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## PSYCHOLOGICAL FEATURES OF INTERNET ADDICTION IN ADOLESCENT CHILDREN

**Анотація: Мета роботи.** Наукове дослідження присвячене проблемі Інтернет-залежності підлітків від гаджетів. **Методологія.** На різних етапах виконання завдань використано такі методи та технології, як: інтерактивна бесіда, анкетування («На визначення Інтернет-залежності»), тестування («Оцінка розвитку вольових якостей», «Дослідження вольової саморегуляції», «Діагностика мотивації до успіху»). **Наукова новизна.** Встановлено, що Інтернет-залежність може розвивати певні види поведінки дітей підліткового віку, серед яких основними є: пристрасть до віртуального спілкування та віртуальних знайомств; ігнорування подій навколо себе; погана адаптація до реального життя; наявність певних фізіологічних ознак (загальна втома, небажання проявляти активність, кволість, агресивність тощо), інформаційне перенавантаження. **Висновки.** Досліджено, що більшість сучасних батьків дозволяють своїм дітям користуватися гаджетами без обмеження в часі, обґрунтовуючи це тим, що таким чином діти краще розвиваються. У той же час батьки погоджувалися, що вкрай небезпечною стає проблема підміни індивідуально-особистісного реального життя віртуальною реальністю. Доведено, що дитина, яка багато часу проводить у віртуальному інформаційному просторі, гірше взаємодіє з навколишнім світом, «випадає» з нього, починає відчувати складнощі у взаєминах із соціальним оточенням. Виявлено схильність Інтернет-залежних підлітків до порушення суспільних норм і правил поведінки. Виділено зв'язок між Інтернет-адикцією та потягом до брехні. Встановлено зворотну кореляцію між критерієм комп'ютерної залежності та показником сили волі, що характерно для всіх форм залежної поведінки. Акцентовано на зворотний взаємозв'язок між стадією комп'ютерної залежності та показником мотивації: мотиви соціальної значущості. Встановлено негативний зв'язок між стадіями сформованості комп'ютерної залежності та самооцінкою за показниками «зовнішність» і «впевненість у собі». Вказано на зниження мотивації при формуванні Інтернет-залежності внаслідок задоволення потреби у самореалізації та самовираженні у віртуальному світі. Описано соціальну незрілість, інфантильність гаджет-адиктів. Встановлено виникнення порушень в емоційно-вольовій сфері, ослаблення вольових установок, що впливає здатність самостійно приймати рішення і призводить до втрати контролю за діями.

**Ключові слова:** віртуальний інформаційний простір, онлайн-ресурси, Інтернет-залежність, віртуалізація освітнього середовища, підлітки, психолого-педагогічна профілактика.

**Abstract: Purpose of the study.** The scientific research is devoted to the problem of adolescents' Internet addiction to gadgets. **Methodology.** At various stages of the study, the following methods and technologies were used: interactive conversation, questionnaires ("To determine Internet addiction"), and testing ("Assessment of the development of volitional qualities," "Study of volitional

self-regulation,” “Diagnosis of achievement motivation”). **Scientific novelty.** It was found that Internet addiction may foster certain types of behavior in adolescents, the main ones being: a passion for virtual communication and online acquaintances; ignoring events around them; poor adaptation to real life; presence of certain physiological signs (general fatigue, reluctance to be active, weakness, aggressiveness, etc.), and informational overload. **Conclusions.** The study found that most modern parents allow their children to use gadgets without time limits, justifying this by the belief that it enhances development. At the same time, parents acknowledged the dangerous substitution of real personal life with virtual reality. It has been proven that children who spend excessive time in virtual information environments interact poorly with the real world, “drop out” of it, and experience social communication difficulties. A tendency among Internet-addicted adolescents to violate social norms and rules was identified, as well as a link between Internet addiction and the propensity for lying. A negative correlation was established between the level of computer addiction and the strength of will, which is typical for all forms of addictive behavior. A reverse relationship was also noted between the stage of computer addiction and the motivation level related to social significance. A negative correlation was found between the stages of computer addiction development and self-esteem in the areas of “appearance” and “self-confidence.” Decreased motivation is noted due to satisfying self-realization and self-expression needs in the virtual world. The article describes the social immaturity and infantilism of gadget addicts and highlights emotional-volitional sphere disorders and weakened volitional attitudes, which impair decision-making abilities and lead to a loss of behavioral control.

