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"New Addiction": An Introduction to the Subject of Behavioral Addictions

ABSTRACT

The conceptualization of the term "addiction" has been the subject of great debate for decades. Because the term is associated with drug use or alcohol consumption, it is not surprising that most official definitions focus on substances. Despite this, there is a growing trend that sees a range of behaviors as potentially addictive. These "new addictions" include gambling, playing video games, shopping, and using the internet or social networks. The purpose of the article is to discuss the definitions interpretations of the term that can be found in the literature according to contemporary knowledge. The article is divided into three parts; the first reviews the terms and classifications related to new addictions, the second highlights the differences and similarities between activity addictions and substance addictions, and the final part provides a brief overview of behavioral addictions.

KEYWORDS
new addictions, behavioral dependency, activity addiction, substance addiction, addiction

Introduction

The term *addiction* is commonly associated with disorders involving the use of psychoactive substances, such as alcohol, drugs, and tobacco. However, recent decades have seen the emergence of new, complex behaviors that involve compulsive activities. They are similar in their course and symptoms to the mechanism of addiction. The difference is that their object is not a chemical substance. Specialists

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in the field of addiction therapy have begun to pay attention to the very formation of the problem and the behaviors associated with it (Lelonek-Kuleta, 2015: 98). In the literature, the following terms have appeared: *new addictions*, *behavioral dependency*, and *activity addiction*. In brief, they refer to addictive behavior that an individual is unable to stop despite the disruption it causes in many aspects of the person's functioning (Ogińska-Bulik 2010). *New addictions* is a colloquial term used to emphasize the distinction from "old" addictions related to substance use (Guerreschi 2005). The term *behavioral addictions* is intended to emphasize the similarity to substance addictions. *Activity addiction* is an uncommon term, mainly used to emphasize the addictive nature of a behavior which is unrelated to substance use (Ogińska-Bulik 2010; Habrat 2016). Such discrepancy in terminology has been the subject of discussion for a very long time. The medical paradigm advocates a clear distinction between *addiction* and *dependence*. It is suggested that the former should be applied only to mental disorders caused by the use of psychoactive substances. The social paradigm proposes terms such as *behavioral addiction* or *addiction to activities* (Grzegorzewska, Cierpiałkowska 2018: 21).

In this article, I use the term *behavioral addiction* to describe an individual's involvement in an activity that results in negative consequences. This is dictated by several factors supported by the current state of knowledge and empirical findings (see Cierpiałkowska, Sęk 2016; Grzegorzewska, Cierpiałkowska 2018). The symptoms and mechanisms of both substance and behavioral addictions share significant similarities. Typically, they co-occur with each other or they can transform into the other when a person is trying to maintain abstinence. For example, addiction to psychoactive drugs may change into an addictive activity. The term *behavioral addiction* is widely used in the scientific and popular literature and has become a permanent part of the social consciousness (see Grzegorzewska, Cierpiałkowska 2018).

New addictions are poorly described in the diagnostic criteria and their etiology is insufficiently recognized. Thus, little is known about effective preventive or therapeutic interventions at this stage. However, the complex nature of behavioral addictions and the co-occurrence of other psychiatric problems are an important reason to address this topic. This article first presents, against the background of the existing knowledge on addiction, the definitions that have been

formulated regarding new addictions; it then summarizes selected behavioral addictions.

Behavioral addictions—definitions and diagnostic criteria

Medical and social science professionals are engaged in a debate over the correctness of the terminology used in this field. So far, two leading problems have emerged. One relates to the symptoms that identify a particular class of disorders. The other involves the pathological mechanisms which lead to the formation and maintenance of disorders (Grzegorzewska, Cierpiałkowska 2018: 20). These issues have led to three leading opinions:

