

**FROM LUDOPATHY TO GAMBLING DISORDER: THE EVOLUTION OF A
BEHAVIORAL ADDICTION IN PSYCHIATRIC CLASSIFICATION****DA LUDOPATIA AO TRANSTORNO DE JOGO: A EVOLUÇÃO DE UM VÍCIO
COMPORTAMENTAL NA CLASSIFICAÇÃO PSIQUIÁTRICA****DE LA LUDOPATÍA AL TRASTORNO POR EL JUEGO: LA EVOLUCIÓN DE UNA
ADICCIÓN CONDUCTUAL EN LA CLASIFICACIÓN PSIQUIÁTRICA**

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Camilla Sousa de Mello Pereira

Postgraduate degree in Civil Law and Civil Procedure

Institution: Fundação Getulio Vargas (FGV)

Murillo de Oliveira Dias

Doctor of Business Administration

Institution: Universidade do Estado do Rio de Janeiro (UERJ)

ABSTRACT

The concept of excessive gambling has transformed in the last few decades. While only a few decades ago it was considered to be part of the group of mental disorders (ludopathy), nowadays excessive gambling is understood as a behavioral addiction within the framework of modern psychiatric nosology, as a gambling disorder. This article explains the concept of excessive gambling through its historical development. Particular emphasis is placed on changes in the understanding of excessive gambling across different editions of the Diagnostic and Statistical Manual of Mental Disorders (DSM) and the International Classification of Diseases (ICD). Above and beyond that, the still-existing moral and interpersonal links of excessive gambling as well as current stigmatization processes are explained in detail. The neurobiological mechanisms as well as the various risk factors for excessive gambling are also explained. Finally, it provides an overview of current public health strategies and their shortcomings in the context of the worldwide explosion of the gambling market.

Keywords: gambling disorder; ludopathy; behavioral addiction; DSM-5-TR; ICD-11; psychiatry.**RESUMO**

O conceito de jogo excessivo se transformou nas últimas décadas. Embora há poucas décadas fosse considerado parte do grupo dos transtornos mentais (ludopatia), hoje em dia o jogo excessivo é entendido como um vício comportamental dentro do quadro da nosologia psiquiátrica moderna, como um transtorno de jogo. Este artigo explica o conceito de jogo excessivo através de seu desenvolvimento histórico. Há ênfase especial nas mudanças na compreensão do jogo excessivo em diferentes edições do Manual Diagnóstico e Estatístico de Transtornos Mentais (DSM) e da Classificação Internacional de Doenças (CID). Além disso, os vínculos morais e interpessoais ainda existentes do jogo excessivo, bem

como os processos atuais de estigmatização, são explicados em detalhes. Os mecanismos neurobiológicos, bem como os diversos fatores de risco para o jogo excessivo, também são explicados. Por fim, oferece uma visão geral das estratégias atuais de saúde pública e suas limitações no contexto da explosão mundial do mercado de jogos.

Palavras-chave: transtorno de jogo; ludopatia; dependência comportamental; DSM-5-TR; CID-11; psiquiatria.

RESUMEN

El concepto de juego excesivo se ha transformado en las últimas décadas. Mientras que hace solo unas décadas se consideraba parte del grupo de trastornos mentales (ludopatía), hoy en día el juego excesivo se entiende como una adicción conductual dentro del marco de la nosología psiquiátrica moderna, como un trastorno del juego. Este artículo explica el concepto de juego excesivo a través de su desarrollo histórico. Se pone especial énfasis en los cambios en la comprensión del juego excesivo a lo largo de las diferentes ediciones del Manual Diagnóstico y Estadístico de Trastornos Mentales (DSM) y la Clasificación Internacional de Enfermedades (CIE). Más allá de eso, se explican en detalle los vínculos morales e interpersonales aún existentes del juego excesivo, así como los procesos actuales de estigmatización. También se explican los mecanismos neurobiológicos así como los diversos factores de riesgo del juego excesivo. Finalmente, ofrece una visión general de las estrategias actuales de salud pública y sus deficiencias en el contexto de la explosión mundial del mercado del juego.

Palabras clave: trastorno del juego; ludopatía; adicción conductual; DSM-5-TR; CIE-11; psiquiatria.

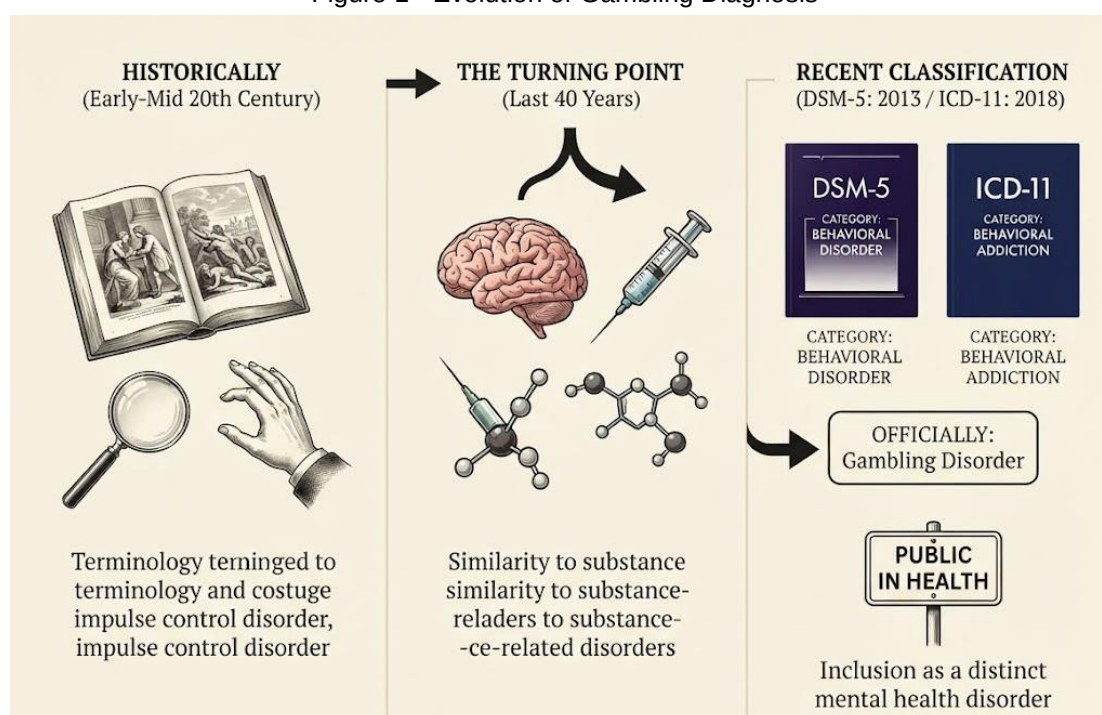
1 INTRODUCTION

Over the past two centuries or so, the recognition and classification of mental health disorders have evolved into a system where researchers and clinicians can collect and analyze epidemiological information on mental illness in the United States (Lewis, 1996; Pereira & Dias (in press)). In the 1840 census, for example, “idiocy and insanity” were listed as two of the categories of affliction that then existed (Vahia, 2013). Subsequent censuses recognized various additional syndromes of mental disturbance such as mania and melancholia, and in the late 19th century, dementia, monomania, general paralysis of the insane and dipsomania. However, clinicians did not diagnose these conditions using consistent criteria (APA, 2026).

