

## Playing the wrong game again? Policy responses to problematic video gaming in Brazil

*Commentary on: Policy responses to problematic video game use: A systematic review of current measures and future possibilities (Király et al., 2018)*

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Brazil is the leading game market in South America and the second leading market in Latin America. Worldwide, Brazil ranks fourth in number of gamers, with nearly 66.3 million gamers. In the last years, there has been a significant and progressive concern about the negative consequences of video gaming overuse, but no population-based study has estimated the prevalence of problematic gaming in Brazil. There is also no public policy aimed at reducing risk and harm of problematic gaming. Drawing a parallel between gaming and alcohol policies, we discuss some alternatives to address this challenging situation.

**Keywords:** Brazil, problematic gaming, public policies, prevention

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### INTRODUCTION

About 10 years ago, well-known Brazilian researchers published an editorial drawing attention to the paucity of policy-making experience and research into alcohol policies to face alcohol-related problems, which they compared to the myth of David fighting the giant Goliath (Pechansky, Pinsky, & Laranjeira, 2006). The researchers stated that, in the real world, David would lose this battle in Brazil, and they were right.

Currently, Brazil has one of the highest prevalence rates of alcohol-related disorders (Caetano, Madruga, Pinsky, & Laranjeira, 2013). Data from the latest national survey on alcohol and drug use, conducted in 2012, show an increase in the amount and frequency of alcohol consumption among the alcohol users compared with the first survey, conducted in 2006. Also important is the reduction in the age at first alcohol use, i.e., an increased number of adolescents first consumed alcohol before the age of 15 years, violating the minimum drinking age law, which prohibits alcohol consumption for those younger than 18 years of age. In addition, there was an increase in early regular alcohol consumption (Caetano, Mills, Madruga, Pinsky, & Laranjeira, 2015). Alcoholism is the third leading cause of work absenteeism and the leading cause of occupational accidents in Brazil. This condition also leads to granting of disability pension, school and work delays, decreased productivity, and interpersonal conflicts (Ally et al., 2016; Branco, Mascarenhas, & Pena, 2009; Carlini, 2006).

The present commentary aims to shed more light on the very interesting systematic review published by Király et al. (2018) on policy responses to problematic video game use worldwide. As emphasized by the authors, video gaming has become one of the most popular leisure time activities across both genders and all age groups, while a minority of gamers play so excessively that it may lead to negative consequences. Comprehensively, analyzing and presenting the existing health policy strategies to fight problematic gaming behavior is very important to help clarify possible mechanisms and targets for intervention, especially when facing a phenomenon that the authors very properly address as complex and multifaceted. Although video gaming is not usually associated with the negative consequences of alcohol use, we would like to draw a parallel between potential mental health consequences relating to problematic video game use and alcohol-use problems in Brazil, as well as to investigate the existence of policies addressing the risks of problematic video game use.

Brazil, like other low- and middle-income countries (LAMIC) in Latin America, has undergone a period of major technological transition over recent years. In less than a decade, the number of Internet users has nearly doubled in Brazil, accounting for 61% of the population

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in 2016, which corresponds to 107.9 million individuals (Brazilian Internet Steering Committee, 2017). Brazil is the leading game market in South America and the second leading market in Latin America (with Mexico ranking first). Worldwide, Brazil ranks 13th among the countries that generate the most income in this sector. However, more important and useful for public health is the fact that Brazil ranks fourth in number of gamers, with nearly 66.3 million gamers (NewZoo, 2017).

According to the Brazilian Media Study (SECOM, 2015), 65% of Internet users aged 16–25 years access the web on a daily basis for an average of 5 hr. In line with these data, other national school and household surveys, although not assessing problematic use as an outcome, have also shown that 60%–80% of Brazilian young people spend more than 2 hr a day in front of a computer, game console, or TV screen (Bergmann et al., 2016; Oliveira et al., 2016). A nationwide market survey conducted annually in Brazil indicates that parents are becoming increasingly aware of the possible risks of excessive gaming by their children. In the past three surveys, there was a significant and progressive increase in the number of parents concerned with and attempting to control how much time their children spend playing games (Sioux, Blend New Research, & ESPM, 2017). In this scenario, it is of concern that, to date, no population-based study has estimated the prevalence of problematic gaming in Brazil.

It is important to note that mental health problems affect 10%–20% of children and adolescents worldwide, and that almost 90% of the world's population of children and adolescents live in LAMIC (Kieling et al., 2011). Because of the large number of risk factors associated with poverty and other psychosocial stressors, such as violence, young people in LAMIC may be particularly vulnerable to psychopathologies, including addiction (Cook, Bond, & Greenfield, 2014; Lund et al., 2011). It is also worth noting that investment in mental health is usually <1% of the annual health budget in LAMIC, leaving a significant “treatment gap” due to insufficient human resources and poor delivery of health services from an already unequally distributed health at onset (Sharan, Levav, Olifson, de Francisco, & Saxena, 2007). A multicenter study on the use of child and adolescent mental health services in Brazil showed that only <20% of children and adolescents with psychiatric disorders had access to treatment services in the previous 12 months, with a decreased likelihood of obtaining mental health care among those living in deprived areas (Paula et al., 2014).

