

Gambling Disorder and Its Social Impact: From Medical, Legal, and Cultural Perspectives

Yūri HAYANO¹

Abstract

Gambling disorder has become an increasingly visible public health and social issue in recent years, drawing attention not only from psychiatry and psychology but also from policy studies, sociology, and cultural studies. While pathological gambling was historically regarded as a moral failing or a form of deviant behavior, the shift in diagnostic frameworks—including DSM-5 and ICD-11—has repositioned gambling disorder as a medically recognized behavioral addiction requiring structured intervention and support. However, despite institutional recognition, the lived experiences of individuals affected by gambling disorder remain complex, particularly in Japan, where sociocultural norms surrounding silence, stigma, and family-based responsibility often delay help-seeking. This study examines the conceptual frameworks, diagnostic criteria, and socio-structural realities of gambling disorder, with a specific focus on how cultural context shapes the visibility, recognition, and treatment pathways of the disorder. By incorporating prior international scholarship alongside Japanese research—including Hayano's analysis of pachinko culture and gambling behavior—the paper proposes a revised framework for understanding gambling disorder not solely as an individual pathology but as a socially embedded phenomenon.

Keywords: Gambling disorder, behavioral addiction, DSM-5, ICD-11, public health, stigma, Japan

1. Introduction

Gambling disorder has drawn significant scholarly, policy, and clinical attention over the past decade as concerns regarding its prevalence and social impact have expanded. The rising accessibility of gambling platforms—including online gambling environments, casino expansion, and culturally embedded leisure forms such as pachinko—has

¹ Hosei University, Graduate School of Public Policy, master's Program in Public Management

accelerated broader recognition that gambling is no longer merely an entertainment activity but a behavioral pattern with the potential to generate chronic harm. Historically, gambling behavior was interpreted as a personal weakness, moral failing, or deviant act. Such perspectives contributed to societal stigma, delayed treatment, and the marginalization of individuals experiencing gambling-related harm. However, advances in neuroscience, public health frameworks, and behavioral addiction research have fundamentally transformed this understanding. As Griffiths (1995, 2015) and others have emphasized, gambling addiction shares essential mechanisms with substance addiction, including reinforcement learning, tolerance development, impaired control, and relapse tendencies. This conceptual shift has led to international standardization of diagnostic criteria and treatment approaches.

Japan represents a distinct context in this global landscape. While formal recognition of gambling disorder has increased within public policy and medical systems, sociocultural conditions—such as stigma, self-responsibility narratives, and family-centered coping structures—continue to shape how the disorder is experienced, recognized, and addressed.

Previous

studies, including Hayano (2019, 2021, 2022) and Hayano et al. (2021), indicate that gambling behavior in Japan is influenced by linguistic, cultural, and normative frameworks that extend beyond clinical definitions. These findings suggest that gambling disorder in the Japanese context requires analysis not only through biomedical criteria but also through sociocultural dynamics.

The purpose of this paper is to examine the diagnostic and structural characteristics of gambling disorder while situating them within contemporary societal realities. By synthesizing international research with Japan-specific findings, this study explores how the disorder is framed, recognized, and responded to at both institutional and societal levels.

2. Definition and Diagnostic Criteria of Gambling Disorder

2.1 Previous Research and Conceptual Framework

Research on gambling disorder has rapidly expanded since the 1990s and has developed as an interdisciplinary field spanning psychology, psychiatry, public health, social policy, and sociology. Internationally, a major shift occurred when Griffiths (1995, 2015) conceptualized gambling disorder as a form of behavioral addiction. Whereas gambling behavior had previously been discussed primarily as deviant behavior or a subtype of

impulsivity, Griffiths demonstrated parallels with substance use disorders—such as tolerance, impaired control, and relapse tendencies—prompting a fundamental reassessment of addiction theory. In addition, the *Pathways Model* proposed by Blaszczynski and Nower (2002) revealed that the developmental trajectories leading to gambling disorder are not uniform. Their model highlights that multiple psychosocial factors—including cognitive vulnerability, emotional dysregulation, and impulsivity—interact and accumulate in complex ways. This framework continues to inform clinical practice and has influenced differentiated approaches in treatment and individualized support programs.