1. Activity-related behaviors are similar to addictions and can refer to it. The important emphasis here is on the nomenclature and the descriptive language being used. Both dependency and addiction are thought of as harmful. In this understanding, *addiction* refers to addictions resulting from psychoactive substances. In contrast, *dependency* is used for dependence on an activity. In Polish, the term *nałóg* [dependency] is used in the medical terminology and its meaning coincides with how addiction is defined today (Lelonek-Kuleta 2015: 98; Grzegorzewska, Cierpiałkowska 2018: 21).
2. Behavioral addictions share some characteristics with obsessive-compulsive disorders. What they have in common is the function of the activities. They are meant to relieve tension and anxiety in the individual. The difference between the two is that behavioral addictions are oriented toward a goal which, when fulfilled, leads to pleasure. Obsessive-compulsive behaviors are not aimed at achieving specific results, but at coping with negative emotions. People who compulsively engage in activities feel a compulsion to perform and repeat them. They are overburdened by this state, but cannot end it.
3. We can think of behavioral addictions in terms of impulse control disorders. This is mainly influenced by the similarity between the symptoms and mechanisms and the co-occurrence of substance and activity addictions (Grzegorzewska, Cierpiałkowska 2018: 21–22). In clinical psychology, a behavioral addiction is considered to be

> a condition in which a person complains of the inability (despite attempts) to control their thoughts and behaviors, suffers from various problems (economic, interpersonal, or health) resulting from the compulsive repetition of these activities, and has a sense of helplessness and powerlessness in the face of the problem. (Cierpiałkowska, Sęk 2016: 391)

The above opinions are not mutually exclusive. The link between impulsivity and compulsivity was first noted in substance abuse research (Grzegorzewska, Cierpiałkowska 2018: 44). Impulsivity plays the key role in the early stages of the addiction process, in the form of a tendency to look for short-term benefits. In the later stages, associated with repetition, compulsive habits of substance use develop. It is similar with behavioral addictions. Impulsivity initiates the addictive behavior (e.g., a desire for pleasure), while compulsivity supports its repetition (e.g., tension relief). However, the relationship between impulsivity and compulsivity as a mechanism of behavioral addictions is still being researched (Grzegorzewska, Cierpiałkowska 2018).

Aviel Goodman (1990) is considered to have formulated the first definition based on diagnostic criteria:

> Addiction … [is] a process whereby a behavior that can function both to produce pleasure and to provide relief from internal discomfort is employed in a pattern characterized by (1) recurrent failure to control the behavior (powerlessness) and (2) continuation of the behavior despite significant negative consequences (unmanageability). (Goodman 1990: 1404)

He based his criteria on the DSM-3-R, directly referring to the concept of addictions, while emphasizing the psychological and behavioral aspects of the problem. His assumption, although it has received recognition in practice, has not yet obtained the status of an official clinical tool.

Figure 1. Criteria of behavioral addictions according to Aviel Goodman (1990)

Goodman (1990)
• Repeated failure to restrain the impulse to engage in specific behaviors • Increasing sense of tension immediately before engaging in the behavior in question • Pleasure or relief while engaged in a given activity • A sense of lack of control over engaging in the activity • The presence of five of the following symptoms: ▪ Frequent preoccupation with behavior/activities in preparation of a particular behavior ▪ Engaging in the behavior in question (in frequency and duration) well beyond the intended level ▪ Repeated attempts to reduce the frequency of, control, or stop the behavior in question ▪ Devoting more and more time to activities related to the behavior ▪ Increasing involvement in a behavior at the expense of home, work, school, or social responsibilities ▪ Giving up or limiting important social, occupational, and recreational activities because of engaging in the behavior in question ▪ Continuing a particular behavior despite experiencing persistent or recurring social, financial, psychological, and physical problems resulting from or exacerbated by that behavior ▪ Increasing tolerance—needing to increase the frequency or intensity of a behavior in order to obtain the same level of pleasure or relief as before ▪ Anxiety or nervousness when a particular behavior is unavailable • Symptoms persisting for longer than a month or recurring over a longer period of time

Source: Based on Goodman (1990) and Lelonek-Kuleta (2015: 99).

Mark Griffiths (2004) created another popular, six-factor model with criteria that indicate behavioral addiction. According to him, a diagnosis of addiction is contingent on the fulfillment of all of the factors. The boundary between passion/commitment to an activity and addiction to it is the addict being isolated from everyday life and suffering from the situation.