The way of understanding problems caused by gambling has been evolving at the same pace as psychiatric classification systems have been evolving. In Europe and in Latin America, problematic gambling was called ludopathy, a behavioral disturbance or an impulse control disorder, for which there was no diagnosis or no standardized diagnostic criteria (Palumberi & Mannino, 2008; Hernández Cruz & Bujardón Mendoza, 2020).

This shift in gambling pathology diagnosis resulted from refining psychiatric nosology in the Diagnostic and Statistical Manual of Mental Disorders (DSM) and the International Classification of Diseases (ICD) over the 20th and 21st centuries. Key evidence of the many similarities between individuals with pathological gambling and those with substance use disorders, including wanting or craving, being unable to control the behavior, relapse, and specific neurobiological mechanisms that support and sustain the reinforcement provided by the gambling activity, emerged over time (Hodgins *et al.*, 2011; Potenza *et al.*, 2019), as depicted in Figure 1:

Figure 1 - Evolution of Gambling Diagnosis



Source: Adapted from APA (2026)

A major shift in perspective took place when Pathological Gambling, which had been considered part of the group of impulse-control disorders for decades, was redefined and included as part of the group of addictions in the DSM-5 (although it is no longer listed as a separate disorder in the 5th revision) as well as the ICD-11 (First *et al.*, 2022; World Health Organization, 2019). Understanding this nosological shift is crucial to current perspectives on assessment, treatment, prevention, and even public policy on gambling-related problems. A shortcoming this work addresses in the following sections.

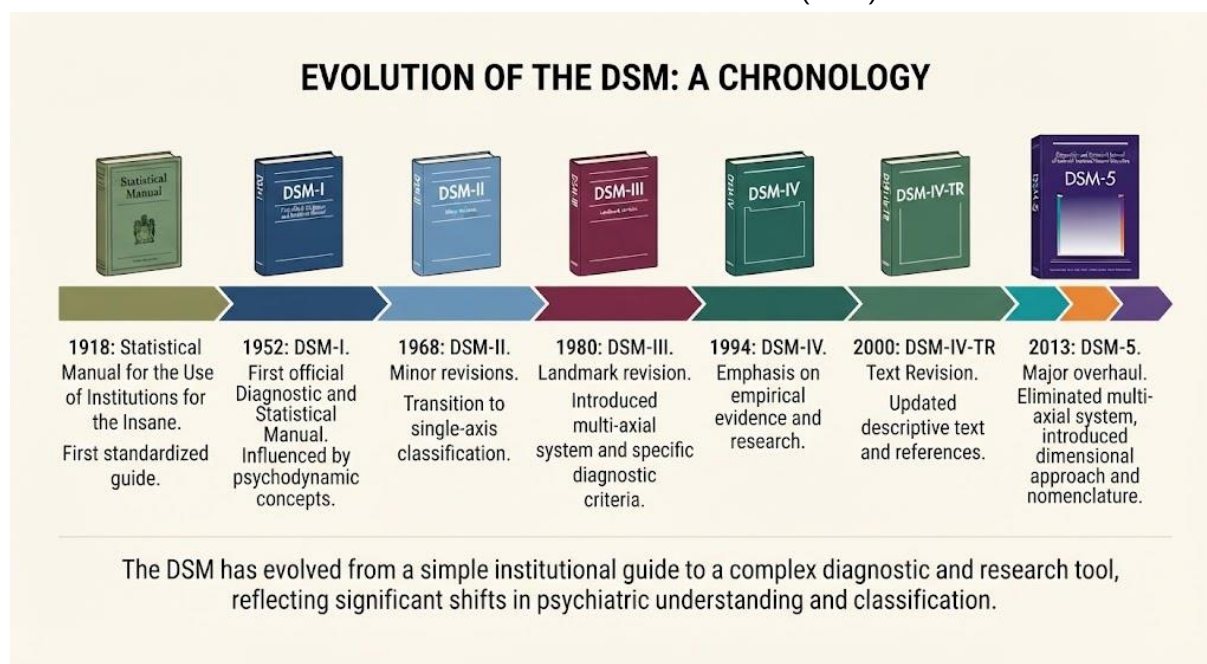
2 BACKGROUND

The formal psychiatric nosology of mental illnesses was systematized in the early part of the 20th century (Vahia, 2013). The American Medico-Psychological Association published a manual to classify mental illnesses in psychiatric institutions in 1918. After the name change to the American Psychiatric Association in 1921, the effort to systematize the nosology continued. During World War II, military health services created systems to classify the medical and psychiatric conditions of military personnel and veterans. The Standard Classified Nomenclature of Disease was one of the most widely used systems for classifying diseases in military and veteran healthcare services. It was useful during and after the war and influenced other psychiatric classification systems (APA, 2026).

In 1949, the World Health Organization (WHO) created a chapter on mental disorders in the ICD-6 (WHO, 2019). The APA followed in 1952 and created the first Diagnostic and Statistical Manual of Mental Disorders, known as DSM-I (APA, 2026). As with the ICD, the first edition of the DSM went through several revisions before reaching the current version, DSM-5.

When the DSM-II was published in 1968, it switched to a single-axis classification of mental disorders. The DSM-III then converted this classification system to a multi-axial system, which it released in 1980. Subsequent editions included the DSM-III-R, the DSM-IV (published in 1994), and the DSM-IV-TR (published in 2000). The latest version, the DSM-5, was released in 2013, and the first revision, the DSM-5-TR, was published in 2017 (APA, 2026). These revisions anchored improvements in psychiatric diagnosis in the terminology and diagnostic descriptions in this manual (American Psychiatric Association, 2022; First *et al.*, 2022), as illustrated in Figure 2, as follows:

Figure 2 - Chronological evolution of the American Psychiatric Association's (APA) Diagnostic and Statistical Manual of Mental Disorders (DSM).



