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## TRANSFORMATION OF INTERNET ADDICTION ON THE BACKGROUND OF SOCIAL ISOLATION AND SECURITY CRISIS

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### ТРАНСФОРМАЦІЯ ІНТЕРНЕТ-ЗАЛЕЖНОСТІ НА ТЛІ СОЦІАЛЬНОЇ ІЗОЛЯЦІЇ ТА КРИЗИ БЕЗПЕКИ

**Key words:** Internet, addiction, Internet addiction, compulsions, behavior violations

**Aim** — based on the analysis of the characteristics of Internet addiction, identify its peculiarities on the background of social isolation and security crisis.

**Materials and methods.** The study was conducted on a contingent of 120 respondents (students of higher education) aged 18 to 23, who have experience of permanent stay in conditions of social isolation in Ukraine (2020—2023), with established Internet-addiction according to Internet Addiction Test (K. Young, 1998) and Internet Use Disorders Identification Test (Linskiy I. V., Minko A. I., Artemchuk A. P. et al., 2009). The distribution of the contingent by gender was symmetrical. The research method is a structured psychological interview.

**Study results.** In our analysis, it becomes evident that the excessive utilization of the Internet does not merely align with a series of non-chemical addictions; rather, it operates as a facilitative mechanism for a broad range of behavioral and psychological transgressions, which arise as an interconnected functional entity. Within this multifaceted spectrum, we discern two discrete categories: the formation of compulsive behavior patterns and the justification of pre-existing behavior abnormalities.

Compulsive behavior patterns include compulsive gaming and gambling behavior, compulsive social media use, compulsive pornography consumption, news-related compulsive behavior. Formation of compulsive behavior patterns associated with problematic excessive use of Internet have such mechanisms: openness and accessibility of hyper-stimulating content, reinforcement and rewards with feedback loops, social comparison, escapism and avoidance, information overload. Justification of pre-existing behavior abnormalities associated with problematic excessive use of Internet include reinforcement of attention-seeking and provocative behaviors; reinforcement of rude and violent behaviors, reinforcement of self-harm and destructive behaviors, progressive reinforcement of deviant sexuality, reinforcement of cult-like behavior. Noticed underlying mechanisms: echo chambers, disinhibition due to anonymity, group polarization and competitive dynamics.

**Conclusions.** Behavioral and psychological disorders linked to problematic excessive Internet use do not fit neatly into a singular pathological disorder classification within current assessment frameworks that may trivialize Internet addiction as a mere form of non-chemical addiction. Instead, in the contemporary context, it is imperative to examine and thoroughly evaluate the intricate array of behavioral and psychological disorders that manifest through Internet usage.

**Ключові слова:** Інтернет, залежність, Інтернет-залежність, компульсії, порушення поведінки

**Мета** — на ґрунті аналізу характеристик Інтернет-залежності виявити її особливості на тлі соціальної ізоляції та кризи безпеки в Україні.

Дослідження проводили на контингенті 120 осіб (здобувачі вищої освіти) віком від 18 до 23 років, які мають досвід постійного перебування в умовах соціальної ізоляції в Україні (2020—2023 рр.), із встановленою Інтернет-залежністю відповідно до Тесту на Інтернет-залежність (К. Янг, 1998) та Тесту ідентифікації розладів використання Інтернету (Лінський І. В., Мінко А. І., Артемчук А. П. та ін., 2009). Розподіл контингенту за статтю був симетричним. Метод дослідження — структуроване психологічне інтерв'ю.

У нашому аналізі стає очевидним, що надмірне використання Інтернету — не просто пов'язане з рядом нехімічних залежностей; фактично воно є механізмом реалізації широкого діапазону поведінкових і психологічних порушень, які виникають як взаємопов'язана функціональна сутність. У цьому спектрі ми розрізняємо дві окремі категорії: формування компульсивних патернів поведінки та виправдання наявних аномалій поведінки.