Figure 2. Criteria of behavioral addictions according to Mark Griffiths (2004)

Griffiths (2004)
• Salience of emotional preoccupation: the behavior becomes the most important activity in a person's life and dominates their thoughts, emotions, and behavior • Mood change: engaging in the behavior can be a strategy for coping with problems • Dose tolerance: the behavior must be performed with increasing intensity to deliver the desired satisfaction • Withdrawal symptoms: unpleasant feelings or physical symptoms when not engaging in the behavior • Interpersonal or intra-psychic conflicts as a consequence of engaging in the behavior • Conversion: the tendency to return to the behavior after a period of stopping or controlling it

Source: Based on Pospiszyl (2020: 243).

Based on the analysis of the diagnostic criteria described in the literature on the subject, Irena Grzegorzewska and Lidia Cierpiałkowska (2018) adopted the following operational criteria (Figure 3). In her theory as well, the diagnosis of behavioral addiction is only confirmed if all five symptoms occur.

Figure 3. Operational criteria of behavioral addictions according to Irena Grzegorzewska and Lidia Cierpiałkowska (2018)

Grzegorzewska, Cierpiałkowska (2018)
• Undertaking a given activity in order to change one's well-being: to gain pleasure, reduce pain, increase energy, calm down, or, in the final phase, to preserve one's ability to function normally (tolerance effect) • Over time, the need to intensify a given activity in order to achieve a desired/accepted state • Loss of control over the amount, frequency, and timing of certain activities • The appearance of withdrawal symptoms if an activity is abruptly curtailed, limited, or unavailable • More intense negative consequences resulting from exceeding the time spent on an activity, which is a direct or indirect indicator of loss of control

Source: Grzegorzewska, Cierpiałkowska 2018: 34.

In practice, terms related to activity addiction have been known and attempts to categorize it have been made for quite a long time (Lelonek-Kuleta 2015; Habrat 2016; Grzegorzewska, Cierpiałkowska 2018). Given the multitude of activities that can become addictions, it seems necessary to clinically and scientifically systematize behavioral addictions. Only the DSM-5 classification of the American Psychiatric Association (2013) includes pathological gambling as a *non-substance-related disorder*. The introduction of the term *disorder* helped to systematize scholarly work on the intensification of addictive behaviors—from normal use, through abuse (DSM-4) and harmful use (ICD-10), to addiction (both to substances and behaviors)—which made it possible to make this area of research more coherent (Lelonek-Kuleta, 2014: 16). This was contrary to the previous editions of the DSM-3 and the DSM-4, in which pathological gambling was classified as an impulse disorder. In the ICD-10, which has been valid in Poland since 1 January 2022 (though it has not been translated into Polish yet, so the classifications in the previous edition are still in use), the term *behavioral addiction* was not used or appeared only in the category of disorders of impulse control or compulsive-obsessive disorders.

"New" and "old" addictions

When considering the similarities and differences of substance addiction and activity addiction, it is necessary to look at the issue from the medical perspective as well. First of all, if the phenomenon falls into the medical category, diagnostic criteria and preventive and remedial procedures are developed. This has both positive and negative consequences. Reducing behavioral addiction to simplified physiological and psychological categories ignores the multifaceted approach to the issue. In terms of psychological mechanisms and conditions, the phenomena are similar. However, the social image of them, the way they are perceived, stigmatized, and excluded, the social damage they cause (conflicts with the law, loss of employment, conflicts in the family, etc.), and the availability of prevention and treatment differ significantly. This results in a wide range of consequences experienced by the individual with an addiction and their loved ones, and thus in the support they receive in their recovery.

On the other hand, the fact that various state bodies are allocating large amounts of money toward recovery strategies speaks in favor of analyzing behavioral addictions from the point of view of medicine. The prerequisite for considering a phenomenon to be a medical issue is the existence of a pathogenic factor. However, this is not the case with behavioral addictions; they stem from natural physiological mechanisms. The reinforcement of a given behavior is influenced by stimuli that facilitate and reward it (pleasure) and by those that condition it negatively (lack of reward). It is a reversible process (Habrat 2016: 21).

Many researchers (e.g., Ogińska-Bulik 2010; Grzegorzewska, Cierpiałkowska 2018) highlight methodological weaknesses and inadequacies in the understanding of behavioral addictions. Moreover, it is hard to resist the impression that the criteria for some of them are transferred by analogy to the criteria of existing substance addictions. The interpretation of them better fits the nomothetic model of explaining them mainly in terms of general laws and theories, rather than the idiographic model, in which the phenomena in question are well explained by an empirically confirmed theory (Habrat 2016: 22).