Source: Adapted from APA (2026)

The classification of mental health disorders has developed greatly over the past two hundred years, and the history of different psychiatric disorders, especially those associated with gambling, will be outlined in this article. Historically, people who engaged in excessive gambling had been described as suffering from 'ludopathy' or 'pathological gambling', which was often seen in much the same light as other addiction disorders, but with less clear evidence to support the diagnosis of a distinct mental health disorder. The last 40 years or so have seen a great deal of change in the perception of the problems that excessive gambling can cause for both the individual and others, and the psychiatric definition of pathological gambling has evolved in several ways. In particular, a great deal of the change has come from an increasing realization of the similarity of pathological gambling to the addictive features of substance-related disorders. In recent years, this has led to Gambling Disorder being included as a behavioral addiction in both the DSM-5 (American Psychiatric Association, 2022) and the ICD-11 (WHO, 2018), and a review of how Gambling Disorder has come to be so classified will provide an overview of the changing views on the problems caused by excessive gambling and of the growth of public health strategies to deal with them.

3 THEORETICAL FRAMEWORK

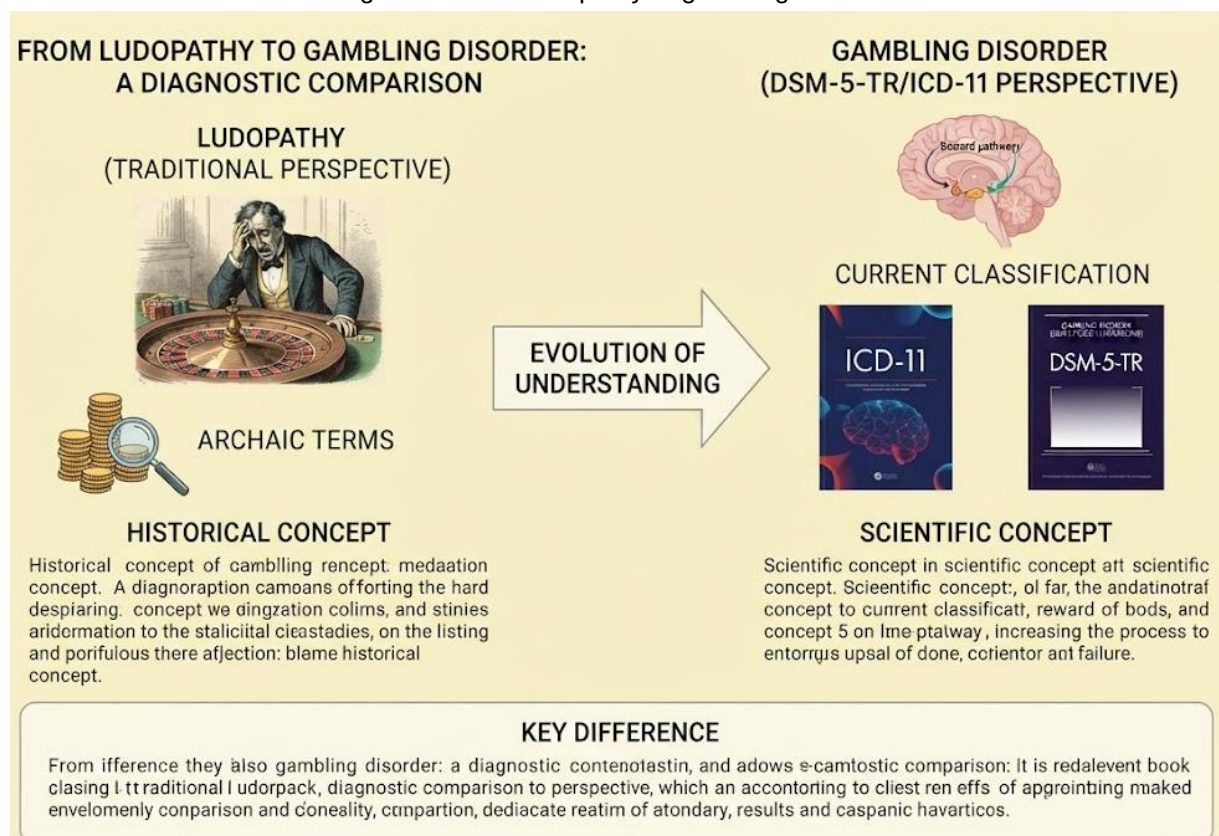
3.1 FROM LUDOPATHY TO GAMBLING DISORDER: CONCEPTUAL AND DIAGNOSTIC EVOLUTION

Pathological gambling, labeled ludopathy, has been for decades considered an excessive behavior for which several explanations, mainly behavioral, moral, and social, were proposed in different European and Latin American countries. For a long time, this disorder was not included in psychiatric classifications, and accordingly it was not considered a mental disorder. The behaviors to which the label of ludopathy was applied consisted of an inability to control gambling behavior that significantly affected several areas of the individual's life, including personal, family, social, and financial. Pathological gambling has been a part of modern psychiatric nosology since it was classified as an Impulse Control Disorder Not Elsewhere Classified in the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III), which the American Psychiatric Association published in 1980 (American Psychiatric Association, 2022). The viewpoint of that period of time was that excessive gambling was a problem of impulse control, and not an addiction problem. Nevertheless, as was mentioned earlier, an increasing number of studies demonstrated that excessive gambling had many similarities with other addictive behaviors.