Патерни компульсивної поведінки включають: компульсивну поведінку в контексті онлайн-ігор; компульсивне використання соціальних мереж; компульсивне споживання порнографії; компульсивну поведінку, пов'язану з новинами. Формування компульсивних моделей поведінки, пов'язаних із проблемним використанням Інтернету, має такі механізми: відкритість та доступність контенту, який вчиняє гіперстимуляцію підкріplення за допомогою циклів зворотного зв'язку, соціальне порівняння, ескапізм та уникнення, перевантаження інформацією. Виправдання наявних відхилень у поведінці, пов'язаних із проблемним використанням Інтернету, охоплює посилення прагнення до уваги та провокаційної поведінки; посилення грубої та насильницької поведінки; посилення аутоагресії та деструктивної поведінки; прогресування посилення девіантної сексуальності; посилення поведінки за типом онлайн-культури. Виявлені такі механізми: ехокамери, розгалужування через анонімність, групова поляризація та конкурентна динаміка.

Поведінкові та психологічні порушення, пов'язані з проблемним надмірним використанням Інтернету, не відповідають єдиному психопатологічному феномену в межах наявних оціночних визначень, які оцінюють Інтернет-залежність як тривіальну форму нехімічної залежності. Натомість у сучасному контексті складний набір поведінкових та психологічних порушень, які реалізують за допомогою мережі Інтернет, потребує вивчення та комплексної оцінки.

Internet addiction is a highly contentious form of behavioral addiction that has sparked significant debate. In the early 20<sup>th</sup> century, extensive research shed light on the problematic use of the Internet, effectively categorizing it as a mental disorder. Although the official recognition of Internet addiction is yet to be established in diagnostic manuals such as DSM-5 or ICD-11, the concept of problematic Internet usage and its consequences on individuals' well-being remains a subject of ongoing research and clinical interest [1—3].

However, in recent years, the landscape has dramatically changed, leading to a paradoxical situation. The prevalent lifestyle shifts in developed countries have resulted in an all-encompassing prevalence of Internet addiction. This transformation in societal behavior poses a dilemma: a behavior that is deemed pathological primarily due to its detrimental effects on interpersonal relationships and social functioning is now ubiquitously present. Curiously, the absence of these behavioral patterns in modern society can potentially inflict an even greater negative impact on social functioning and interpersonal relationships than their presence [1; 4—8].

Hence, Internet addiction emerges as a complex phenomenon, requiring nuanced examination and consideration. The rapid advancement of technology and the widespread availability of internet connectivity have intertwined individuals' lives with the digital realm. Consequently, the implications of excessive internet usage extend far beyond individual experiences, warranting ongoing exploration to comprehend its multifaceted impact on society at large [1—3; 9].

The Internet Addiction Test (IAT), developed by Kimberly Young in 1998, stands as the primary diagnostic tool for identifying Internet addiction in Europe and the United States today. It aims to detect various indicators, including excessive preoccupation with the Internet, a progressive increase in time spent online, efforts to self-impose limits on Internet usage, mood swings associated with restricted Internet access, losing track of time while engrossed online, the presence of work or relationship threats due to Internet use, attempts to conceal the duration of Internet activities, and employing the Internet as a means of mood regulation [10—12].

However, it is worth noting that the approach employed by the IAT, considering Internet addiction as a typical behavioral addiction, may seem somewhat simplistic when viewed through the lens of the present day, a quarter-century later. As our understanding of technology's influence on human behavior has advanced, it has become increasingly evident that Internet addiction encompasses complex and multifaceted factors that extend beyond the conventional framework of behavioral addictions. Therefore, while the IAT has provided valuable insights into Internet addiction, ongoing research and evolving diagnostic approaches are necessary to capture the nuances and intricacies of this ever-evolving phenomenon.

Even prior to the COVID-19 pandemic, the behavior patterns outlined in the Internet Addiction Test were

met with skepticism in the realm of psychopathology. However, the social isolation brought about by the pandemic from 2020 to 2022 has profoundly transformed the role of the Internet in people's social functioning, shifting the perception of Internet usage from "abuse" to a societal norm. In Ukraine, the period of social isolation persisted beyond the lifting of quarantine measures in 2022 due to war-related administrative, infrastructural, and security restrictions, extending for over three years and ongoing. These unprecedented circumstances have blurred the boundaries between excessive Internet usage and essential reliance on online platforms for daily functioning. What was once deemed pathological behavior has become a lifeline for maintaining social connections, accessing vital information, and mitigating the psychological impact of the prolonged isolation. Consequently, the traditional understanding of Internet addiction has become entangled with the larger societal context, necessitating a reevaluation of its diagnostic criteria and the development of more comprehensive frameworks to assess the evolving relationship between individuals and the digital realm.