With the development of knowledge on the psychological and neurobiological mechanisms of addiction, similarities between substance addictions and behavioral addictions have been indicated. On biological grounds, there has been interest in the basis of learned behavior. Common neuronal pathways in the development of addictions have been pointed out. First of all, the function of the so-called reward center has been emphasized and the role of the dopaminergic and opioid systems in mechanisms of positive reinforcement and the role of serotonergic system in protective mechanisms have been confirmed (Lelonek-Kuleta 2015: 101; Habrat 2016: 33). A few studies in the field of genetics have also confirmed that substance abuse and behavioral addiction share a common pathogenesis and that the propensity for them can be inherited (Lelonek-Kuleta 2015: 101).

The current diagnostic criteria explain the term *addiction* as the sum of addictive behaviors (with psychological components and biological foundations) and biological pharmacological conditions (altered tolerance and abstinence symptoms). Thus, the term refers only to the abuse of psychoactive substances.

Withdrawal symptoms are a special area of discussion in research on behavioral addictions. The symptoms that occur when one is prevented from performing an activity are similar to the symptoms of withdrawal syndrome, but they are non-specific. Among other things, they can be a manifestation of frustration and can occur in the form of anxiety, irritability, or restlessness. In contrast, the symptoms that constitute diagnostic criteria are typical of withdrawal from a substance, such as increased sleepiness or appetite in the case of cocaine addiction (Habrat 2016: 34). Thus, in behavioral addictions, they are limited to the mental sphere. The disease course of psychoactive addictions varies depending on the substance in question. The initial step in the treatment of chemical addictions is detoxification, but not in behavioral addictions. As a result, the DSM-5 classification introduced a category of addictive disorders that included substance use disorders and gambling disorders, which highlights their similarity in terms of mechanisms while indicating their distinctiveness (separate subcategories).

Cierpiałkowska described two major views on the nature of addictions. Supporters of the first view treat them as a syndrome, while supporters of the other perceive them as a process (Grzegorzewska,

Cierpiałkowska 2018: 35–41). The multifactor model is one of the most popular models for explaining the origin of addiction development (Lelonek-Kuleta 2015: 101). It is based on the idea that addictions have the same origin. On the one hand, they result from complex and integrated biological, psychological, and social factors, while on the other hand, they depend on neurobiological and psychological contexts that increase a person's susceptibility to addiction. Therefore, they are treated as a syndrome with many aspects, both those related to substance and behavioral ones. This concept is reflected in ongoing research and it is confirmed, for example, in scientific articles on the co-occurrence of addictions or the substitution of one object of addiction for another. However, the authors of the concept are accused of focusing too much on diagnosis, while neglecting the analysis of the psychological processes behind the phenomenon (Grzegorzewska, Cierpiałkowska 2018).

The model that treats addiction as a process also points to the role of substance addictions, which, in this case, are among the many risk factors correlated with behavioral addictions. In this approach, the individual intentionally engages in a given behavior. The goal is to achieve pleasure. The addiction itself develops gradually; it is accompanied by risk factors and co-occurring problematic situations. This approach makes it possible to identify those psychological processes that are specific to the development of a particular addiction. Thus, it makes it possible to construct evidence-based interventions, which is invaluable for effective therapy and interventions in practice (Grzegorzewska, Cierpiałkowska 2018).

Regardless of whether the object of addiction is a substance or a behavior, it brings suffering into the life of the affected person (in every aspect of their lives). Importantly, we can consider the consequences of addiction in the individual, familial, and the societal perspectives (Włodarczyk 2020: 40). Social ties are broken, social competence is lost, relationships are disrupted, and the addicted individual becomes increasingly isolated from people. These effects of addiction co-occur, creating new problems and reinforcing one another.