**Keywords:** virtual information space, online resources, Internet addiction, virtualization of the educational environment, adolescents, psychological-pedagogical prevention.

**Introduction.** Modern Ukrainian society is marked by crises in many areas of public life, resulting in a sharp shift in habitual behavioral stereotypes. The destabilization of the financial situation and the country’s unfavorable conditions contribute to a widespread sense of insecurity among the population. Dissatisfaction with real life is one of the pressing issues of contemporary society and often takes on a pathological character. Adolescents are especially vulnerable in this context due to their psychological characteristics and developmental stage, which place them in a state of crisis. One of the forms of escape from an unbearable reality is the virtual information space, which particularly affects teenagers. This age group seeks opportunities to express themselves, assume a certain social role, and achieve self-determination needs that are most easily fulfilled through online resources.

**Theoretical Background of the Study.** Significant contributions to the study of Internet addiction have been made by researchers such as N. Petryk and O. Fedoriv (2023), who examined the impact of modern gadgets on the health of children and adolescents; O. Litvinova (2021), who conducted an empirical study on the influence of gadgets on adolescents’ mental state; L. Levytska (2022), who analyzed the psychological characteristics of adolescent Internet addiction; O. Kuleshova and L. Mikheeva (2022), who studied Internet addiction in youth and outlined ways to overcome it; and A. Kariyev, F. Orazbayeva, A. Zhunusbekova, and R. Kenzhetaaieva (2025), who identified types of Internet addiction among Kazakhstani students in the context of the virtualization of the educational environment. Notably, V. Bedan (2022), O. Petrynko, and K. Teleshun (2022) proposed psychoprophylactic strategies for addressing gadget addiction among adolescents and adults.

Individual personality traits that may act as determinants of gadget addiction, as identified by M. Khovrych (2021), S. Cherneta and Zabolotskyi (2023), I. Yuskiv (2024), and I. Fedorchenko (2025), include: weak volitional control, high levels of neuroticism, heightened emotionality, external locus of control, inadequate self-perception, unrealistically low or high self-esteem, dissatisfaction with oneself, shyness and introversion, a desire for independence, social phobias, feelings of loneliness

and a lack of mutual understanding from others, awareness of low social status, a need for attention, a tendency toward fantasy and gambling.

Despite the significant number of publications, the issue of Internet addiction among adolescents requires further study. The relevance of the problem and the importance of methodological and practical development led to the choice of this research topic in order to highlight previously unresolved aspects of the broader issue.

**Purpose of the Article.** To examine the key psychological characteristics of adolescent children with Internet addiction.

**Empirical Part.** At various stages of the empirical study, the following methods and technologies were used: interactive conversation, questionnaires (“To determine Internet addiction”), and testing (“Assessment of the development of volitional qualities,” “Study of volitional self-regulation,” “Diagnosis of achievement motivation”). During the conversation phase, parents of adolescents were asked to complete the tasks and answer questions regarding their children’s Internet use. When asked, “How do you feel about your child using modern gadgets, and why?”, 60% of parents responded positively. They believed that interacting with gadgets enriched and diversified children’s activities and helped them learn reading, writing, and math. Parents also noted that modern society dictates its own rules, and that using new technologies is a necessity for the younger generation. Meanwhile, 40% of parents responded negatively, explaining that adolescence is too early for using mobile phones and tablets.

When asked, “How much time do you allow your child to spend using gadgets?”, 35% of parents said their child played educational games on a tablet or smartphone for one hour per day. 30% did not monitor how much time their child spent on games. 15% allowed up to 30 minutes per day of phone use, and 20% only allowed gadget use for school-related tasks. Thus, most modern parents permit their children to use gadgets without time limits, believing it contributes to their development.