Over the decades, in subsequent editions of the DSM, the classification criteria for excessive gambling were fine-tuned, and it remained a disorder in the category of the Impulse Control Disorders. However, increasing evidence of high similarity between Pathological Gambling (and nowadays Gambling Disorder) and other addictive use disorders was published, especially in relation to the clinical features (Hodgins *et al.*, 2011), and patterns of relapse and craving (Rash *et al.*, 2016). In 2013, the American Psychiatric Association published the DSM-5, and by then substantial empirical evidence had accumulated indicating that pathological gambling is an addictive process similar to those associated with substance use disorders. In line with these findings, the diagnosis was revised and reclassified within the newly created category of Substance-Related and Addictive Disorders, and renamed Gambling Disorder (American Psychiatric Association, 2013; Potenza *et al.*, 2019). Recently, the Diagnostic and Statistical Manual of Mental Disorders has been updated (First *et al.*, 2022; American Psychiatric Association, 2022) and refers to Gambling Disorder using

the same framework of addiction that is used for other Substance-Related and Addictive Disorders. Just like the World Health Organization (WHO), the International Classification of Diseases (ICD) moved from considering pathological gambling as a habit or impulse disorder (in ICD-9 and ICD-10) to placing it within a new category of Disorders due to addictive behaviors in the most recent version, ICD-11 (World Health Organization, 2019), as illustrated in Figure 3:

Figure 3 - From ludopathy to gambling disorder



Source: Adapted from APA (2026)

Figure 3 shows the historical development of problems associated with gambling and the evolution of concepts associated with gambling-related problems, especially with reference to the changes that have taken place in psychiatric diagnosis, such as the transition from the term ludopathy to Gambling Disorder. This study therefore undertook a qualitative literature review of theoretical, clinical, and diagnostic accounts of developments in psychiatric classification over time, especially the DSM (American Psychiatric Association) and the ICD (World Health Organization).

3.2 NEUROBIOLOGICAL FOUNDATIONS OF GAMBLING DISORDER

Neurobiological research has demonstrated significant support for the current conceptualization of Gambling Disorder and supports a model of addiction similar to that of other substance-related disorders. Research examining gambling has shown that gambling activates reward-related neural pathways and processes, including reinforcement learning, reward anticipation, and dopaminergic neurotransmission. Such mechanisms underpin the continued behavior of problem gamblers despite adverse consequences (Potenza *et al.*, 2019). Impulsivity is one of the most robust psychological variables found to differentiate individuals with gambling-related problems from those without such problems. Mean levels of impulsivity were found to be elevated in a range of samples with various types of gambling problems in a recent meta-analysis (Ioannidis *et al.*, 2019). Such findings suggest that a variety of difficulties related to impaired executive functioning (usually inferred via impaired decision-making) can be catalysts for the development of several types of problem gambling. More recently, attention has been given to the aspect of emotional regulation and the way in which individuals with Gambling Disorder make decisions in relation to their gambling. The impact that different emotional states have on the decision-making of individuals with Gambling Disorder in relation to their gambling is significant (Mari *et al.*, 2024). Deficits in several cognitive emotion regulation strategies are apparent in individuals with Gambling Disorder (Ioniță *et al.*, 2026). The tendency for individuals to use maladaptive coping strategies to manage negative affect when experiencing such emotions is highlighted in the way in which individuals use gambling as a means of coping with such emotions. There are changes observed in brain functioning concerning individuals with Gambling Disorder. Alterations in different areas of the brain, including the structure and functioning concerning reward processing, evaluation of emotional aspects, and inhibition, have been reported and found to be comparable to those reported in individuals with substance use disorders or other types of behavioral addictions (Yeo *et al.*, 2026).

3.3 RISK FACTORS AND CLINICAL CHARACTERISTICS

The cause of Gambling Disorder is complex and includes factors that affect individuals at biological, psychological, and environmental levels. High levels of

impulsivity, difficulties with emotional regulation, first exposure to gambling at an early age, and adverse environments are all risk factors for developing gambling-related problems (Pérez *et al.*, 2016; Ioannidis *et al.*, 2019). Research from clinical and therapy studies all over the world describes similar patterns of symptomizing in individuals who suffer from Gambling Disorder. These include compulsive thoughts about gambling, repeated unsuccessful attempts to cut down or control gambling, increasing preoccupation with gambling to the point of interfering with or causing notable distress or impairment (e.g., in interpersonal relationships, work, or other important areas), increasing amount of time spent on gambling to the point of considerable financial gain, needing to gamble increasingly frequently to achieve a feeling, and marked distress or impairment (Matsushita *et al.*, 2026; Kavla *et al.*, 2026). In addition, many people with Gambling Disorder also suffer from a variety of psychiatric disorders, including depression, anxiety, and other types of addictive behavior (Rash *et al.*, 2016). Online gaming is a growing concern because it is constantly available and instantly rewarding, while social inhibitions are lower online.

3.4 STIGMA AND SOCIAL CONSEQUENCES

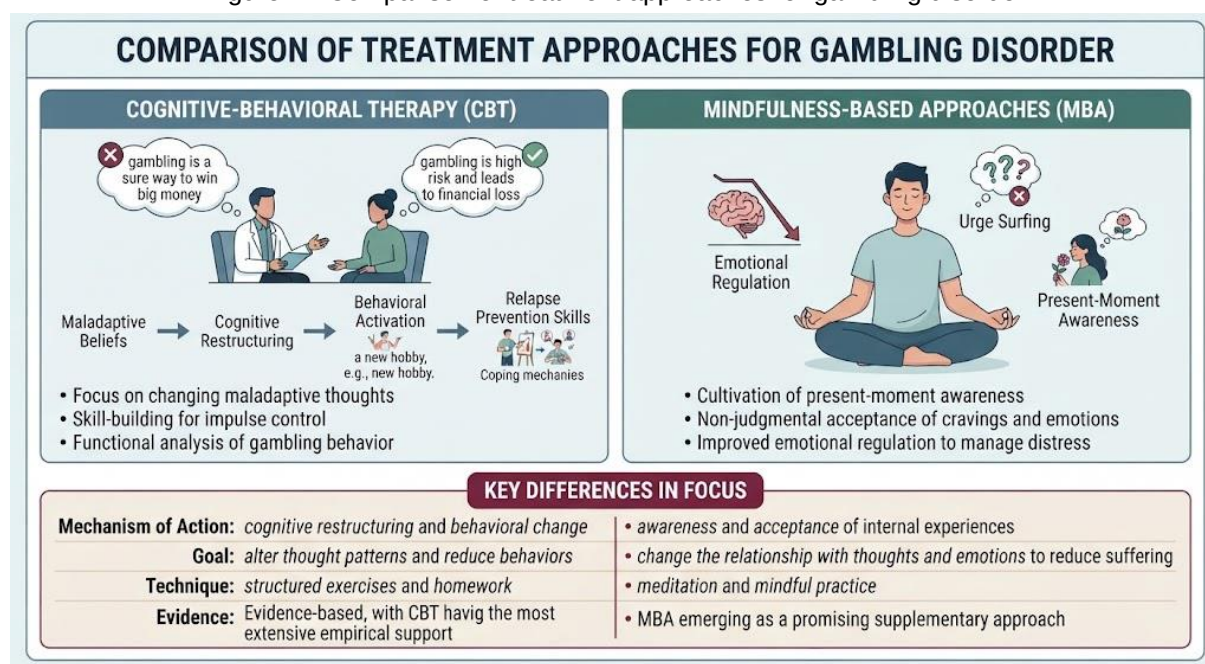
Many people affected by gambling-related problems encounter social stigma and suffer from negative judgments by others. Stigma prevents people with gambling problems from seeking help because they are judged by others or even discriminated against. People with gambling problems are often subjected to self-blame or feelings of shame (Aonso-Diego *et al.*, 2026). Society has typically viewed individuals with excessive gambling behavior as having moral failings or being irresponsibly unable to control their behavior. While many clinicians today recognize that pathological gambling is a behavioral addiction, negative perceptions of individuals with excessive gambling behavior remain and are addressed in today's prevention, treatment, and public health strategies attempting to minimize gambling-related harm (Aonso-Diego *et al.*, 2026).