Selected types of "new addictions"

Sociocultural changes are triggering a strong need for possessions and intense experiences in modern society. An experience itself is becoming less important than the way it is recorded, for example, on social networks. The paradox of our time is living in a world full of goods and choices while experiencing a poverty of relationships. Relationships are weakening, as a result of which the human capacity to tolerate stressors of various kinds is also decreasing. Looking for regulation and ways to cope with stress, the individual turns to activities that will help reduce their bad mood. This section of the article discusses selected new addictions. They were selected based on the official DSM-5 classification. Addiction to gambling appears here under the category of substance use disorders and dependencies. Problematic internet use was considered for potential inclusion in this category and online gaming addiction was considered to require further research. Other addictions under consideration, in which no satisfactory evidence has been found, included addictions to shopping, sex, and physical exercise (this article discusses shopping addiction).

Gambling

First recognized as a disease and appearing in the 2000 DSM-5 classification under the category of impulse control disorders (Panasiuk K., Panasiuk B. 2016), pathological gambling was defined as a progressive and chronic disorder that involves a persistent inability to resist the impulse to gamble and interferes with or harms one's personal, familial, or professional pursuits (Kusztal, Piasecka, Nastazjak 2021: 18). Now, in the latest DSM-5 criteria introduced in 2013, gambling is in the category of psychoactive substance and addiction disorders (Figure 4). A gambling disorder is viewed as a continuum in which the number of identified symptoms determines its severity. Mild severity of the disorder involves the appearance of 4–5 criteria, moderate severity entails 6–7 criteria, and significant severity 8–9 criteria. Early remission, on the other hand, is evidenced by the absence of symptoms for 3–12 months; with persistent remission, the time extends beyond 12 months.

Figure 4. Gambling diagnostic criteria according to the DSM-5

Kryteria diagnostyczne DSM-5
A. Persistent or recurrent problematic gambling behavior leading to clinically significant harm or negative distress, as indicated by four or more of the following behaviors exhibited by the individual in the past 12 months: 1. Feeling the need to gamble for increasingly larger amounts of money in order to achieve the desired level of excitement 2. Becoming anxious or irritated when trying to reduce or stop gambling 3. Making unsuccessful attempts to control, reduce, and stop gambling 4. Feeling overwhelmed with gambling 5. Often gambling when feeling stressed 6. After losing money, often returning to the game another day to get even 7. Lying to hide the degree of gambling behavior 8. Jeopardizing or losing significant relationships, jobs, or educational or professional opportunities due to gambling 9. Becoming dependent on people who can help with their financial difficulties caused by their involvement in gambling. B. Gambling behavior is not better explained by the occurrence of a manic episode.

Source: Based on Panasiuk & Panasiuk (2016: 93).

The ICD-10 and the newer ICD-11 classifications, which are valid in Europe, also refer to gambling (Table 1). In the ICD-10 classification, pathological gambling was placed in the category of mental and behavioral disorders, in the subcategory of disorders of habits and drives. It was defined as "frequent, repeated episodes of gambling that dominate a person's life, leading to violations of norms and social, professional, material, and family obligations" (Pużyński, Wciórka 2000: 178). The introduction of the ICD-11 classification brought an important change (in Poland, the ICD-10 criteria are valid until it is translated): a subsection appeared for disorders due to substance use or addictive behaviors, which distinguished between disorders caused by substance use and those caused by addictive behaviors. Gambling use disorder and gaming disorder were placed in the latter group. The disorder is diagnosed when gambling behavior and other features are evident for at least 12 months, although the duration can be shortened if all diagnostic requirements are met and symptoms are severe.

Table 1. Gambling diagnostic criteria according to the ICD-10 and the ICD-11

ICD-10	ICD-11
1. Increased drive to search for an addictive agent 2. Increased tolerance to the agent (gradual decrease in pleasure when the same dose is delivered, or the need to increase the amount of the agent to achieve similar pleasure as at the beginning) 3. Compulsive need to gamble, at the expense of one's health and environment 4. Weakening of one's willpower 5. Obsession with gambling and persistence and recurrence of intrusive thoughts, even after years of abstinence 6. Self-deception and the use of excuses and other defense mechanisms to facilitate gambling 7. Physical exhaustion and lack of interest in non-gambling environments 8. Emotional burnout.	A pattern of persistent or repeated gambling behaviors that may be engaged in online or offline. These behaviors are characterized by: 1. Impaired control over gambling (e.g., onset, frequency, intensity, duration, termination, and context) 2. Prioritization of gambling to such an extent that it takes precedence over other life interests and daily activities 3. Continuation or escalation of gambling despite the occurrence of negative consequences.

