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THE DIGITAL WORLD AND CYBERPSYCHOLOGY: THE PSYCHOLOGICAL
TRANSFORMATION OF THE INDIVIDUAL IN THE VIRTUAL
ENVIRONMENT AND ITS SCIENTIFIC AND THEORETICAL ANALYSIS

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Abstract: *This scientific article systematically analyzes the problems of cyberpsychology, a new psychological phenomenon taking shape under the conditions of modern information and communication technologies. Cyberpsychology is considered a modern field of science that studies the interaction between humans and digital technologies—in particular, an individual's behavior, emotional state, and social self-awareness in the virtual environment. Drawing on foreign and local research, the article examines the concept of “digital natives,” the “online disinhibition effect” in the online environment, the phenomenon of Internet addiction, and the influence of social networks on an individual's “self-concept.” In addition, practical recommendations are developed for preventing problems observed among young people, such as cyberbullying, FOMO syndrome, and digital addiction.*

Keywords: *cyberpsychology, digital world, virtual environment, Internet addiction, online disinhibition effect, digital natives, digital immigrants, self-concept, cyberbullying, FOMO syndrome, clip thinking, media literacy, digital addiction, social networks, information society.*

INTRODUCTION:

The twenty-first century is an era of rapid development of information technologies, a process that is fundamentally changing nearly all spheres of human life, including the inner mental world. The Internet, smartphones, and social networks are no longer merely technical tools; they have become a socio-psychological environment that directly influences the modern person's way of thinking, style of communication, and even the process of self-awareness. It is for this very reason that, at the end of the twentieth and the beginning of the twenty-first century, a new field of psychology—cyberpsychology—began to take shape.

Cyberpsychology studies the cognitive, emotional, and behavioral characteristics that arise in the course of a person's interaction with computers, the Internet, and other digital devices. Because modern students and young people spend a large part of the day in virtual space, their personal development, value system, and social adaptation are now shaped not only by the family and the educational environment but also by the digital environment. From this perspective, an in-depth scientific study of the problems of cyberpsychology and an objective analysis of its positive and negative aspects are of pressing scientific and practical importance.

Date: 29th September-2026

The aim of this article is to provide a systematic account of the influence of the digital world on the human psyche on the basis of contemporary foreign and local psychological research, and to develop practical recommendations for ensuring young people's psychological safety in the virtual environment.

MAIN PART

1. The Subject and Formation History of Cyberpsychology

The term “cyberpsychology” was introduced into scientific usage in the late 1990s by the American psychologist John Suler. His work *The Psychology of Cyberspace* laid the theoretical foundation of this field. The subject of cyberpsychology is the complex psychological interaction between humans and digital technologies (the Internet, social networks, video games, and artificial intelligence systems). Today, cyberpsychology covers the following main areas:

- Psychology of virtual communication;
- Online behavior and personal identification;
- Digital addictions (Internet, social network, and gaming addiction);
- Cybersecurity and the psychological consequences of online violence.

2. The Concept of Digital Natives and Digital Immigrants

In his well-known article published in 2001, the American researcher Marc Prensky divides modern society into two large groups: “digital natives”—the generation born and raised with technology—and “digital immigrants”—the generation that adopted technology later, at a conscious age. Prensky notes that digital natives perceive information in a fundamentally different way—rapidly and visually—which produces significant differences in their cognitive processes.

This approach is also reflected in Uzbek psychology. In particular, M. Yoqubxo'jayeva's study notes that, because today's Generation Z and Generation Alpha were born and raised in the digital environment, they show a high capacity for rapidly distributing attention and quickly perceiving visual information, but at the same time exhibit features such as a weakening of the capacity for deep analytical and systematic thinking.

3. The Psychological Structure of the Virtual Personality

The classification of the cognitive, emotional-value, and volitional components in the structure of personality put forward by Academician E. G'oziyev can be reinterpreted in the context of the digital environment:

- **The cognitive component** shifts, under digital conditions, into the form of “clip thinking”: knowledge is perceived not as an integrated system but as a stream of short, fragmentary pieces of information;
- **The emotional-value component** is formed in a manner dependent on external evaluation through “likes” and comments on social networks;
- **The volitional component** often weakens, because the digital environment offers quick and easy gratification (instant gratification), which reduces the perseverance needed to achieve long-term goals.