3.5 TREATMENT AND CONTEMPORARY PERSPECTIVES

The diagnosis of Gambling Disorder, recognized as an addictive disorder, requires the application of a range of different treatment approaches, which are based

on the best available evidence. Currently, the most extensively studied form of treatment for Gambling Disorder is Cognitive-behavioral therapy (CBT), aimed at changing maladaptive beliefs about gambling and reducing gambling-related behaviors. Many programs also include a range of different strategies for dealing with the reinforcement of gambling, managing emotions, and relapse prevention (Potenza *et al.*, 2019). New interventions to treat excessive gambling, including mindfulness-based approaches, have started to gain ground. While it appears that such approaches can decrease craving for gambling, improve emotional regulation, and enhance the outcome of treatments for pathological gamblers (Tannous *et al.*, 2016), their role as supplementary therapies for individuals suffering from GD should be explored further. An even greater potential for several currently available interventions, including the Seeking Safety program (Najavits, 2002), which was designed to treat individuals with co-occurring SUD and PTSD, is to help patients with GD and comorbid psychological disorders. The concept of gambling pathology has evolved significantly in recent years from a generic term such as ludopathy to be addressed within the current state-of-the-art psychiatric, psychological, and neuroscientific views of the disorder. These views underpin contemporary perspectives on Gambling Disorder, as well as its diagnosis and treatment, as well as issues about prevention and public policy, as displayed in Figure 4:

Figure 4 - Comparison of treatment approaches for gambling disorder



Source: Adapted from APA (2026) and WHO (2019)

4 METHODOLOGY

In terms of primary sources for the data corpus, peer-reviewed articles, diagnostic manuals, systematic reviews, and international classification documents on the topics of gambling, pathological gambling, ludopathy and Gambling Disorder were sourced from the following evidence-based publications: The Diagnostic and Statistical Manual of Mental Disorders, Version 5 – Text Revision (American Psychiatric Association, 2022); International Classification of Diseases (World Health Organization, 2019); Hodgins *et al.* (2011) Hodgins, DC, Steeves, T., & al-Sabahi, F. (2011). Systematic Assessment of Negative Impact – Short Form (SUNI-SF). Addictive Behaviors, 36(10), 1011–1018; and systematic reviews and theoretical articles on the topics of impulsivity, emotional control, stigma, and a variety of risk factors and their respective treatments, as these are the key components that can provide greater insight into the study of Gambling Disorder within contemporary psychiatry (Ioannidis *et al.*, 2019; Aonso-Diego *et al.*, 2026).

Following the qualitative coding framework (Strauss and Corbin, 1998), the literature was initially analyzed through open coding to identify major concepts in the reviewed material. Open coding led to the identification of several themes, which were then analyzed through axial coding by examining the relationships among them. The results of the axial coding led to the selection of the themes that formed the basis of the selective coding. This stage involved developing the most appropriate themes, which together provided a suitable explanatory framework for the investigated phenomenon: the development of Gambling Disorder within the frame of modern psychiatric nosology.

To strengthen the rigor of this analysis, references were compared across diagnostic manuals, theoretical papers, epidemiological studies, and systematic reviews to identify converging points of view across different scientific traditions. In conducting this literature review, we selected relevant, credible scientific evidence from all years and studies, ensuring the resulting analysis presented a complete historical account of the topic under investigation, as currently understood within the three main related disciplines of psychiatric and addictive behavior research. (Saunders *et al.*, 2019).

5 RESULTS AND DISCUSSIONS

Gaming disorder, commonly referred to as gambling disorder, has undergone significant changes in terms of the way it has been conceptualized as a psychiatric disorder over the last four decades. It has moved from a behavioral and impulse-control-oriented conceptualization to a more clinically grounded and empirically supported disorder of addiction. Within the two major classifications of psychiatric and somatic disorders worldwide, the Diagnostic and Statistical Manual of Mental Disorders (DSM) developed by the American Psychiatric Association (APA) and the International Classification of Diseases (ICD) developed by the World Health Organization (WHO), the conceptualization of excessive gambling has undergone major changes over the last four decades (American Psychiatric Association, 2022; World Health Organization, 2019).

5.1 GAMBLING DISORDER IN THE DSM

The first reference to excessive gambling as a psychiatric problem was in 1980 with the publication of the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III), when Pathological Gambling was included among the impulse control disorders as Pathological Gambling (American Psychiatric Association, 2022, p. 791). The behavioral inhibition model of impulse control disorders, based on an inability to resist urges or compulsions to gamble, was the main theoretical framework used to explain the behavior of individuals affected by this problem (Hodgins *et al.*, 2011).

Since the inclusion of pathological gambling in the DSM in 1980, the criteria have been modified somewhat in the subsequent revisions of DSM-III-R (1987) and DSM-IV (1994). In both of these versions, the criteria for pathological gambling remained unchanged and continued to be listed under the impulse-control disorders. Increasing evidence of similarity with substance use disorders and their treatment, including aspects such as craving, loss of control, continued behavior despite adverse consequences, relapse, and comorbidity, was incorporated into the impulse-control disorders (Hodgins *et al.*, 2011; Rash *et al.*, 2016).

A groundbreaking change to the diagnostic criteria for pathological gambling occurred in 2013 with the release of the DSM-5. Pathological Gambling was recast as

Gambling Disorder and moved from the chapter on Impulse-Control Disorders to the chapter on Substance-Related and Addictive Disorders. Gambling Disorder thus became the behavioral addiction prototype within the spectrum of addictive disorders (Hodgins *et al.*, 2011; Rash *et al.*, 2016).