Source: Based on Pospiszyl (2020) and Kusztal et al. (2021).

Three stages are usually distinguished in the development of a gambling addiction (see Woronowicz 2009: 468, Panasiuk K., Panasiuk B. 2016: 95–98, Pospiszyl 2020: 311). The first of these is referred to as the victory phase. At this stage, winning evokes a feeling of triumph and the gambler risks increasingly larger sums, hoping to succeed. The turning point for this phase, called the "big win episode," is when it becomes an obsession. The next stage, the loss phase, leads to an ambivalent feeling. On the one hand, there is a desire to give up; on the other hand, wishful thinking appears about the possibility of another win. The gambler is consumed by this vision, hoping only for revenge and to recoup the money which was lost. The addict's behavior begins to create problems in various areas of their life (family, work, etc.). The third phase, the desperation phase, begins when all manipulations and defense mechanisms stop working. The gambler feels the consequences of their behavior, for which they must bear responsibility. This stage is often perceived as the turning point after which the addict seeks help.

According to a 2017 survey by CBOS (the Centre for Public Opinion Research) (CBOS 2017), 0.4% of gamblers in Poland admitted to compulsive gambling. Men far outnumber women in this group (only 1/3 of the gamblers are women). Age is also

a significant factor. Teenagers most often choose slot machines, while young adults (20–35 years old) gamble in casinos. More than half of gambling addicts begin their gambling adventure between the ages of 10 and 14. According to the survey, e-gambling is very popular among Poles. The most common form is sports betting (Lelonek-Kuleta et al. 2020). It is difficult to estimate the extent of gambling problems, and the available studies have yielded ambiguous results. Most of the information on the prevalence of gambling disorders comes from the United States, Norway, and Canada. Depending on the location of the study and the diagnostic tool used, the percentage of gambling addicts in the population ranges from 0.1% to 2% (Grzegorzewska, Cierpiałkowska 2018: 153).

Problematic internet use

The internet has become an integral part of life, a place to work, and a source of gratification. Unfortunately, what benefits us can also harm us. Problematic use of the internet includes a variety of activities such as surfing the web, online gambling, cybersex, online shopping, compulsive information-seeking, and excessive use of social media. From the point of view of many researchers (e.g., Grzegorzewska, Cierpiałkowska 2018: 211), the internet as such is not a source of addiction; it only mediates in the development of addiction to certain activities. This is in line with the contemporary position which assumes that the term "internet addiction" is a mental shortcut that refers to engaging in various risky and addictive behaviors online. Harmful online use is now considered to include (1) harmful gaming, (2) harmful sexual involvement, (3) excessive and harmful information-seeking, (4) compulsive behavior, and (5) excessive and harmful social involvement (Grzegorzewska, Cierpiałkowska 2018: 211–212).

The American Psychiatric Association has considered including the diagnosis of pathological internet use in the DSM-5 classification. It suggested including four criteria relevant to diagnosing the problem: (1) excessive use, often associated with losing track of time or neglecting basic needs, (2) withdrawal, including feelings of anger, tension, and/or depression when not using a computer, (3) changing tolerance, using a computer with increasing frequency, including manifesting the need for increasingly better computer equipment,

more programs, and longer use of the internet, and (4) negative consequences, including arguing, lying, poor performance at work/school, social isolation, and fatigue (Grzegorzewska, Cierpiałkowska 2018: 212–213). Nonetheless, the 2013 DSM-5 classification did not include internet addiction as a disorder. Despite the lack of an official nosological classification, researchers have suggested their own diagnostic criteria. In the literature, Ivan K. Goldberg is considered one of the first researchers to address the phenomenon. He defined addiction as a situation in which people abuse the internet, which is associated with a number of negative physical and psychological consequences (Barłóg 2015). He also specified the symptoms by which this problem can be identified (Figure 5).