In Japan, research historically centered on medical and public health approaches; however, recent studies have increasingly examined gambling disorder from sociocultural perspectives. Hayano (2019, 2021,2022) and Hayano et al. (2021) argued that gambling disorder in Japan is closely related to cultural norms and social expectations, demonstrating that gambling harm is not merely a form of pathology but a phenomenon that becomes concealed within social constraints. In this study, the patterns of delayed disclosure and help-seeking observed in Japanese gambling cases, discussed in Hayano (2019, 2021,2022) and Hayano et al. (2021), are referred to as Silent Addiction, meaning an addiction that remains unrecognized or unspoken within personal, familial, social, and institutional contexts.

In this paper, Silent Addiction refers to a subtype of addiction in which the individual, family, community, and institutional systems fail to acknowledge the problem, resulting in substantial delay in seeking support, formal diagnosis, or treatment. The concept builds on the mechanisms of shame and guilt described by Petry (2005), while integrating sociocultural elements unique to Japan such as norms of silence, familial responsibility, and self-blame (Lesieur & Rosenthal, 1991). Thus, Silent Addiction does not refer to a condition that lacks symptoms, but to one where the condition becomes visible yet unshared—a sociocultural construct rather than merely a clinical state.

These strands of prior research collectively indicate that gambling disorder is not simply excessive leisure consumption, but a multidimensional phenomenon in which medical, neuroscientific, psychological, and sociocultural conditions interact. Building on these theoretical foundations, the following sections examine internationally standardized diagnostic criteria to clarify the conceptual framework of gambling disorder.

2.2 Definition and Characteristics in DSM-5

The DSM-5 (2013) categorizes gambling disorder under “Substance-Related and Addictive Disorders,” marking a significant conceptual break from DSM-IV, where it had been classified as an impulse control disorder. This shift represents a major theoretical reorientation in the understanding of addiction. DSM-5 evaluates whether gambling behavior persists for at least 12 months and whether it causes clinically significant impairment in daily life, occupational functioning, interpersonal relationships, and financial stability. A diagnosis is made when at least four of the listed criteria are met within a 12-month period. Core symptoms include preoccupation with gambling, increasing wagers or time investment (tolerance), repeated attempts to recover losses (chasing), loss of control, relapse, and harmful consequences affecting family, work, and social life.

Importantly, DSM-5 emphasizes that individuals affected by gambling disorder frequently minimize or conceal the severity of their condition. This diagnostic framework positions gambling disorder not as a failure of willpower, but as a treatable chronic mental disorder characterized by impaired self-regulation and altered reward learning processes.

2.3 Classification in ICD-11 and International Standardization

Under the *International Classification of Diseases, 11th Revision* (ICD-11), adopted by the World Health Organization in 2019 and implemented in 2022, gambling disorder is classified as “Disorders due to addictive behaviours.” The ICD-11 diagnostic focus aligns closely with DSM-5, emphasizing persistence, impaired control, and impacts on social, family, and functional domains (Table1).

Table 1

Period	Diagnostic Positioning	Dominant Interpretation
Before 1990s	Moral deviation / misconduct	Individual behavioral flaw
DSM-IV period	Impulse control disorder	Psychological condition
DSM-5 onward	Behavioral addiction / medical disorder	Treatable condition

This transition demonstrates how gambling disorder has gradually shifted from being understood as a moral or personality deficit to being institutionally acknowledged as a medical issue requiring social support and formal intervention. Notably, ICD-11

incorporates digital and electronically mediated gambling environments, reflecting contemporary behavioral conditions not present in earlier diagnostic systems.

2.4 Transformation of Diagnostic Frameworks and Their Sociological Meaning

Diagnostic frameworks for gambling disorder have undergone substantial transformation over time. Until the late 20th century, gambling problems were widely regarded as moral failure or character weakness, and public recognition remained limited. However, advances in neuroscience and clinical research revealed that gambling behavior engages dopaminergic reward circuits and follows reinforcement-based learning patterns, reshaping the theoretical understanding of addiction. Consequently, international diagnostic systems such as DSM-5 and ICD-11 now define gambling disorder as a chronic, relapsing condition requiring medical treatment and policy-based support, rather than a personal responsibility issue. This conceptual shift has profoundly influenced public health approaches, family support policy, professional training frameworks, and consultation systems.

