New consumption trends in the use of social networks and video games, problematic consumption, and the phenomenon of online gambling

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ABSTRACT

The inappropriate use of electronic devices can affect the psychological and physical health of children and adolescents. Therefore, it is essential to accompany them and promote media literacy to ensure a healthy and responsible use of technology. On occasions that depend on a multifactorial complex, the inappropriate use of networks can trigger problematic consumption and seriously affect the lives of young people. In 2022, the World Health Organization recognized, through ICD-11, the addiction to video games and used the term “problematic use” for the Internet and social networks.

This article attempts to update professionals on new trends in the consumption of social networks, video games, and online gambling platforms and their consequences on the psychophysical well-being of children and adolescents.

Keywords: social network; adolescent; problem behavior; addictive behavior.

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INTRODUCTION

It is essential to understand that the new generations are immersed since birth in the digital culture (digital natives), and this implies multiple challenges and opportunities.1,2

Play spaces, bonding, and quality interactions with primary caregivers and the environment are essential for optimal child development. However, the supply of devices at an early age can hinder these opportunities. As children grow up immersed in audiovisual and digital culture, they evolve into multimedia, active protagonists and develop natural and intuitive usage skills. In this process, the accompaniment and example of their caregivers are essential.3,4

At the same time, digital literacy is essential to strengthening the appropriation and acquisition of the tools necessary to develop critical thinking, problem-solving, content production, and expression, which will result in responsible and healthy use.4,5

The theory of uses and gratifications describes the motivations for consumption: search for information, entertainment, interpersonal relationships, identification, and surveillance of the environment. Young people in the networks identify themselves, interrelate, and experience the fear of missing out, which keeps them connected. They also shape their digital identity, leaving traces, and everything happens "through the gap" away from the adult's gaze.6

Regarding technologies, the term "use" is used when the time, frequency, and mode of use do not have negative repercussions. In contrast, "abuse/inappropriate use" generates negative consequences, whether due to time, frequency, or type of use.

On the other hand, "problematic consumption" is understood as all those that negatively affect, occasionally or over time, the subject's physical and psychological health and social relations and can even trigger problems with the law. It should be clarified that not all problematic consumption is an addiction, but all addictions begin as problematic consumption.

This narrative review aims to update professionals on the new consumption trends of children and adolescents regarding technologies and their consequences for psychophysical well-being.

METHOD

We consulted about the subject's presence in databases such as PubMed Central and Scielo during the last five years. The search keywords were "social networks", "adolescent", "problem behavior", and "addictive behavior".

ADDITIONS AND ADOLESCENCE

The concept of addiction implies a primary, chronic, neurobiological disease with genetic, psychosocial, and environmental factors influencing its manifestations. It is characterized by behaviors that include one or more problems in the control of substance use and compulsive and persistent use despite the harm they produce; craving triggers both physical and psychological dependence.7

However, this concept is not limited to the abuse of psychoactive substances; there are also apparently harmless behavioral habits that can trigger behavioral addictions.8-11 Behavioral addictions share the clinical characteristics of substance addictions:10-12

1. Prominence: activity dominates thoughts, feelings, and behaviors (social impairment).
2. Mood changes: related to consumption.
3. Tolerance: increase consumption is needed to obtain the same effects.
4. Abstinence: unpleasant physical and psychological manifestations upon discontinuation of consumption.
5. Conflicts: intrapersonal loss and interpersonal, neglect of other activities due to interference.
6. Relapses: after periods of abstinence or control.

The American Psychiatric Association, in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (2013), includes Internet gaming disorder in the section of conditions requiring further study and does not contemplate addiction to the Internet and new technologies.8 However, the World Health Organization (2022) recognizes video game addiction in the group of non-substance addictions. It suggests using the term "problematic use" about the Internet and social networks. Problematic use of the Internet also presents tolerance, abstinence, and dependence.

Although there is a genetic component associated with a multifactorial psychosocial complex that determines addictions, the intense stimuli produced by interactions in networks, video games, or gambling, which trigger the release of dopamine in the brain, a neurotransmitter linked to pleasure and instant gratification, are of great relevance.13

This mechanism is the neurobiological basis
of behavioral repetition in addictive behaviors. It is activated by actions, decisions, and strategies developed in video games, network interactions, and gambling. It is related to associative learning and positive reinforcement of pleasurable emotions.\textsuperscript{13}

This behavior involves the consumption of positive reinforcement (pleasant consequences) or negative reinforcement (unpleasant consequences) to avoid withdrawal symptoms.\textsuperscript{13}

Adolescence is a highly vulnerable stage, where young people who go through situations related to lack of support, socio-affective alterations, school failure, situations of violence and exclusion, excessive competition, a feeling of existential emptiness, and poor self-esteem are at greater risk of developing addictive patterns.\textsuperscript{8}

The adolescent brain is characterized by a greater sensitivity to rewards and a lower capacity for impulse control; this condition exposes them to risks.\textsuperscript{14}

In a longitudinal study, repeated exposure to digital social rewards in early adolescence was shown to increase neural reactivity and reduce impulse avoidance.\textsuperscript{14}

Concerning the problematic use of technologies, research reveals that there are associations with specific comorbidities: anxiety, depression, attention deficit, hyperactivity disorder, and obsessive-compulsive disorder, which explain compulsive behaviors.\textsuperscript{15}