Figure 5. Criteria of internet addiction according to Ivan K. Goldberg

Goldberg
Addiction can be diagnosed when a minimum of three of the following symptoms appear: • Tolerance—a decreasing level of satisfaction resulting from using the internet for the same amount of time, leading to longer and longer online activity • Abstinence syndrome—appears only a few days after stopping online activity and involves at least two of the following symptoms: ▪ psychomotor stimulation ▪ anxiety ▪ obsessive thoughts about the internet and its content ▪ lower mood ▪ fantasies and dreams related to the internet ▪ arbitrary or involuntary movement of fingers in a manner characteristic of using a computer keyboard. In order to reduce the symptoms of abstinence syndrome, the person starts using the internet again. • Using the internet for longer than planned • The need to interrupt or limit internet use, but with unsuccessful attempts • Spending a lot of time on internet-related activities (organizing online material or reading books about the internet) • Reducing or abandoning professional, social, or recreational activities in favor of internet use • Continued use of the internet despite the awareness of developing physical, social, and psychological problems.

Source: Based on Barłóg (2015).

The phases of media addiction are best described in the context of compulsive internet use, but they can also apply to online gaming addiction. The addiction process itself is divided into four phases, each of which is associated with a critical moment (Panasiuk K., Panasiuk B. 2017: 69–70). The first stage, called engagement, entails occasional use of the internet that serves some specific purpose, such as

searching for materials for study or work. The time spent on this task does not yet interfere with the natural rhythm of life. Subsequently, there is a transition from occasional use to the next stage: substitution. At this stage, Internet usage becomes regular, at the expense of time spent on other activities. The person begins to isolate themselves socially and loses interest in other areas of life. Problems appear that become increasingly difficult to solve. Stage three is escape. A loss of control occurs. The addict gets into conflicts with relatives and manipulates their social environment. They escape from reality into the virtual world. The last stage (desperation) is an attempt to return to normal life. As a result of external circumstances, the addict is no longer able to use escape mechanisms and begins to seek help (Panasiuk K., Panasiuk B. 2017: 69–70; Pospiszyl 2020: 303–304).

Studies on internet addiction present the scale of the phenomenon itself, rather than reliably assessing the problem. They vary considerably depending on the culture and society under study and use inconsistent methodologies. Some studies are conducted on representative populations through surveys posted online, while others address specific groups with questionnaires. A 2001 study found that 10% of Europeans admitted to compulsive internet use or considered themselves addicted. It is worth mentioning that at the beginning of the 21st century, 17% of Poles used the Internet; while in 2019–2020 this percentage had risen to nearly 85% (Pospiszyl 2020: 305). Therefore, it can be estimated that the number of people currently addicted to this medium is higher. Nevertheless, given the methodological diversity, the variety of research tools used, the sociocultural context, and the rapid development of the internet itself, it seems that addiction rates can be both overestimated and underestimated, depending on the group being studied (Grzegorzewska, Cierpiałkowska 2018: 216).

Internet gaming addiction

The American DSM-5 classification introduced the term *internet gaming disorder* to describe the disorder related to using games as one that requires further analysis (Cyrklaff-Gorczyca, Kruszewski 2018). As suggested in the DSM-5 classification, there are nine diagnostic

criteria for gaming addiction (Figure 6). At least five of these symptoms must appear within 12 months for a diagnosis to be made.

Figure 6. Probable diagnostic criteria for computer game addiction, according to the DSM-5 classification

- Preoccupation with gaming
- Symptoms of withdrawal when gaming is not possible
- Tolerance—the need to become more and more involved in gaming
- Unsuccessful attempts to control one's gaming
- Loss of interest in previous pleasures and activities as a consequence of excessive gaming
- Continuing to engage in gaming despite the negative consequences of doing so
- Lying or deceiving family, therapists, and others about the time spent gaming
- Using games as a way to escape from problems or to regulate one's mood
- Risking or losing interpersonal relationships or work, school, or career due to excessive gaming.

Source: Based on Grzegorzewska & Cierpiałkowska (2018: 190).

The new ICD-11 classification also included this addiction as *gaming disorder*. It has been placed in the "addictive behaviors" subgroup and it refers to

> a disorder of gaming control and the increasing importance of gaming over other activities to the point that gaming dominates other daily activities and interests, as well as the continuation or escalation of gaming despite the negative consequences it entails. (Cyrklaff-Gorczyca, Kruszewski 2018: 47)

For a behavior to be qualified as a gaming addiction, there must be a 12-month period (in the case of severe symptoms, the time frame is shorter) during which there is a significant impairment of functioning in an important sphere of life.

