DSM-5 AND GAMBLING

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History

- In the United States, the initial impetus for developing a classification of mental disorders was to collect statistical information for the census.

- By the 1880 census, seven categories of mental illnesses were listed: mania, melancholia, monomania, paresis, dementia, dipsomania, and epilepsy.

- The increasing role of government in health care created a greater push for diagnostic uniformity in the period, and the first standard psychiatric classification was produced in the United States in 1918 by the American Medico-Psychological Association, forerunner of the APA.

- Published as the *Statistical Manual for the Use of Institutions for the Insane*, it listed 22 disorders and was primarily used to gather uniform statistics from mental institutions.
Development of DSM

• In 1933 the APA collaborated with the New York Academy of Medicine to publish a nationally acceptable psychiatric nomenclature incorporated in the American Medical Association’s *Standard Classified Nomenclature of Disease*.

• The manual contained 24 major categories.

• In the 1940s the United States military made a more sweeping revision to serve the needs of military psychiatrists.

• Meanwhile, the Veterans Administration created its own system to incorporate outpatient presentations of World War II veterans.

• Three different systems—those of the AMA, the Armed Forces, and the Veterans Administration.

• Some agencies used one system for clinical use, another for disability ratings, and a third for statistical reporting.
DSM-I

- The APA Committee on Nomenclature and Statistics set to work on a single national system of classification of mental illnesses that led to the publication in 1952 of the first edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-I).

- DSM-I was the first official manual of mental disorders to focus on clinical utility for classification.

- Definitions were relatively simple and consisted of brief prototypical descriptions. Most disorders were “reactions” reflecting the influence of Adolf Meyer and his psychobiological approach to psychiatry, which hypothesized that disorders were types of reaction patterns that are exaggerations or aberrations of, or substitutions for, normal, healthy, and adaptable ways of living.
DSM-II

• To encourage consistency internationally, WHO sponsored a revision that appeared as ICD-8 in 1968 and the APA published DSM-II the same year.

• Among the several changes in DSM-II, the most striking was the omission of the term *reaction* from diagnoses.

• The names of several disorders were changed, and the manual encouraged users to record multiple psychiatric diagnoses (listed in order of importance) and associated physical conditions, which presaged the development of the multiaxial diagnostic scheme of DSM-III.
DSM-III

- Published in 1980, DSM-III created a sensation.

- It was the first effort by a medical specialty to provide a comprehensive and detailed diagnostic manual in which all disorders were defined by specific criteria so that the methods for making a psychiatric diagnosis were relatively clear.

- Detailed drafts were written, opinions were obtained from 550 clinicians, and results were subjected to field tests of over 12,000 patients.

- In addition to the inclusion of diagnostic criteria, the other major innovation of DSM-III was the introduction of a multiaxial classification system. Five axes were described.
DSM-III

- DSM-III relied less than its predecessors on psychoanalytic concepts, and its descriptive approach was meant to be neutral ("atheoretical") with regard to etiology.

- Task force members felt that the inclusion of etiological theories would present an "obstacle to use of the manual by clinicians of varying theoretical orientations since it would not be possible to present all reasonable etiologic theories for each disorder".
DSM-III

- Another major goal of DSM-III was to improve reliability.

- Definitions in DSM-I and DSM-II did not facilitate communication between clinicians and often failed to delineate one disorder from another.

- Research showed that different clinicians using DSM-I or DSM-II would give different diagnoses to the same patient.

- In DSM-III each of the mental disorders was conceptualized as a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is typically associated with either distress or impairment.

- There was an inference that there is a behavioral, psychological, or biological dysfunction, and that the disturbance is not only in the relationship between the individual and society.
DSM-IV

- The APA created a task force in May 1988 to begin work on DSM-IV.

- DSM-IV was published in 1994, and its development involved systematic reviews of the literature, secondary data analyses of previously collected data, and analyses of primary data collected through 12 field trials.

- A major change from previous versions was the inclusion of a clinical significance criterion for almost half of all the categories, which required that symptoms cause “clinically significant distress or impairment in social, occupational, or other important areas of functioning.”

- Several new disorders were introduced (e.g., acute stress disorder, bipolar II disorder, Asperger’s disorder), and others were deleted or subsumed by other categories (e.g., cluttering, transsexualism, passive-aggressive personality disorder).
The road to DSM-5 began in 1999, and its publication in 2013 is the culmination of a lengthy and labor-intensive process.