3. Factors Contributing to the Development of Gambling Disorder: Cultural, Institutional, and Psychological Perspectives in Japanese Society

Gambling disorder cannot be explained solely by individual personality traits or decision-making tendencies; rather, it emerges through the interaction of multiple layered factors, including institutional systems, cultural norms, psychological mechanisms, and everyday living environments. In Japanese society in particular, the coexistence of institutionally sanctioned gambling structures and sociocultural norms grounded in shame and silence has been noted as having a distinctive influence on the onset and maintenance of gambling addiction (Hayano 2021). This chapter examines the background factors shaping the development of gambling disorder, focusing on the contextual conditions specific to Japanese society.

3.1 Gambling as an Institutional Structure: Legality, Everyday Presence, and Accessibility

Japan's gambling environment is characterized by the nationwide expansion of pachinko and pachislot as everyday leisure facilities, in addition to publicly operated gambling such as horse racing, motorboat racing, bicycle racing, and national lotteries. Because these forms of gambling are managed and operated under legal and municipal regulatory frameworks, they are socially perceived as "legitimate leisure rather than illegal behavior" (Shaffer & Korn 2002). As a result, unlike countries in which gambling is restricted to

designated zones or specific demographic groups, Japan has developed an environment in which gambling is easily accessible from urban centers to rural regions. Abbott (2017) notes that the social accessibility of gambling is strongly correlated with increased addiction risk, and in Japan this institutional landscape functions as an environmental factor that structurally supports the formation of gambling disorder. Furthermore, because revenue from pachinko and public gambling contributes to local government finances, administrative systems face the contradictory task of balancing addiction prevention with financial benefit (Hayano 2021). This structural contradiction contributes to the persistence of gambling as a “socially tolerated yet publicly discouraged behavior.”

3.2 Shame, Silence, and the Cultural Logic of Self-Responsibility in Japan

In Japanese society, disclosing personal failure or vulnerability is often socially difficult, and this tendency functions as a cultural factor inhibiting acknowledgment of addiction and access to support. Petry (2005) points out that addiction frequently coexists with self-denial and shame; however, this tendency appears even stronger in Japan, where individuals with gambling disorder are influenced by value systems that frame withholding shame from others as a social obligation. Hayano (2021) shows that gambling disorder in Japan is characterized by “isolation, silence, and concealment,” and defines this phenomenon as Silent Addiction. This term refers to a process in which addiction is not shared within the family, community, or workplace, resulting in worsening conditions before reaching support services. This culturally reinforced suppression structure has been highlighted as an issue unique to Japan, differing from Western participation-based support models (Lesieur & Rosenthal 1991).

3.3 Entertainment Culture and the Weakening of Risk Perception

The pachinko industry and national lotteries in Japan have been historically embedded within everyday consumption through advertising, television programming, and landscape design, positioning gambling as a form of “play and entertainment” (Hayano 2022). Due to this long-term institutionalization and cultural normalization, many individuals perceive gambling not as a high-risk behavior but as an extension of routine consumer activity. Among younger generations in particular, the spread of online gambling and digital game-based wagering has blurred boundaries between recreational gaming and gambling (Hing 2016). This cognitive framing reduces risk awareness at the onset of gambling behavior and lowers the psychological threshold that may otherwise prevent escalation into dependency.

3.4 Living Environment, Stress, and Gambling as Avoidance Behavior

In Japan, structural living conditions—including long working hours, solitary lifestyles, and economic instability—function as background factors reinforcing addictive behavior. Petry (2005) demonstrates that gambling behavior can serve as emotional regulation and stress avoidance, and in Japan this tendency manifests as repeated engagement with gambling as an escapist behavior during the process of dependency formation (Hayano et al. 2021). Many individuals experiencing gambling disorder face financial problems, family conflict, and social isolation; however, these conditions themselves form a negative feedback loop that strengthens the return to gambling (Lesieur & Rosenthal 1991).