At the same time, parents agreed that the substitution of a child’s real, personal life with virtual reality was becoming extremely dangerous. Children who spend a lot of time on electronic devices interact less effectively with the world around them, “drop out” of reality, and begin to struggle in social relationships.

As part of the study, participants were asked to spend an entire day—eight hours—without access to the virtual information space, online resources, the Internet, or any digital devices (smartphones, computers, televisions, etc.) and to document their activities and feelings throughout the experience.

It was found that:

- 75% of the adolescents were unable to last eight hours without the Internet. The main sensations they described included increased irritability, emotional instability, a tendency toward depression, and low stress tolerance. This group also exhibited negative reactions when others tried to divert their attention away from the Internet.
- 25% of adolescents managed to stay offline for eight hours. While they described similar feelings to the 75% who failed the task, the intensity of these feelings was much lower. This group showed the ability to manage their time effectively and preferred spending their free time meeting with friends. Their use of digital resources did not interfere with social interaction. Still, 47.6% of these adolescents reported some issues related to excessive Internet use. They typically spent more than three hours online per day and often checked their email before engaging in more important tasks.

Based on these findings, it was determined that two out of three participants were unable to stay away from gadgets for eight hours, indicating they were Internet-dependent.

Based on the results of the questionnaire administered to adolescents regarding their level of Internet addiction, the following distribution was identified:

- 35.4% of respondents were classified as regular Internet users who were able to control the amount of time spent online (low level of addiction);
- 25.8% of respondents exhibited minor problems associated with excessive Internet use (moderate level of addiction);
- 31.4% scored between 80–100 points, indicating the presence of Internet addiction (high level of addiction), requiring professional intervention.

Thus, the results revealed that 42.8% of respondents demonstrated a low level of Internet addiction. However, the high level of addiction—31.4%—represents the “at-risk group” that requires corresponding corrective and preventive psychological-pedagogical measures.

After speaking with the adolescents, it was determined that most of them cited online communication with friends as the primary reason for using the Internet. A smaller portion used the Internet for educational purposes (reading books, articles), and, interestingly, none of the respondents reported going online without a specific purpose. Most students accessed the Internet not via computers but via personal smartphones or tablets.

The students also completed a situational questionnaire entitled “Your Leisure Time”, where they were asked to choose how they most frequently spent their free time (e.g., reading books, walking with friends, browsing the Internet without a specific purpose, helping at home, listening to music, doing live streams, etc.).

However, even listening to music, as a form of leisure, was often connected to the Internet (e.g., watching movies or listening to music online). Only 20% of children reported attending extracurricular activities or hobby groups. It is encouraging that 31.3% preferred face-to-face communication and walking with friends.

These results suggest that “Internet-based leisure” is increasingly displacing traditional forms of recreation such as socializing with friends, reading books, and participating in clubs or sports. Our findings indicate that the ages of 12 to 14 are a critical period of “self-discovery”, during which children are particularly vulnerable to becoming trapped in Internet dependence.

In general, the respondents were not selective about how they spent their leisure time, often choosing the most accessible options. As a result, adolescent schoolchildren tend to seek fulfillment of their needs online. They use Internet time indiscriminately and without control, most often staying online on social networks or playing online games. Excessive use of digital resources leads to the formation of a stable dependence on the virtual environment. Further clarifying surveys revealed that among the group of Internet-dependent adolescents, the most common indicators of loss of control over their behavior included: inability to quit a game without outside help; high tolerance — spending 40 or more hours per week in the virtual space. This group also exhibited signs of social dysfunction: irritability and anger when others inquired about what they were doing online; preference for virtual communication over real-life interaction; and complaints from others about the respondent’s prolonged presence in the virtual world.

