Research Center, 2023) show that users who spend more than 3 hours a day in front of a screen are more likely to experience fatigue, distraction, and irritability. Therefore, the daily time spent on social networks for young people should not exceed 2–3 hours. It is also useful to designate at least 1 day a week as a “digital detox” day — that is, to completely stay away from all devices.
2. Technological rest before bed (digital sunset). Using a phone or tablet at night reduces melatonin production. According to research by the Harvard Sleep Institute (2022), sleep quality improved by 60% in users who made it a habit to turn off their phones 1 hour before bedtime.
3. Increase real-life communication and physical activity. Digital communication weakens a person’s empathy and social communication skills. Therefore, playing sports at least 3 times a week, holding live meetings with friends, or spending time in nature restores mental balance.



A 2023 study by the Institute of Psychology of Uzbekistan found that social anxiety levels were 40% lower among students who regularly played sports.

4. Manage and use notifications wisely. Notifications coming to your phone every 5 minutes are distracting and create a “distracting conditioned reflex” in the brain. Therefore, psychologists (Lin & Chou, 2022) recommend turning off automatic notifications on social networks and checking messages at certain times of the day.

5. Psychoprophylactic exercises that reduce stress. Breathing exercises, meditation, and mindfulness practices naturally reduce cortisol levels. According to the American Psychotherapy Association (2023), 10 minutes of daily meditation increases a person’s emotional stability by 35%.

In the conditions of Uzbekistan, initiatives such as integrating these measures into the education system and holding “digital health weeks” at universities strengthen digital balance in the minds of young people.

Conclusion

The issue of excessive use of social networks among Uzbek youth is recognized as one of the most pressing psychological and medical problems in modern times. Studies show that excessive time spent on social networks directly changes not only emotional stability, but also the physiological state. As a result of such a habit, an imbalance of the dopamine system, increased levels of stress hormones, poor sleep quality, distraction, and depressive states are observed.

Comparing oneself with others in the digital environment, the syndrome of "virtual identification" and "perfect life" reduce the self-esteem of young people. This, in turn, increases self-confidence, social anxiety, and mental fatigue. From a medical point of view, such stress leads to cardiovascular diseases, hormonal imbalances, and a weakened immune system. Therefore, it is important to develop a culture of digital hygiene among young people, maintain a balance between online and real life, and periodically conduct a "digital detox." Parents, educators, and medical professionals should actively participate in this process and teach young people to live in a healthy information environment. Only then will it be possible to effectively use the positive aspects of social networks and reduce their negative psychological consequences.

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