The journey involved the efforts of many experts who carefully reviewed the literature, collected new data, and performed targeted analyses of existing data.

Not only have the diagnostic criteria been revised and updated, but chapter placement has changed.
DSM-5

- New categories have been introduced, and others have been consolidated.

- Many new disorders are included, and the multiaxial diagnostic scheme has been eliminated.

- Many dimensional assessments have been added to help clinicians better describe the patient’s symptoms and function.

- Symbolic of the transformation is that, unlike prior editions, DSM-5 is a “living document,” which means that it can change in response to scientific advances as they occur.
DSMs from 1952 to 2013

<table>
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<tr>
<th>Edition (year)</th>
<th>Number of disorders</th>
<th>Number of pages</th>
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<tr>
<td>DSM-I (1952)</td>
<td>106</td>
<td>132</td>
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<td>DSM-II (1968)</td>
<td>182</td>
<td>119</td>
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<td>265</td>
<td>494</td>
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<td>292</td>
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<td>DSM-IV (1994)</td>
<td>297</td>
<td>886</td>
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<td>DSM-IV-TR (2000)</td>
<td>297</td>
<td>943</td>
</tr>
<tr>
<td>DSM-5 (2013)</td>
<td>??</td>
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Gambling History

• Gambling is a ubiquitous activity encountered in almost all cultures throughout recorded history.

• Although recognized by both Emil Kraepelin (1856–1926) and Eugen Bleuler (1857–1939), disordered gambling behavior was first officially recognized in DSM-III as pathological gambling.

• The disorder was categorized as one of the impulse-control disorders not elsewhere classified, along with disorders such as kleptomania, pyromania, and trichotillomania.

• In DSM-5, the disorder is included in the chapter on substance use disorders because of consistently high rates of comorbidity, similar presentations of some symptoms, and genetic and physiological overlap.

• It also aligns more closely to substance use disorders than to other psychiatric conditions.

• Additionally, the placement of gambling disorder in the current chapter is likely to improve recognition of the disorder, especially among substance abusers who are at high risk for gambling problems.
Substance-Related and Addictive Disorders

• In addition to the substance-related disorders, this chapter also includes gambling disorder,

• Reflects evidence that gambling behaviors activate reward systems similar to those activated by drugs of abuse and produce some behavioral symptoms that appear comparable to those produced by the substance use disorders.

• Other excessive behavioral patterns, such as Internet gaming, have also been described, but the research on these and other behavioral syndromes is less clear.

• Thus, groups of repetitive behaviors, which some term behavioral addictions, with such subcategories as “sex addiction,” “exercise addiction,” or “shopping addiction,” are not included - at this time there is insufficient peer-reviewed evidence to establish the diagnostic criteria and course descriptions.
Non-Substance-Related Disorders

Gambling Disorder

• An important departure from DSM-IV-TR is that the current chapter now includes gambling disorder, formerly listed as pathological gambling in the section on impulse control disorders not elsewhere classified.

• The disorder has been relocated because of evidence showing that gambling activates the same brain reward system with effects similar to those of drugs of abuse.
Gambling Disorder

A. Persistent and recurrent problematic gambling behavior leading to clinically significant impairment or distress, as indicated by the individual exhibiting four (or more) of the following in a 12-month period:

1. Needs to gamble with increasing amounts of money in order to achieve the desired excitement.
2. Is restless or irritable when attempting to cut down or stop gambling.
3. Has made repeated unsuccessful efforts to control, cut back, or stop gambling.
4. Is often preoccupied with gambling (e.g., having persistent thoughts of reliving past gambling experiences, handicapping or planning the next venture, thinking of ways to get money with which to gamble).
Gambling Disorder

5. Often gambles when feeling distressed (e.g., helpless, guilty, anxious, depressed). (former: gambles as a way of escaping from problems…)

6. After losing money gambling, often returns another day to get even (“chasing” one’s losses).

7. Lies to conceal the extent of involvement with gambling.

8. Has jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling.

9. Relies on others to provide money to relieve desperate financial situations caused by gambling.

B. The gambling behavior is not better explained by a manic episode.
The essential feature of gambling disorder is persistent and recurrent maladaptive gambling behavior that disrupts personal, family, and/or vocational pursuits (Criterion A).