The Diagnostic Criteria: According to the DSM-5-TR (2017), individuals with Gambling Disorder present with a persistent and recurrent pattern of behavior related to gambling that is characterized by clinically significant distress or impairment. Such behavior includes: preoccupation with gambling; increasing amounts of money needed to experience the same level of excitement; unsuccessful efforts to cut down or control Gambling Behavior; Gambling as a way to escape from or relieve emotional pain; return to Gambling after losing a large amount of money, dissipating an entire week's pay or borrowing money to recoup losses; Lansing other important activities to gamble; using deceit or lying to hide or to finance Gambling Behavior; risking or losing a relationship, job, health, or other important opportunity because of Gambling; and other significant Behavioral and functional difficulties attributable to Gambling Behavior that result in Gambling Behavior causing the individual to require others to provide them with financial assistance to meet their basic needs (First *et al.*, 2016, p. 529).

It further classifies individuals with Gambling Disorder along a continuum of mild, moderate, and severe based on the number of criteria that an individual meets, as outlined in the DSM-5-TR. Those who meet 4-5 of the criteria would be considered to have a mild form of the disorder, those who meet 6-7 of the criteria would have a moderate form, and those who meet eight or more of the criteria would have a severe form of the disorder (APA, 2022).

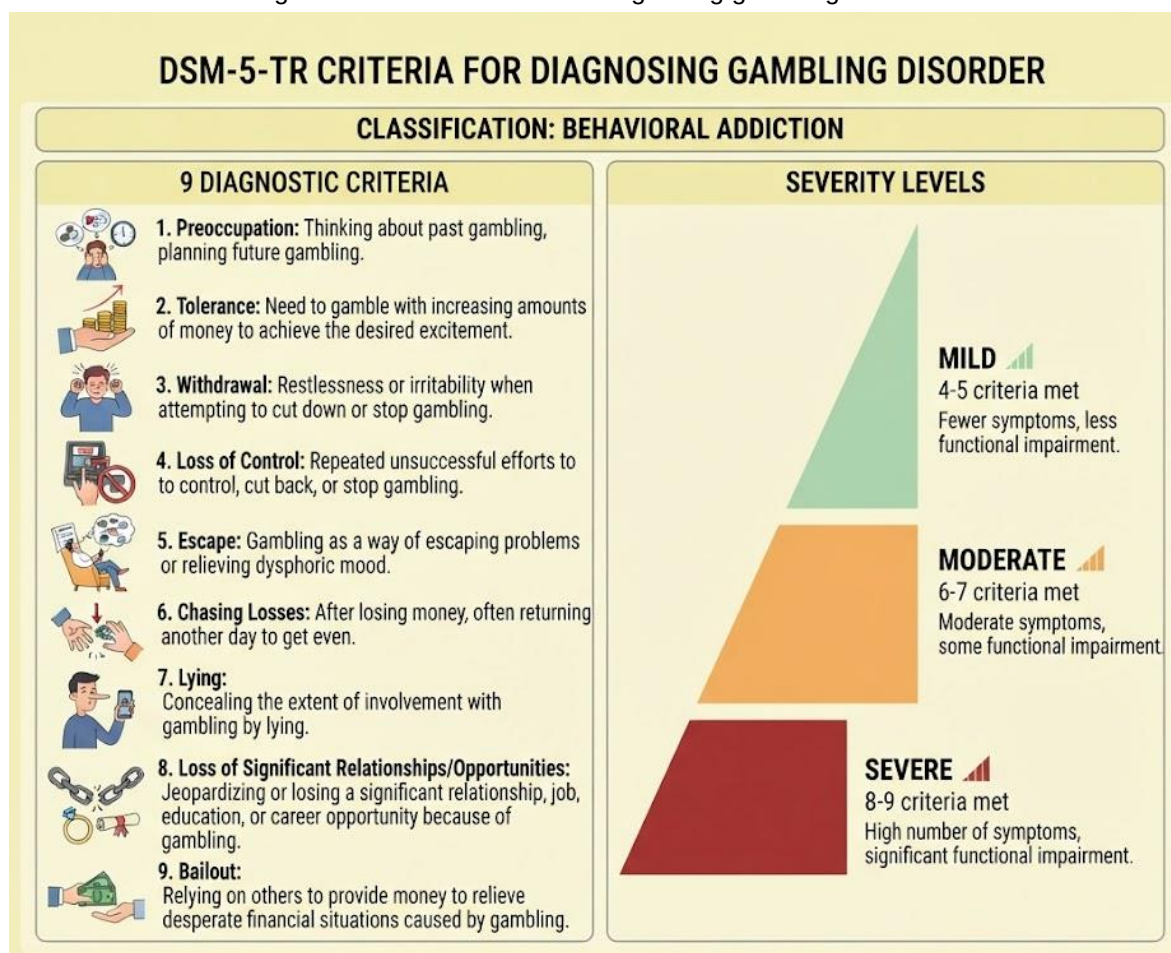
5.2 DSM-5-TR DIAGNOSTIC CRITERIA

1. **Tolerance:** Need to bet increasing amounts of money to achieve the desired excitement.
2. **Withdrawal:** Restlessness or irritability when trying to reduce or stop gambling.
3. **Loss of Control:** Repeated and unsuccessful efforts to control, reduce, or stop gambling.

4. **Worry:** Frequent thoughts about gambling (e.g., reminiscing about past experiences, planning the next move, or thinking about ways to get money to gamble).
5. **Emotional Escape:** Playing frequently when feeling distressed (anxiety, guilt, depression, helplessness).
6. **Chasing:** Returning to try to recover financial losses after a day of loss.
7. **Lie:** Concealing the degree of involvement with gambling through lies to family members or therapists.
8. **Impairment in Relationships/Opportunities:** Risking or losing significant relationships, jobs, or educational and career opportunities because of gambling.
9. **Financial Rescue:** Relying on third parties for money and alleviating desperate financial situations caused by gambling.