**Aim** — to analyze and establish the shift in characteristics of internet addiction on the background of social isolation and security crisis.

**Materials and methods.** The study was conducted on a contingent of 120 respondents aged 18 to 23, who are students of higher education and have experience of permanent stay in conditions of social isolation in Ukraine during 2020-2023 and have Internet-addiction according to Internet Addiction Test (K. Young, 1998 [11]) and Internet Use Disorders Identification Test (Linskyi, I. V., Minko, A. I., Artemchuk, A. P. et al, 2009 [13]). The distribution of the contingent by gender was symmetrical. The research method is a structured psychological interview.

**Study results.** The current understanding of internet addiction relies on a conceptual framework that applies general characteristics of non-chemical addictions to internet use. This approach is directly reflected in diagnostic tools, leading to an oversimplified clinical perspective on a complex and highly contextualized problem. In Ukraine, two main tests are primarily used for diagnosing internet addiction: the Internet Addiction Test developed by K. Young in 1998 (adapted for the Russian population by V. A. Loskutova in 2004 and subsequently translated into Ukrainian) and the Internet Use Disorders Identification Test (Internet-UDIT) developed by a group of Ukrainian academic psychiatrists, including I. V. Linskyi, A. I. Minko, A. F. Artemchuk, and 12 others, in 2009.

Internet Addiction Test (IAT) have underling anachronisms: technical (the questions exclusively refer to computers as means of accessing the internet, ignoring the significant shift towards mobile devices and smartphones; the assumption that internet usage occurs within clearly defined and limited sessions fails to acknowledge the continuous nature of internet access through mobile connectivity; the notion that using the internet is a separate activity that excludes other activities overlooks the integration of online platforms

and services into various aspects of daily life); socio-cultural (the questions may hold biases regarding the impact of internet use on work efficiency and education without considering the remote format and the evolving nature of online learning and remote work; assume dissatisfaction from others regarding an individual's internet usage, without considering the shifting societal norms and the increased reliance on digital communication); introspective (the questions may assume attempts to self-limit internet use as a marker of addiction, disregarding the evolving role of constant connectivity; suggest feelings of guilt associated with internet use, failing to consider the changing societal perceptions and the normalization of online activities). Also IAT suffers from situational incorrectness (referring to social isolation and security crisis): the questions may assume that individuals have access to positive experiences and unlimited activities in their offline lives as alternatives to internet use, while in situations of motivated social isolation or external danger, such alternatives may be severely limited or unavailable; the questions may overlook the crucial role of the internet as a vital source of official security notifications and updates.

Internet Use Disorders Identification Test (Internet-UDIT), is a modification of (Alcohol Use Disorders Identification Test, AUDIT by WHO) and structured by general framework of addictions (including chemical) and assume that all same features are true for excessive internet use, such as: loose of control over Internet session timing, regards on using Internet, harm to social functioning, craving and frustration; while still have anachronic questions ("How often do you spend time on the Internet?" — today it's a continuous due to mobile technologies) and situational incorrectness ("How often in the last year have you woken up thinking about the Internet and/or started your day with an Internet connection?" — today it's the question of security notifications and vital news).

When evaluating the diagnostic criteria of these tests within the framework of rapid technological progress, socio-cultural shifts, and the challenging circumstances of social isolation and security crises in Ukraine, one can readily observe a discrepancy between the diagnostic outcomes and the clinical reality. Thus, it is essential to reevaluate and update the diagnostic criteria to align with the current clinical reality and provide a more accurate understanding of internet addiction.

In modern conditions, the excessive use of Internet seem to be not a one from a line of non-chemical addictions, but a providing mechanism for a wide spectrum of behavioral and psychological violations (in combinations), emerging as their common functional part. In this spectrum we can distinguish 2 distinct categories: formation of compulsive behavior patterns and justification of pre-existing behavior abnormalities.