4. Impact of Gambling Disorder: Individual, Family, and Societal Perspectives

Gambling disorder is a multilayered issue that affects not only the individual's psychological and financial well-being, but also family relationships, local communities, and public systems. Previous research indicates that the effects of gambling disorder occur at three interconnected levels: the individual level, the family/interpersonal level, and the societal/structural level (Griffiths 2015; Petry 2005). In accordance with these categories, this study organizes the concrete forms of impact and examines their social implications.

4.1 Impact on the Individual: Psychological Burden, Life Disruption, and Decline in Self-Evaluation

Individuals with gambling disorder are known to experience multiple burdens, including loss of control over behavior, self-denial resulting from loss, and financial difficulties. Petry (2005) points out that individuals with gambling addiction tend to show high levels of depression, guilt, and reduced self-esteem, and that suicidal ideation may increase as symptoms progress. Griffiths (2015) reports that individuals with gambling disorder may face a suicide risk 4–15 times higher than the general population. Japanese studies suggest that many individuals with gambling disorder tend to internalize a strong sense of self-responsibility and shame related to failure, which results in delayed engagement with medical institutions and support systems. This psychological suppression structure is considered a key sociocultural factor contributing to the long-term persistence and chronicity of gambling disorder.

4.2 Impact on the Family: Relationship Breakdown, Financial Loss, and Co-dependency

The impact of gambling disorder on families is substantial. Lesieur and Rosenthal (1991) argue that family members may repeatedly engage in behavior such as covering debt, maintaining secrecy, or implicitly accepting the behavior, which can lead to psychological exhaustion and co-dependent relationships. This dynamic not only hinders the recovery process of the individual but also harms the mental and physical well-being of family members. In Japan, silence and concealment by family members tend to become structurally reinforced, leading gambling disorder to be treated as a “private household matter” (Hayano et al. 2021). Compared to Western family-support models, this tendency may lead to delays in access to support and heightened isolation. Reports indicate that spouses and children may experience emotional distress, domestic conflict, and economic insecurity (Shaffer 2010), demonstrating that gambling disorder must be understood as an issue affecting the family system rather than an isolated individual.

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4.3 Impact on Society and Systems: Healthcare Costs, Crime, and Public Burden

The consequences of gambling disorder also appear in social and economic burdens. Abbott (2017) notes that gambling disorder may contribute to rising crime rates, debt restructuring, unemployment, and homelessness, generating long-term costs for governments, municipalities, and welfare institutions. In Japan, because public gambling and the pachinko industry constitute a portion of municipal revenue, contradictions emerge between addiction prevention policies and industry maintenance (Hayano 2021). This dilemma between dependence risk and fiscal reliance influences IR policy debates

and advertising regulations, creating structural conditions that make social visibility of addiction risk difficult.

4.4 Stigma and Public Perception: Social Structures that Reinforce Silence

Social stigma surrounding addiction is noted as a factor that prevents early intervention and access to support for both individuals and families (Hing 2016). Particularly in Japan, negative associations such as “lack of self-control,” “shame,” and “weakness” are easily attributed to individuals with gambling disorder, making public disclosure of the condition difficult. Prior studies suggest that unless societal understanding of addiction improves, treatment motivation and the effectiveness of family-support systems will remain limited (Shaffer & Korn 2002). In other words, gambling disorder cannot be resolved through medical support alone; change in societal perception is necessary.

5. Support Systems and International Comparison: Challenges and Prospects for Japan

Support systems for gambling disorder vary widely across countries and regions in terms of institutional design, medical models, and underlying policy frameworks. International research indicates that countermeasures for gambling disorder are generally organized across four domains: medical intervention, regulatory policy, social support, and education/prevention (Abbott 2017; Korn & Shaffer 1999). Each country has developed its own response model depending on cultural norms, legal systems, and the structure of the gambling market. This chapter examines the current state of Japan’s support systems and identifies challenges and future directions through international comparison.