More and more young people are also reaching for new technologies to play. A debate is developing among educators, psychologists, teachers, and parents about the consequences of this phenomenon. There is no simple answer here. On the one hand, the literature on the subject points to the beneficial effects of new technologies, such as the development of visual-spatial skills; the growth of knowledge and reading, counting, and language skills; and the formation of pro-social attitudes. On the other hand, we can see young people overwhelmed with games, losing control over the time they spend playing, ignoring other activities, and experiencing many negative consequences, all of which leads to addiction (Grzegorzewska, Cierpiałkowska 2018: 184–185). Games can provide an escape from a reality full of conflict,

negative emotions, or low self-esteem. According to a study conducted on a representative group of European adolescents (Muller et al. 2015), the percentages of adolescents (14–17-year-olds) addicted to computer games in each country were as follows: Greece—2.5%, Poland—2.0%, Iceland—1.8%, Germany—1.6%, Romania—1.3%, the Netherlands—1.0%, and Spain—0.6% (Muller et al. 2015).

Compulsive shopping

Researchers disagree on which category of mental disorders uncontrolled shopping falls into. Four types of disorders are most commonly mentioned: impulse control disorder, mood disorder, obsessive-compulsive disorder, and behavioral addiction, with the last two receiving the most attention. The term "compulsive buying" is not yet a valid definition. This type of activity can be defined as "an uncontrolled compulsion to buy, which adversely affects the functioning of the individual" (Grzegorzewska, Cierpiałkowska 2018: 314–315). Compulsive buying has not been classified in the current diagnostic criteria. However, according to the non-binding criteria of Helga Dittmar (Grzegorzewska, Cierpiałkowska 2018: 316), uncontrollable need is one of the key symptoms that distinguish normal buying from pathological buying. Compulsive buying also entails negative consequences in various spheres of life. Regarding the mechanisms of addiction, compulsive buying exists when three of the following symptoms occur:

> (1) the feeling of compulsion and/or a strong need to shop, (2) impaired control over refraining from shopping and over the length and frequency of time spent shopping, (3) experiencing anxiety, irritability, or worse moods when trying to reduce the opportunity to shop, and the subsiding of these states when the opportunity to pursue shopping plans arises, (4) spending more and more time shopping for satisfaction or a good mood that was previously achieved in less time, (5) progressive neglect of alternative sources of pleasure or one's interests in favor of shopping and acquiring funds for shopping, and (6) continuing to buy things despite the harmful consequences associated with such shopping. (Grzegorzewska, Cierpiałkowska 2018: 317)

The research on the prevalence of shopaholism indicates that in Europe, 1%–10% of the population are affected by this problem, while in the USA about 6% of people suffer from it (Grzegorzewska,

Cierpiałkowska 2018). In Poland, according to the findings reported by CBOS (2015), about 4% of people over the age of 15 struggle with compulsive buying. The majority of them are girls and women under the age of 24. This problem usually affects young people, and the reason for this, especially in the West, can be traced to the rich offer of various types of goods, the possibility of choosing them, easy access to them, and the culture of spending leisure time in shopping malls (Ogińska-Bulik 2016).

Conclusion

Terms such as "behavioral addictions," "activity addictions," and "new addictions," which were discussed above, have become a permanent part of the scholarly literature and practice. This has its positive aspects, such as reducing the controversy surrounding the overly broad use of the term "addiction" and investigating the consequences of being engaged in activities that are beyond one's control. On the other hand, the term addiction evokes negative, often stigmatizing associations. Excessive and reckless application of the term to specific forms of activity may create a lot of misunderstandings and may pathologize everyday life. Simplified descriptions of human behaviors can underestimate the real risks of addiction. At the moment, the best studied behavioral addiction is gambling. With the current state of knowledge, and especially in the absence of validated diagnostic criteria and longitudinal studies, it is too early to consider other behavioral addictions as full-fledged, independent disorders, much less to classify them as similar to substance addictions rather than impulse control disorders. More scientific evidence is needed to expand the knowledge of behavioral addictions to match that of substance addictions.

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