

Cyberpsychology: A Simple Overview of Addiction

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Commentary

Addiction is considered an excessive and pathological behavior that causes dependence and restricts freedom [1]. Although the concept of addiction has been generally attributed to the consumption of substances, different authors have found a series of potentially addictive behaviors that do not involve the use of drugs. These behaviors have been related to socially acceptable activities such as gambling, sex, work, shopping and Internet use [2,3]. These addictions that do not involve the consumption have been called addictive behaviors [4].

Around the 90's different researchers had proposed internet addiction as a new disorder, as well as addiction to video games, television and mobile phones. It was then that a new field of study of addiction emerged in relation to information technologies and communications, also called technological addictions [5]. Within this field of study, it is important to mention the current limitations regarding the recognition of disorders of problematic use and addiction to technology. The borderline between normal, excessive and addictive behavior is a limitation that has been investigated in recent years [6]. Although videogame addiction has recently been recognized, more research is still needed. Currently, the APA does not recognize the majority of addictive behaviors, classifying them as a problem of impulse control [7,8]. There are still debates about technological addiction and the confusion of concepts such as problematic use, excessive use, and pathological use, among others [9]. One of the most frequent debates is about the term of addiction, which is why several authors have used alternative terms to explain the same behavior [10]. However, other authors define these concepts differently. To mention a few, problematic use is related to indiscriminate use, affecting personal relationships and a problem with everyday life [11]. On the other hand, addictive behavior refers to compulsive dependence, affecting the family, academic and work environment, as well as social isolation and weakening of daily

activities [12]; it shows deterioration in the control of its use that manifests itself in cognitive, behavioral and physiological symptoms [13].

One of the models that support addictive behavior is the components model of addiction that explains addiction from a biopsychological framework and defines it as a sum of characteristics such as prominence, mood changes, tolerance, abstinence, conflict and relapses [14]. In addition, various studies have analyzed the difference between excessive use and addictive behavior, relating psychological aspects in addiction such as depression and differentiating between a pathological behavior and a high engagement [15]. Therefore, although excessive use is a high-risk factor for addiction, it is not the addiction in itself, but a characteristic of addictive behavior [16].

Addictive behavior has been investigated in recent decades and has been related to different concepts. Like most addictions, there is a strong relationship with depression and anxiety [17-19]. Impulsiveness and neuroticism are characteristics that are related to addictive behavior [20-22]. Other study variables have been related, such as stress, loneliness, suicidal ideation, aggression, sleeping and eating disorders, as well as substance addictions [23-25]. Within the technological addiction, the different types and subtypes must be divided. For example, addiction to social networks is a subtype of Internet addiction. It is important to investigate the different types and subtypes separately, since different characteristics and consequences can be found [6,16,26]. Currently, the most popular use of technology has to do with the Internet and within this, the most popular activity is the use of social networks. The inappropriate use of social networks has generated interest in the field of cyberpsychology, since it has been related to negative aspects and can be considered a risk factor [27,28]. However, it has also been found that it can be a protective factor in situations of conflict, with social networks being a refuge where negative

thoughts and emotions can escape, as well as finding social support [6,24,29,30]. Exploring the behavioural mechanisms and neuropsychiatric outcomes related to addictive behavior may help in understanding the different risk factors involved in brain disorders such as those described by Etindele Sosso FA as the "complex combination" [31-33].

Defining the guidelines for diagnosing addictive behavior on the Internet is one of the priorities in cyberpsychology, especially for those new generations of children and adolescents who are immersed in technology daily and who have been exposed to the Internet from a very young age [8,9]. Although research has marked important differences between excessive and pathological behavior, there are still debates about the definition and patterns of addiction [16]. Reviewing Internet addiction from a biopsychosocial framework [14], we can define it from different perspectives: From the biological perspective, there is the neuroscientific posture, which has linked Internet addiction with changes in neuronal connectivity and in the structure and functioning of the brain [34,35]. The cognitive-behavioral posture explains addiction as maladaptive cognitions, amplified by environmental factors, with a tendency in certain individuals with some psychological dispositions and social experiences. The socio-cognitive theory postulates that it arises from the expectation of positive results, combined with self-efficacy and a poor self-regulation of the proper use of the Internet [36]. These positions, like other explanations from different perspectives, can be complemented to better understand the Internet addiction.

As the years pass, there will also be more technological advances. Accordingly, the prevention of pathological behaviours related to technological addictions should be prioritized. [37]. However, it is important to clarify that the use of technology should not be taken as something inherently harmful, since it offers benefits that can be related to positive aspects or protective factors. Therefore, the priority of cyberpsychology should be the promotion of the healthy use of technology [37]. In addition, the approach to intervention and prevention should also be prioritized in the negative psychological aspects that have been related to addictive behavior, since addiction could only be a symptom of another underlying condition, such as depression.

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