5.1 Current Support Systems in Japan

Support systems for gambling disorder in Japan have gradually developed since the late 2010s. The enactment of the Basic Act on Measures Against Gambling Addiction (2018) was particularly significant, as it clarified the responsibilities of national and municipal governments and mandated the establishment of medical institutions, consultation services, and research frameworks. However, challenges remain in treatment and access to support, including regional disparities in service availability, a gap between consultation numbers and actual support delivery, and insufficient psychological and family support (Ministry of Health, Labour and Welfare 2021). Additionally, because public gambling and the pachinko industry are tied to regional economic structures, addiction countermeasures often conflict with industrial expansion and political interests. These circumstances indicate that, although addiction countermeasures exist

institutionally, Japan remains in a stage of “partial systemization,” meaning that practical effectiveness remains limited.

5.2 International System Models: Comparative Frameworks

In Norway and Sweden, gambling is primarily state-controlled, and strict regulations are applied to advertising and online access (Abbott 2017). Norway has implemented a system in which gambling platforms automatically impose usage limits or exclusion measures when signs of addiction are detected, embedding prevention functions into system design. In the United Kingdom, the Gambling Commission operates a nationwide self-exclusion system, allowing individuals with gambling problems to ban themselves from online or land-based gambling venues (Hing 2016). Both individuals and families can initiate exclusion requests, reflecting a rights-based approach to addiction support. Singapore imposes high entrance fees (levy) for casino access as a deterrent to excessive gambling (Petry 2005). Additionally, family members may apply to prohibit the affected individual from entering gambling facilities, reflecting a policy model that frames gambling addiction as a family-level social issue.

5.3 Comparative Analysis: Structural Elements Missing in Japan

Compared with these international models, several structural weaknesses in Japan become apparent (Table 2):

Table 2

Focus Area	Current Situation in Japan	Missing Elements Compared to Other Countries
Support Access	Consultation services exist, but usage remains low	Lack of early intervention systems
Regulatory Policy	Weak advertising regulation and limited usage restriction	Industry protection prioritized over consumer protection
Family Support	Reliant on private associations and self-help	Lack of institutional family protection structures
Prevention	Awareness-based approaches dominate	Insufficient legal frameworks and user restriction systems

As Hayano et al. (2021) notes, cultural silence combined with institutional insufficiency in Japan fosters a structure in which addiction tends to persist within family units over long periods. Based on this, improving Japan’s support system requires not only medical

and policy-related reform but also cultural and societal transformation through education and public awareness.

5.4 Implications for Japan: Balancing System Reform and Cultural Change

Based on international comparison, the following areas emerge as potential directions for improvement:

1. Development of multi-stage and standardized access pathways (e.g., online screening, anonymous consultation, integrated medical referral)
2. Institutionalization of family support models (e.g., family exclusion systems, family education programs)
3. Strengthening of advertising regulations and access restrictions
4. Public awareness campaigns to reduce stigma and improve recognition
5. Formation of regional support networks

These measures extend beyond conventional medical policy and align with a broader shift toward redefining gambling disorder as a sociocultural issue rather than solely an individual pathology.

6. Conclusion and Future Directions

This study examined gambling disorder not as a simple matter of individual behavioral failure or flawed decision-making but as a social phenomenon in which institutional systems, cultural norms, and psychological structures interact. While international diagnostic standards such as DSM-5 and ICD-11 position gambling disorder as a medical condition requiring treatment and support, findings suggest that in Japan, cultural tendencies to frame addiction as a matter of “personal responsibility” or “shame” continue to hinder access to support.

As confirmed in Chapters 3 and 4, gambling disorder in Japan is influenced by high institutional accessibility, cultural norms of silence and shame, the socially legitimized framing of gambling as entertainment, and the interaction with socioeconomic instability. The concept of Silent Addiction, proposed in this study, provides an important framework for understanding the invisibility of gambling disorder and the delayed access to support systems in Japanese society. This perspective reveals the difficulty of implementing preventive interventions before addiction becomes visible and demonstrates that families,

communities, and administrative systems tend to avoid sharing or publicly acknowledging the issue.

International comparison in Chapter 5 showed that while elements of support systems exist in Japan, challenges remain, including weak regulatory policy, lack of family support systems, insufficient preventive education, and the underdeveloped structure of anonymous consultation services. Unlike other countries where addiction is institutionally managed as a social risk and responsibilities are clearly assigned among individuals, families, communities, and gambling operators, such frameworks have not yet been fully established in Japan. Based on these challenges, the following points are particularly important for future development:

1. Transformation of cultural understanding: Addiction must be redefined socially not as a “matter of character or willpower,” but as a treatable disorder. Social awareness and education through schools and public campaigns are necessary for this shift (Hing 2016).