The DSM-5-TR (APA, 2022) classifies Gambling Disorder according to symptom severity based on the number of diagnostic criteria fulfilled during a 12-month period. A diagnosis is considered mild when four to five criteria are met, moderate when six to seven criteria are present, and severe when eight or more criteria are endorsed. This dimensional approach allows clinicians to assess the intensity of the disorder and its potential impact on an individual's psychological, social, occupational, and financial functioning (American Psychiatric Association, 2022), as illustrated in Figure 5:

Figure 5 - DSM-5 Criteria for diagnosing gambling disorder



Source: APA (2022). Diagnostic and Statistical Manual of Mental Disorders, 5th ed., Text Revision (DSM-5 TR)

5.3 GAMBLING DISORDER IN THE ICD

Similarly, the World Health Organization (2019) took a comparable stance in the classification of gambling-related disorders in the ICD-11. In contrast to the older ICD categories of disorders of habits and of impulse-control disorders, the authors of ICD-11 considered addictive behaviors to be the basis of a unique class of mental disorders (World Health Organization, 2019).

When ICD-11 was published by WHO in 2019, it was another significant step in recognizing that pathological gambling, now more commonly referred to as Gambling Disorder, should be classified within the group of 'Disorders Due to Addictive Behaviors'.

The definition of a disorder due to addictive behavior, Gaming Disorder, according to ICD-11, is a pattern of gambling behavior (including betting, gaming,

lotteries, online gambling, etc.) leading to clinically significant impairment (e.g., neglect of family obligations, misuse of funds, guilty feelings). Gaming behavior (online as well as offline) may be characterized by a loss of control, increased priority given to gambling over other activities for pleasure or self-care, and continued gambling behavior despite significant negative consequences (World Health Organization, 2019).

For the first time, ICD-11 accounts for the growing number of people who develop problems with online or other digital gaming and online betting facilities. These have become increasingly common in recent years. In many countries, dedicated online gaming machines (e.g., pachinko) or gambling kiosks also provide gaming and online betting facilities. These are considered to be predominantly offline forms of gambling disorder.

5.4 CONVERGENCE BETWEEN DSM-5-TR AND ICD-11

DSM-5-TR and ICD-11 display considerable convergence when it comes to diagnosing Gambling Disorder. For the first time in the history of psychiatric classification, both manuals recognize pathology associated with excessive gambling as a behavioral addiction, distinct from the group of impulse-control disorders, with characteristics of impaired control, preoccupation, increasing frequency, negatively affected behavior, and deteriorating consequences or negative impacts.

The authoring of the two most popular diagnostic systems has also evolved in a parallel direction and now point to diagnostic criteria for Gambling Disorder that represent the results of years of sound empirical research and include reference to reward and decision-making dysfunctions as found in individuals with substance use disorders (Potenza *et al.*, 2019), whilst meta-analytic data support the major contribution of impulsivity and poor executive functioning in pathologic gambling (Ioannidis *et al.*, 2019).

Thus, the shift from so-called 'ludopathy' or 'pathological gambling' to 'Gambling Disorder' signifies more than a change of name. Importantly, the acknowledgment of Gambling Disorder as a serious medical condition and an addictive disorder, which is supported by empirical evidence, has important implications for its diagnosis and treatment, as well as for the prevention of gambling-related problems and their public health implications within the globalized and growing gambling market.

ICD-11 categories (WHO, 2019) for gambling disorder represent persistent or recurrent malicious behavior of clinically significant severity, occurring over at least 12 months (evidence for shorter periods of severe symptoms acceptable). Key aspects of this pattern include impaired control, increased salience, and continuation in the face of negative effects (personal, social, financial). Note that, a manic episode better accounted for by bipolar disorder or a substance use disorder are to be excluded from the diagnosis. Psychotherapy in particular, by means of cognitive-behavioural therapy (CBT) and/or motivational interviewing, helps the affected individual to locate the roots of their disordered behavior, challenge their negative thought patterns, and develop a range of new coping strategies. For individuals with particular difficulty accessing conventional forms of psychotherapy, support groups such as Gamblers Anonymous – meetings of peers affected by similar problems – can provide not only advice but ongoing support and even a structure (meeting regularly) to help them maintain their abstinence. For some with co-occurring (e.g. anxiety or depression) mental health problems, consideration of using an opioid antagonist (e.g. naltrexone) or a mood stabilizer, as part of their overall treatment plan, may also be part of severe cases. The ICD-11 criteria for gambling disorder is illustrated in Figure 6:

Figure 6 - ICD-11 Criteria for diagnosing gambling disorder



Source: Adapted from WHO (2019)

Figure 6 summarizes the diagnostic criteria, classification, and treatment of Gambling Disorder according to the ICD-11. The left-hand side of the figure describes the required diagnostic criteria for Gambling Disorder: loss of control over gambling behavior, gambling increasingly takes over their life, other activities and responsibilities being neglected, and the behavior continues or increases despite there being clear adverse consequences in their personal, social, occupational (including educational), or financial life. The duration for which these behavior(s) have been present can be less than 12 months if severe.

The figure can also be viewed from an ICD-11 perspective. Here the ICD-11 categorization of the Disorder is contrasted with that employed by earlier classification systems (e.g. DSM-IV). While the latter had considered excessive gambling primarily as an impulse-control disorder, the ICD-11 categorizes it as a type of Disorder Due to Addictive Behaviors. This class of mental health and related disorders is described by ICD-11 codes beginning with the numeral 6, and that specific to the present topic, the code for Gambling Disorder is 6C50, with a number provided for each of the various environments in which the behavior occurs (offline, 6C50.0; online, 6C50.1; etc.). Thus, the environment (offline, online, etc.) in which gambling takes place may be further specified by providing a number for code 6C50 (as illustrated above).

On the right of the figure, a summary of the treatment of Gambling Disorder is provided. The mainstay of treatment for Gambling Disorder is said to be cognitive-behavioral therapy (CBT) and other evidence-based therapies which aim to change negative thought processes and behaviors associated with problem and pathology. Other mainstream treatments for problem and pathological gambling are said to include self-help and peer support programs (notably Gamblers Anonymous) and, where indicated, specific medications to treat specific aspects of Gambling Disorder (i.e. cravings and any associated psychiatric disorders). Thus, ICD-11 views Gambling Disorder as a behavioral addiction which requires a comprehensive assessment and a range of different treatments (WHO, 2019).

6 RELEVANCE OF THE STUDY

This study is relevant for several reasons. First, it provides a detailed and comprehensive history of pathology associated with excessive gambling. Second, the growing worldwide expansion of gambling markets, including online betting, is

generating a wealth of problems for gamblers and others, as well as for a wide variety of individuals, including clinicians and researchers from many disciplines as well as lawmakers, public policymakers, and regulatory agents. Thus, an in-depth examination of the basis for problems created by excessive gambling is not only timely but also relevant to current social issues. This article provides a historical and scientific foundation for excessive gambling and is therefore relevant to clinical practice, research, public policy, and legal issues.