1. Formation of compulsive behavior patterns — initiation and reinforcement of repetitive and excessive behaviors resulting in urge or craving to engage in specific online activities, leading to an inability to resist or control the impulse. The mechanisms standing

behind formation of compulsive behavior patterns are: *accessibility and availability of hyper-stimulating content* (competitive, erotic and pornographic, socially-exciting etc.); *reinforcement and rewards with feedback loops* (social appreciation with "achievements", "likes", "reposts" etc.); *social comparison* (feeling left out or disconnected and "fear of missing out" on what other individuals experiencing and sharing in social networks); *escapism and avoidance* (online activity used as coping mechanism to temporarily avoid or distract themselves from difficult situations or emotional discomfort); *information overload* (individuals get used to excessive attention-catching data, that causes stereotypical aimless "surfing" and "refreshing" to maintain information flow. Problematic compulsive behavior patterns include: compulsive gaming and gambling behavior, compulsive social media use, compulsive pornography consumption, news-related compulsive behavior.

Evaluation of above-mentioned patterns should be based on general parameters of compulsive behavior: repetitive or ritualized acts, urges or cravings, excessive time spent, frustration related distress, interference with daily functioning, lack of self-control, preoccupation, resistance and avoidance. While also the progression parameter should be added to reflect the processual dynamics.

2. Justification of pre-existing behavior abnormalities — reinforcement of abnormal behaviors that existed before internet use, by their subjective normalization due to the influence or presence of the internet. The mechanisms that involved in this are: *echo chambers* (attendance in specific online-communities where like-minded individuals reinforce each other's beliefs, behaviors, and attitudes, while dissenting opinions or alternative perspectives are often ignored or dismissed); *disinhibition due to anonymity* (a sense of anonymity can embolden individuals to express and amplify their abnormal behaviors without fear of real-life consequences; this can lead to increasingly aberrant actions within the online community); *group polarization and competitive dynamics* (in specific online-communities individuals with similar behavior abnormalities adopt and amplify progressively more extreme versions of their pre-existing behaviors through repeated interactions and discussions aimed on validation within the group). Problematic justification of behavior abnormalities includes: reinforcement of attention-seeking and provocative behaviors; reinforcement of rude and violent behaviors, reinforcement of self-harm and destructive behaviors, progressive reinforcement of deviant sexuality, reinforcement of cult-like behavior.

Abnormalities mentioned above strangely refer to a behavior presented in context of some prominent personality traits or patterns as borderline and dissociability trait domains (that are seem to be induced by specific online activities and settings, thus make it close to "secondary personality change"). Evaluation of this behaviors possibly could be evaluated with general parameters of personality violations: inflexible and pervasive patterns, distorted thinking and perception,

emotional dysregulation, impaired interpersonal relationships, maladaptive coping mechanisms, self-identity issues, social and occupational impairment.

Summing up our analysis and consideration on behavioral and psychological violations that are associated with Internet-addiction / problematic excessive use of Internet we come to conclusion that there is no solitary test that could be used to diagnose such phenomenon as Internet-addiction, in return there is complex spectrum of underlying compulsive patterns and abnormal behaviors that need to be evaluated in each case of problematic excessive use of Internet. In our following studies we plan to analyze existing tests for mentioned problematic behavior pattern, adapt it and integrate for the purpose of psychodiagnostics.

**Conclusions.** In modern conditions, the excessive use of Internet seem to be not a one from a line of non-chemical addictions, but a providing mechanism for a wide spectrum of behavioral and psychological violations (in combinations), emerging as their common functional part. In this spectrum we can distinguish 2 distinct categories: formation of compulsive behavior patterns and justification of pre-existing behavior abnormalities.

We arrive at the determination that the behavioral and psychological disruptions linked to problematic excessive Internet usage elude classification within existing evaluative frameworks. Instead, a complex array of underlying compulsive patterns and deviant behaviors necessitates comprehensive assessment when considering the issue of problematic excessive Internet use.

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