2. Improvement of access to support: Strengthening consultation systems that ensure anonymity and multi-stage access, as well as introducing online early intervention programs, should be considered (Petry 2005).

3. Institutionalization of family support: Because gambling disorder involves the family unit, as demonstrated by Lesieur and Rosenthal (1991), policy frameworks such as family application systems and family education programs are required.

4. Clarifying policy contradictions: Based on the current conflict between addiction prevention and industrial profit, mechanisms for balancing public welfare and economic interests—such as regulation of gambling operators, advertising control, and usage restrictions—must be developed.

Finally, this study has several limitations. While this report centered on policy comparison and cultural analysis, future research must incorporate empirical data, including the voices of individuals with lived experience, family accounts, medical data, and longitudinal studies following regulatory intervention. Research on emerging forms of gambling, such as online gambling and digital gamification, is also necessary.

Gambling disorder should not be dismissed as a matter of personal weakness or deviant behavior; rather, it is a form of social addiction in which institutional systems, cultural structures, economic design, and family dynamics are deeply intertwined. As

demonstrated in this study, while Japanese addiction countermeasures are in the process of institutionalization, future progress will require simultaneous cultural transformation and structural support. Creating a society where help-seeking is not suppressed by silence, but where recovery and support are socially guaranteed, represents a critical future task.

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References

- Abbott, M. W. (2017). *Public health and gambling harm: An evidence framework*. Auckland University Press.
- Blaszczynski, A., & Nower, L. (2002). A pathways model of problem and pathological gambling. *Addiction*, 97(5), 487–499. <https://doi.org/10.1046/j.1360-0443.2002.00015.x>
- Griffiths, M. D. (1995). Technological addictions. *Clinical Psychology Forum*, 76, 14–19.
- Griffiths, M. D. (2015). Behavioural addiction and gambling: A commentary. *Journal of Gambling Studies*, 31(2), 100–118. <https://doi.org/10.1007/s10899-014-9497-y>
- Hayano, S. (2019). A Study on the Relationship between Pachinko Advertising and Gambling Addiction: The Effect of Wording on Pachinko Advertisements. *The Tsuru University Review*, 90, 49–58.
- Hayano, S. (2021). A Study on the Stimulation of “Gambling Desire” (Shakoshin). *The Tsuru University Review*, 93, 1–10.
- Hayano, S. (2022). A Study on Effective Gambling Advertising Expression on Gambling Addiction in Japan. *Ars Linguistica*, 28, 21–32.
- Hayano, S., Dong, R., Miyata, Y., & Kasuga, S. (2021). The study of differences by region and type of gambling on the degree of gambling addiction in Japan. *Scientific Reports*, 11(1), 1–9. <https://doi.org/10.1038/s41598-021-92137-8>
- Hing, N. (2016). Exploring why people do and do not self-exclude from gambling venues. *International Gambling Studies*, 16(3), 373–389. <https://doi.org/10.1080/14459795.2016.1241189>

- Korn, D., & Shaffer, H. J. (1999). Gambling and the health paradigm: Toward a public health model. *Journal of Gambling Studies*, 15(4), 289–365.
<https://doi.org/10.1023/A:1023005115932>
- Lesieur, H. R., & Rosenthal, R. J. (1991). Pathological gambling: A review of the literature. *Journal of Gambling Behavior*, 7(1), 5–39.
<https://doi.org/10.1007/BF01019763>
- Petry, N. M. (2005). *Pathological gambling: Etiology, comorbidity, and treatment*. American Psychological Association. <https://doi.org/10.1037/10894-000>
- Shaffer, H. J. (2010). Gambling and public health: The public health perspective. Harvard Medical School Division on Addiction.
- Shaffer, H. J., & Korn, D. (2002). Preventing gambling disorders: A public health perspective. In J. McMillen (Ed.), *Gambling and public health: International perspectives* (pp. 179–196). Routledge.
- Ministry of Health, Labour and Welfare. (2021). *Report on policy research related to countermeasures for gambling disorder*. Government of Japan.

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