This article is relevant because it deals with the convergence of the two most powerful classification systems in psychiatry, which today consider Gambling Disorder as an addictive disorder rather than an impulse-control disorder. This change has far-reaching implications for diagnosing and treating people with such problems, for preventing Gambling Disorder, and for developing public health and regulatory policies and laws. The rapid expansion of sports betting in Brazil and online gaming, in addition to the recent enactment of Law No. 14,790/2023, are events of great relevance that connect the classification of psychiatric disorders with the legal and social problems faced by the people affected by Gambling Disorder.

7 MAIN CONTRIBUTIONS

This article offers several theoretical and practical contributions to the study of problems related to gambling addiction. It is also important because it provides a history of the evolution of the psychopathological concepts that described the behavior of the excessive gamblers, tracing their steps in the main classes of the mental affections within the psychiatric classes, from the century XIX to our days, highlighting how the concepts were developed within the frames of the respective models of understanding the human behavior that were dominant in the respective historical periods, and how those new ways of understanding the excessive gambling paved the way for the transformation of a behavior that was considered to be under the control of the mere will of the individual in a behavioral addiction, similar to the other impulse-control disorders, that currently is being considered within the psychiatric and psychological classes as a serious mental health affections, whose treatment is complex and requires the interdisciplinary intervention of several fields of knowledge.

The article also compares DSM-5-TR and ICD-11 in both diagnostic criteria and elements of the diagnostic framework, which guides clinical assessment and research

on the problem. It intends to highlight degrees of agreement, particularly concerning impulse-control disorders now recategorized as addictive behaviors, specifically within the new context of regulations on legal games of chance that are presently in place in Brazil. The study's multidisciplinary nature incorporates findings from psychiatry, psychology, neuroscience, public health, and the legal study of the subject. It therefore furthers the discussion regarding the major challenges related to Gambling Disorder, i.e., the diagnostic criteria, its neurobiological basis, the issues of impulsivity and of emotional dysregulation, of stigma and of treatment as well as of public health and public policy issues. The article culminates in a broad range of analyses regarding the numerous social and legal issues caused by excessive gaming, with a deep dive into the transformations that have occurred in Brazil in recent years, focusing on the specific aspects of the regulated gaming market and its connection to mental health issues that affect individuals and, therefore, also their families, in addition to consumers and the financial market, with the potential to affect society as a whole.

8 CONCLUSION

In conclusion, a distinction must be made between the age-old phenomenon of ludopathy or pathological gambling and today's concept of Gambling Disorder, which is characterized by excessive and problematic gambling behavior and is sustained by a wealth of clinical, psychological, and neurobiological data. More recently, this form of behavioral addiction has been found to bear several important similarities with other forms of addictive behavior, including the development of craving, loss of control, relentless pursuit of the behavior despite the advent of clearly negative consequences, particular patterns of relapse, and alterations in reward processing (Hodgins *et al.*, 2011; Potenza *et al.*, 2019).

Analyzing the evolution of different editions of the Diagnostic and Statistical Manual of Mental Disorders (DSM) led to the recognition that pathological gambling, or gambling disorder, is considered within the realm of impulse control disorders by DSM-III, DSM-III-R, and DSM-IV. In contrast, since DSM-5, it has been classified within the category of Substance-Related and Addictive Disorders, with DSM-5-TR even more precisely detailing the changes to diagnostic criteria for the said disorder and viewing it through the prism of an addiction rather than just as a behavior under the control of impulses (APA, 2022; First *et al.*, 2022).

The ICD has also witnessed change. The current ICD-11 classification of Gaming Disorder, included within the category of Disorders Due to Addictive Behaviors, reflects growing international consensus about the addictive nature of gaming and increasing recognition of excessive gaming as a mental health disorder (World Health Organization, 2019). Comparison with psychiatric classification systems is also notable and reflects the growing influence of evidence on diagnostic decision-making, with consequent benefits for research, clinical assessment, and treatment.

9 FUTURE RESEARCH

Future studies should investigate the social and legal implications in greater depth, especially their effects on the affected individual's family, interpersonal relationships, and family law in general. Individuals with Gambling Disorder often have their behavior interfere with or harm family members, who experience financial, emotional, and behavioral difficulties as a result of the loved one's behavior. Given the extensive impact of problem gambling on spouses and other family members of individuals with Gambling Disorder, it is surprising that little attention has been given to the family dimension of the disorder within both clinical and legal contexts. Studies should also analyze how the consequences of gambling can influence family breakdowns, and specific aspects such as custody of children, consumption of family assets, reduction of family heritage, and safeguarding of vulnerable family members and their rights, among other aspects, which are even more pressing due to the rapid growth of online betting offers, including sports wagering, in a great part of the Brazilian territory (Brasil, 2023; Brianey & Cury, 2026).

Studying the experiences of the spouses, children, and other family members and caretakers of people affected by Gambling Disorder would also be highly beneficial. This would highlight the psychological burden of being a 'secondary victim', as well as aspects of family members' victimization, the processes of family resilience, as well as the different coping strategies employed by family members of individuals affected by Gambling Disorder. Finally, interdisciplinary studies combining the areas of psychiatry, psychology, sociology, economics and family law could be of great value to a better understanding of Gambling Disorder, not only as a psychiatric illness but also as a complex phenomenon which can bring about serious consequences for families and for the rest of society. With more and more countries opening up to new

opportunities for gambling, an in-depth study of the consequences of gambling for families is urgent to stimulate research into the subject as well as to develop clinical and legal policies to prevent and to intervene in the face of gambling problems.

ARTIFICIAL INTELLIGENCE DISCLOSURE

The authors disclose that artificial intelligence (AI) tools were used solely as support instruments during the preparation of this manuscript. Figures 1 through 6 were developed with the assistance of **Google Gemini**, which was used to support the graphical design process and the visual organization of information. All figure content, scientific interpretations, conceptual frameworks, and final revisions were conceived, evaluated, and approved by the authors.

Additionally, **Microsoft Copilot** was utilized as an auxiliary tool to facilitate literature organization, brainstorming, language refinement, and the structuring of ideas throughout the writing process. The use of AI technologies was limited to editorial and organizational assistance and did not replace the authors' intellectual contributions at any stage of the research.

The authors take full responsibility for the accuracy, integrity, interpretation, and originality of the manuscript. All analyses, conclusions, arguments, and scholarly contributions presented in this article are the sole work of the authors, who retain complete authorship and accountability for the final published content.

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