Interventions are oriented towards learning self-control of behaviors, changes in habits, and planning of free time.\textsuperscript{16}

Some studies confirm improvements after the detoxification period, both in mood and sleep, as well as in the reduction of anxiety.\textsuperscript{17}

**VIDEO GAME ADDICTION**

The World Health Organization includes in the ICD-11 as a preventable and treatable disease-video game addiction among mental disorders in the category of substance use or addictive behaviors.\textsuperscript{18}

The actions, decisions, and strategies the player develops in video games activate the dopaminergic reward circuit. This generates compulsive play patterns triggered by the intensity of the stimuli and the immediate pleasurable response.\textsuperscript{13}

**Characteristics**

1. A pattern of persistent or recurrent compulsive playing of digital or video games, online or offline (apps), that causes impairment in other domains (personal, family, social, academic, and work), including loss of control over the time, duration and context of the game, and the prominence of this activity over other activities.

2. Activity continues or increases despite negative consequences: stress, aggressiveness, irritability, tics, social isolation, emotional disturbances, poor academic performance, poor attention, psychophysical disturbances, and suicidal tendencies.

3. It must manifest itself for at least twelve months; this period may be shortened if symptoms are severe.

A systematic review conducted in Japan provides prevalence data ranging from 0.7\% to 27.5\%, especially in males. It also explains that these behaviors are more stable among adolescents than adults, although methodological differences make comparisons difficult. As associations, the following describe behavioral (impulsivity, hyperactivity) and psychological alterations as consequences: social isolation, school failure, and fatigue.\textsuperscript{19}

A multicenter study conducted by UNICEF in Spain to learn about the impact of technologies on adolescents (40,000 young people between 11 and 18 years of age) reveals that the average time of use for entertainment purposes is 7 hours a week and that 4.4\% play more than 30 hours a week. According to data obtained through the Game addiction scale for adolescents, the addictive pattern is presented in 3.1\% of young people (especially males).\textsuperscript{20}

Knowing these problems allows us to intervene within the framework of guaranteeing children’s rights in the virtual world.\textsuperscript{21}

**ONLINE GAMBLING**

They represent a growing problem among teenagers. The sites proliferate online through casino platforms, sports betting, and virtual lotteries.

According to the *Survey on Drug Use in Secondary Education* in Spain, the age of onset of gambling with money, in the face-to-face modality, is 14.6 years old, and online, at 15 years.\textsuperscript{22}

This phenomenon increased during the pandemic and continues to grow due to media advertising, social media promotion (streamers, YouTubers, TikTok, celebrities, and influencers), and sponsorship of soccer teams. In addition, companies offer bonuses and rewards to increase...
their reach.

Young people have easy access through payment methods, such as virtual wallets, enabled by their caregivers for everyday expenses. The dynamic for access requires accessing the page or downloading the application, uploading data and payment methods, and contacting via chat to upload the tokens.

In Argentina, gambling is legal from the age of 18. To gain access, adolescents usually falsify data and provide documentation with information from an adult. There is still no national law on online gambling; in practice, the activity is not regulated, and access data is not verified.

Online gambling becomes problematic when it is performed on a recurrent basis. Digital pathological gambling is the uncontrollable urge to bet or gamble despite the loss of money and its negative consequences in all areas (personal, family, social, academic, and work).

A study on the pattern of play in 7,265 young people (15 and 19 years old) reveals that sports betting is the most frequent and that the prevalence of online gambling addiction in adolescents is higher than that of the general population for gambling disorders, which is 0.72%.23

Let us consider that an epidemic is a health problem that develops due to an external agent that affects a part of the population at a given time and spreads rapidly. There is currently an epidemic of online gambling addiction. The main consequences are anxiety, mood swings, social isolation behaviors, suicidal ideation, depression associated with loss of interest in other activities, compulsive use patterns, financial problems, and cheating.24

Cybergambling treatment implies a challenge that must include media literacy, therapy, and family support. It is doubtful that adolescents will refrain from using the Internet, so it is a priority to accompany them in achieving responsible and critical digital citizenship. The biggest obstacle to combating these problems is easy access, associated with the lack of effective regulations.24

RECOMMENDATIONS AND SUGGESTIONS FOR FAMILIES24,25

• Accompanying children and young people in digital environments.
• Setting up parental controls and arranging the devices in common areas may be helpful.
• Establish intra-family agreements with clear limits for the whole family.
• Pay attention to behavioral changes and, if necessary, consult a professional.
• It is advisable to get involved in configuring profiles (privacy options, security), reading terms and conditions, messaging options, and notifications.
• Educate about risks, such as misleading advertising, false and inappropriate content, challenge accidents, identity theft, fraud, and cyberbullying.
• Promote a balance between sleep, physical activity, and technology use.
• Stimulate other activities, such as social and sports activities.
• Establishing prevention actions to reach the most vulnerable young people is essential to avoiding digital dependence. For more information on problematic consumption in Argentina, consult Law 26934 Integral Plan for Addressing Drug Abuse Problematic (IACOP Plan, by its acronym in Spanish).24

CONCLUSIONS
Families should look for behavioral changes in children and youth, compulsive patterns when playing and interacting online, interference with other activities, or financial difficulties. In such cases, consulting a professional as soon as possible is advisable.

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