Gambling disorder is defined as a cluster of four or more of the symptoms listed in Criterion A occurring at any time in the same 12-month period.

A pattern of “chasing one’s losses” may develop, with an urgent need to keep gambling (often with the placing of larger bets or the taking of greater risks) to undo a loss or series of losses. The individual may abandon his or her gambling strategy and try to win back losses all at once. Although many gamblers may “chase” for short periods of time, it is the frequent, and often long-term, “chase” that is characteristic of gambling disorder (Criterion A6).

Individuals may lie to family members, therapists, or others to conceal the extent of involvement with gambling; these instances of deceit may also include, but are not limited to, covering up illegal behaviors such as forgery, fraud, theft, or embezzlement to obtain money with which to gamble (Criterion A7).

Individuals may also engage in “bailout” behavior, turning to family or others for help with a desperate financial situation that was caused by gambling (Criterion A9).
Changes from DSM-IV

- The DSM-5 diagnosis requires that four of nine symptoms be endorsed to qualify for the diagnosis of disordered gambling.

- The threshold of four symptoms was found to differentiate pathological from nonpathological forms of gambling.

- DSM-IV Criterion A8 has been eliminated in DSM-5 because the symptom “has committed illegal acts finance gambling” has been shown to have low prevalence, and its elimination has little or no effect on prevalence and little effect on the information associated with the diagnosis.
Gambling Disorder

Specify if:

Episodic: Meeting diagnostic criteria at more than one time point, with symptoms subsiding between periods of gambling disorder for at least several months.

Persistent: Experiencing continuous symptoms, to meet diagnostic criteria for multiple years.

Specify if:

In early remission: After full criteria for gambling disorder were previously met, none of the criteria for gambling disorder have been met for at least 3 months but for less than 12 months.

In sustained remission: After full criteria for gambling disorder were previously met, none of the criteria for gambling disorder have been met during a period of 12 months or longer.
Gambling Disorder

Specify current severity:

**Mild:** 4–5 criteria met.

**Moderate:** 6–7 criteria met.

**Severe:** 8–9 criteria met.
Do the severity cut-offs mean anything?

- DSM-5 has used the number of criteria met to define GD severity, mirroring the classification system used for substance use disorders.
- In the case of GD, many indicators are available to potentially operationalize clinical severity (e.g., money lost gambling as a percentage of earnings, impairment, or comorbidity).
- Research suggests that the individual criteria may not all be equivalent in terms of their contributions to the severity of the behavior.
- For example, jeopardizing important matters, experiencing withdrawal, and needing financial assistance have all been associated with a more severe level of GD than were chasing losses or being preoccupied with gambling.
- In a sample of gamblers recruited from the general population, endorsement of the item ‘social, financial, or occupational losses due to gambling’ was most indicative of more severe GD.
DSM-5 Severity Categories

- Based on the nine criteria for GD in the DSM-5, 574 subjects were categorized as mild (score 4–5), moderate (score of 6–7), or severe GD symptoms (score of 8–9).
- Both the moderate and severe groups exhibited significantly higher loss of money to gambling in the past year, lower quality of life, and more nicotine consumption (smoking) relative to the mild group.
- Moderate and severe groups did not differ significantly from each other on these measures.
- The PG-YBOCS total scores differed significantly between all three groups.
- Weekly gambling frequency was insensitive to group differences.
Clinical Variables of Subjects with Gambling Disorder Based on DSM-5 Level of Severity