**Results and Their Discussion.** The data obtained indicate a growing significance of the virtual space in adolescents’ communication systems and, as a result, a decline in the importance of live interpersonal interaction. This contributes to emotional changes and a loss of motivation. The intangible nature of the virtual environment leads to a sense of dissatisfaction, as well as decreased internal activity and motivation.

A particularly notable finding is the pronounced need for intense sensations among addicted individuals ( $p < 0.05$ ). Combined with external passivity, this need turns into a desire for thrills in the virtual world—where fulfilling such needs requires no real effort. All that is needed for excitement in online reality is modern equipment and a subscription. Thus, the combination of thrill-seeking and passivity creates a risk of Internet addiction.

Adolescents suffering from Internet addiction show a tendency to violate social norms and rules of behavior. This urge is easier to express in online communication, where there is less likelihood of being held accountable for one's words or actions. The Internet environment fosters a sense of permissiveness and impunity, encouraging delinquent behavior. Attempts at unlawful actions made in virtual reality often lead to similar actions in the real world. On the Internet, insults, profanity, defamation, and copyright violations are commonplace, and the information space often becomes a training ground for unlawful behavior. Despite the vast amount of useful content and diversity of opinions online, traces of moral decay are more visible than efforts to restore ethical norms and often go unpunished.

A significant correlation between Internet addiction and a tendency to lie was found ( $p < 0.01$ ). During online communication, it is easier to hide the truth or provide false information than in face-to-face conversations. Online dialogue offers different levels of user accessibility—from real-time text chats to delayed forum responses, and includes audio and video communication. The lower the level of user accessibility, the harder it is to detect lies. Over time, individuals develop a habit of concealing the amount of time spent online and the nature of their activity. This information is most often hidden from family members or, if relevant, from supervisors when the work involves computers and Internet use.

A negative correlation was identified between the level of computer dependence and the strength of will ( $R_s = -0.33$ ,  $p \leq 0.01$ ), which is characteristic of all forms of addictive behavior. Additionally, an inverse relationship was found between the stage of computer addiction and motivational indicators—specifically, socially significant motives ( $R_s = -0.23$ ,  $p \leq 0.05$ ). The reduction in willpower and motivation among gadget users indicates structural changes in personality processes as computer addiction develops, leading to a shift in their activity orientation.

According to the correlation analysis, a negative relationship was observed between the stages of computer addiction formation and self-esteem regarding appearance and self-confidence ( $p = 0.01$ ). Dissatisfaction with one's appearance is common among adolescents and may take dangerous forms such as dysmorphophobia or anorexia. Real or imagined flaws reduce an adolescent's self-esteem and confidence, which can negatively affect their social status and relationships with peers. In this context, Internet communication becomes a means of compensating for failures in real interpersonal relationships.

**Conclusions.** The analysis of theoretical and empirical research results allows us to draw the following conclusions:

1. Adolescents are currently the most vulnerable group to the development of Internet addiction, as their psyche is still in the process of formation.
2. Specific psychological traits have been identified in adolescents at various stages of Internet addiction. These adolescents often ignore or fail to notice events around them, are poorly adapted to real life, and exhibit certain physiological symptoms (general fatigue, reluctance to be active, weakness, aggressiveness, etc.). Their self-esteem scores for appearance and confidence are low, and they tend to prefer a dependent style of communication.
3. A decline in motivation is observed as Internet addiction forms, due to the satisfaction of self-realization and self-expression needs in the virtual world. A tendency toward social immaturity and infantilism is also noted among gadget addicts.
4. Internet-addicted adolescents experience emotional-volitional disruptions and a weakening of volitional attitudes, which negatively affects their ability to make independent decisions and leads to a loss of behavioral control.

**Prospects for Further Research.** The next steps in assessing Internet addiction in adolescents will involve the psychodiagnostic study of this process using psychometric tools developed by: M.

Orzack and D. Orzack (1999), S. Yang and J. Chieh-Ju (2007), S. Zhu, N. Liu, W. Zhang, Y. Sun, H. Song, K. Tang, and X. Zhang (2024), to identify the psychological and physical symptoms of Internet addiction.

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