Another problem in LAMIC is the dearth of effective mental health information systems. Without high-quality data, adequate and strategic decision-making to improve mental health systems is likely to be based on ideological grounds rather than on scientific evidence, and the impact of mental health policies will remain unclear (Lora & Sharan, 2015). Because of political, socioeconomic, and cultural differences, extrapolating evidence of effective interventions from high-income countries to LAMIC may not be an easy task. Moreover, the generalizability of this information may be particularly more complicated in complex externalizing behavior problems, such as those with the diagnosis still in doubt (Klasen & Crombag, 2013).

Király et al. (2018) also address the topic of acceptance of regulatory strategies in different countries. In this respect, Brazil has fewer authoritative policies than Eastern countries, while delivering less organized and effective actions than the developed Western countries. Historically, there has been strong resistance to accepting evidence-based initiatives with long-term benefits that, at first glance, may seem to limit individual freedom. Deprivation of liberty and censorship over 20 years of violent military dictatorship has led to a skeptical view of government regulatory and control measures.

Over the past years, the Brazilian press has played an important role in calling the attention of the society to problematic gaming and its detrimental effects on children, adolescents, and adults, but usually in an alarming tone. Recently, the scientific community has also become more aware and supportive of studies in this field. Instrument validation studies have been published in Portuguese (Lemos, Conti, & Sougey, 2015), and others are currently in the process of validation. Internet addiction and smartphone addiction, but not Internet gaming disorder, are the main focus of the few case studies and one clinical trial that have been published to date (Santos et al., 2016). The National Institute of Developmental Psychiatry for Children and Adolescents is currently conducting a cohort study designed to examine the developmental trajectories of mental disorders, and one of the areas of interest is technology use and addiction (Salum et al., 2015). This issue has also been widely discussed in most meetings and congresses of psychiatry and psychology in recent years, and has gradually been incorporated into the curriculum of some psychiatry residency programs. Access to clinical assessment and treatment of technology addiction in Brazil are limited, being available only in a handful of institutions, mostly university hospitals in the states of São Paulo and Rio de Janeiro. There are no specific inpatient units or camp treatment for problematic gaming in Brazil, and primary health care units do not have specific programs for the prevention or treatment of this condition and its related health problems.

Government efforts to regulate Internet use seem to focus only on developing legal mechanisms to ensure Internet neutrality and promote digital inclusion (both of which we acknowledge as extremely important). The 2014 Brazilian Civil Rights Framework for the Internet defines the rights and responsibilities of those who access the Internet, but it has not considered the health implications of excessive Internet use or gaming (Brazil, 2014). There is currently no public policy in Brazil aimed at reducing risk and harm of problematic gaming.

## THE NEXT LEVEL

Given the low availability of human and financial resources and the significant treatment gap, some preventive strategies reported by Király et al. (2018) may be particularly promising in LAMIC, such as Brazil. For example, the Brazilian media content rating system (including the content of games and other entertainment media) has been shown to be up-to-date and in line with international strategies (Xavier & Macedo, 2012). Adding information on the risks of video

game overuse to the existing framework may be a simple and economic measure to raise public awareness of this issue.

Brazilian gaming industry is on the rise, and a number of policies are being jointly developed by the public and private sectors to stimulate the development of this industry (Ministério da Cultura, 2015). Since the government has established partnerships with several sectors of the gaming industry, strategies to protect the youth from gaming-related harm should also be part of this joint agenda. However, it is challenging to consider the development of regulatory strategies that do not affect gaming experience for those who do not play in a problematic or at-risk way.

Epidemiological research to estimate the prevalence of problematic gaming, as well as its association with other physical and mental health conditions and its cost to health services, should be a priority if we wish to have public policies based on solid scientific evidence. However, improving mental health information systems to obtain high-quality data is expensive and time-consuming. While considering the implementation of innovative strategies, we also need to mobilize the scientific community and the various sectors of society to advocate for such an important action. Simultaneously, although it may be risky to invest the already scarce resources in projects with no evidence of effectiveness, we cannot just sit around waiting for the changes. In order to prevent a wave of burden of disease (Goliath) from arriving, we need to immediately formulate and implement political actions that address the problematic gaming.

Therefore, in order to level up (i.e., promoting a safer use while maximizing the benefits of this extremely interesting and popular activity), we need that many highly engaged players, as conscious and clever as David, join efforts, in a persistent and interactive process, to gain experience and find a way to face these challenges. That would be the right game in implementing these policies in Brazil.

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