4. The Online Disinhibition Effect



Date: 29th September-2026

In an article published in 2004 in the journal CyberPsychology and Behavior, John Suler developed the theory of the “online disinhibition effect.” According to this theory, in the Internet environment people behave much more freely than in real life, and sometimes exhibit excessively open behavior. Suler explains this state through six factors:

- Dissociative anonymity—the user’s ability to conceal his or her identity;
- Invisibility—the interlocutor’s facial expressions and body movements are not visible;
- Asynchronicity—a response does not have to be given immediately;
- Solipsistic introjection—perceiving text-based communication as one’s own inner voice;
- Dissociative imagination—perceiving virtual space as a “game world” separated from real life;
- Minimization of authority—the loss of force, on the Internet, of the social status and authority held in real life.

Suler divides this effect into two types: benign disinhibition—a person’s more open sharing of personal experiences—and toxic disinhibition—behavior manifested in the form of insults, cyber harassment, and aggression.

5. The Problem of Internet Addiction

In her 1998 study, the American psychologist Kimberly Young was among the first to scientifically substantiate the concept of “Internet addiction” as a clinical problem. Young describes Internet addiction as an impulse-control disorder similar to pathological gambling. In her view, excessive Internet use is characterized by the following symptoms: anxiety and irritability when away from the Internet, neglect of family and academic obligations, and concealing or understating the time spent online.

Studies conducted in Uzbekistan likewise confirm a similar tendency: among a certain share of Internet users in our country, particularly among adolescents and young people, cases of excessive absorption in the virtual environment are being recorded. This may negatively affect the quality of learning activity, family relationships, and overall psychological well-being.

6. The “Alone Together” Paradox and Social Networks

The American scholar Sherry Turkle, in her book *Alone Together*, describes the paradoxical condition of modern humans: although technology “connects” us with thousands of people at any moment, in reality we are moving further and further away from deep and sincere human relationships. Turkle calls this condition a culture of “constant connectivity” (always-on), in which a person can never be fully “offline,” which gives rise to constant mental strain and inner anxiety.

This process has a significant effect on the formation of the “self-concept,” especially in adolescence. On social networks, individuals often create an “ideal” image of themselves, which can cause a mismatch with the “real self” in real life and, as a result, lead to dissatisfaction with oneself and emotional instability.



Date: 29th September-2026

7. Threats to Young People's Psychological Safety: Cyberbullying, FOMO, and Digital Addiction

M. Yoqubxo'jayeva's study, published in 2026 in the journal Science and Education, systematically classifies the main psychological risks that adolescents face in the digital environment:

- **Cyberbullying** —insults, harassment, and stalking carried out via the Internet, causing the victim deep emotional trauma and social isolation;
- **FOMO syndrome** (Fear of Missing Out)—the fear of being “left out” of events in other people's lives, which fosters the habit of ceaselessly checking social networks;
- **Digital addiction** —the inability to tolerate even a temporary separation from gadgets;
- **Attention impairment** —the inability to concentrate on one thing for a long time because of continuous notifications.

In the study, the author scientifically substantiates the need to build a multilayered system of psychological protection against these threats—at the personal, family, school, and societal levels—and proposes practical methods for teaching this topic in pedagogical psychology classes.

8. The Role of the Family and the Education System in the Digital Age

As G.B. Shoumarov notes, the family plays a decisive role in a child's initial socialization and the formation of his or her worldview. However, in the digital age, a certain part of this function is being taken over by the uncontrolled virtual environment. As V.M. Karimova notes, for an individual's healthy adaptation to the social environment, it is important to increase media literacy in the family and in educational institutions and to instill in children the skills of critically analyzing information.

CONCLUSION AND RECOMMENDATIONS

The analyses conducted show that the digital world is fundamentally changing the psychological profile of modern humans. This process is inseparably linked both with enormous opportunities (rapid access to knowledge, an expanded circle of communication, new platforms for self-expression) and with serious risks (Internet addiction, cyberbullying, clip thinking, emotional instability).

The following practical recommendations can be proposed for effectively addressing the problems of cyberpsychology:

1. **Fostering a culture of digital hygiene:** it is necessary to teach young people to control their screen time and to instill practices of “digital rest” (digital detox).
2. **Increasing media literacy:** courses that develop the skills of critically evaluating information and distinguishing reliable from unreliable sources should be included in educational programs.
3. **Psychological monitoring and counseling services:** a system should be established in educational institutions aimed at identifying young students' level of Internet addiction and, where necessary, providing psychological assistance.



Date: 29th September-2026

4. **Strengthening family supervision and communication:** parents should communicate openly with their children about the digital environment and cultivate a culture of conscious use rather than prohibition.

In conclusion, cyberpsychology is one of the most pressing and promising fields of twenty-first-century psychological science, and its in-depth study is important for the advancement of society not only scientifically but also practically.

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