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mild (4-5 criteria) N=73</th>
<th>Moderate (6-7 criteria) N=184</th>
<th>Severe (8-9 criteria) N=317</th>
<th>Omnibus p value #</th>
<th>Mild vs. Moderate</th>
<th>Moderate vs. Severe</th>
<th>Mild vs. Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at onset of gambling</td>
<td>24.0 (14.7)</td>
<td>26.4 (13.2)</td>
<td>24.4 (12.2)</td>
<td>0.211</td>
<td>---</td>
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</tr>
<tr>
<td>Gambling disorder age at onset</td>
<td>31.4 (15.4)</td>
<td>36.7 (14.0)</td>
<td>34.5 (12.8)</td>
<td>0.020</td>
<td>**</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>$ Lost (Past Year)</td>
<td>8525 (13154)</td>
<td>17419 (19400)</td>
<td>22984 (25676)</td>
<td>&lt;0.001</td>
<td>*</td>
<td>n.s.</td>
<td>***</td>
</tr>
<tr>
<td>PG-YBOCS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- Urge</td>
<td>7.5 (3.5)</td>
<td>10.7 (3.2)</td>
<td>12.2 (2.7)</td>
<td>&lt;0.001</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>- Behavior</td>
<td>8.6 (3.8)</td>
<td>11.5 (3.3)</td>
<td>12.7 (2.9)</td>
<td>&lt;0.001</td>
<td>***</td>
<td>**</td>
<td>***</td>
</tr>
<tr>
<td>- Total</td>
<td>16.1 (6.8)</td>
<td>22.2 (5.3)</td>
<td>24.9 (5.0)</td>
<td>&lt;0.001</td>
<td>***</td>
<td>***</td>
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<tr>
<td>Gambling Frequency</td>
<td>4.1 (2.8)</td>
<td>4.7 (3.0)</td>
<td>5.0 (2.5)</td>
<td>n.s.</td>
<td>---</td>
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<td>QoLI</td>
<td>44.2 (13.4)</td>
<td>35.0 (16.7)</td>
<td>31.4 (15.1)</td>
<td>&lt;0.001</td>
<td>**</td>
<td>n.s.</td>
<td>***</td>
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<tr>
<td>Nicotine use (packs per day)</td>
<td>0.3 (0.5)</td>
<td>0.5 (0.5)</td>
<td>0.6 (0.5)</td>
<td>&lt;0.001</td>
<td>**</td>
<td>n.s.</td>
<td>***</td>
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</table>
Specifiers

• Severity is based on the number of criteria endorsed. Individuals with mild gambling disorder may exhibit only 4–5 of the criteria, with the most frequently endorsed criteria usually related to preoccupation with gambling and “chasing” losses.

• Individuals with moderately severe gambling disorder exhibit more of the criteria (i.e., 6–7).

• Individuals with the most severe form will exhibit all or most of the nine criteria (i.e., 8–9). Jeopardizing relationships or career opportunities due to gambling and relying on others to provide money for gambling losses are typically the least often endorsed criteria and most often occur among those with more severe gambling disorder.

• Individuals presenting for treatment of gambling disorder typically have moderate to severe forms of the disorder.
The past-year prevalence rate of gambling disorder is about 0.2%–0.3% in the general population.

In the general population, the lifetime prevalence rate is about 0.4%–1.0%.

For females, the lifetime prevalence rate of gambling disorder is about 0.2%, and for males it is about 0.6%.

The lifetime prevalence of pathological gambling among African Americans is about 0.9%, among whites about 0.4%, and among Hispanics about 0.3%.
• Gambling patterns may be regular or episodic, and gambling disorder can be persistent or in remission.

• Gambling can increase during periods of stress or depression and during periods of substance use or abstinence.

• Gambling disorder is sometimes associated with spontaneous, long-term remissions.

• Some individuals underestimate their vulnerability to develop gambling disorder or to return to gambling disorder following remission.

• When in a period of remission, they may incorrectly assume that they will have no problem regulating gambling and that they may gamble on some forms nonproblematically, only to experience a return to gambling disorder.
Differential Diagnosis

- **Nondisordered gambling.** In professional gambling, risks are limited and discipline is central. Social gambling typically occurs with friends or colleagues and lasts for a limited period of time, with acceptable losses.

- **Manic episode.** Loss of judgment and excessive gambling may occur during a manic episode. In additional diagnosis of gambling disorder should be given only if the gambling behavior is not better explained by manic episodes.

- **Personality disorders.** Problems with gambling may occur in individuals with antisocial personality disorder and other personality disorders. If the criteria are met for both disorders, both can be diagnosed.

- **Other medical conditions.** Some patients taking dopaminergic medications (e.g., Parkinson’s disease) may experience urges to gamble. If such symptoms dissipate when dopaminergic medications are reduced in dosage or ceased, then a diagnosis of gambling disorder would not be indicated.
Culture-Related Diagnostic Issues

- Individuals from specific cultures and races/ethnicities are more likely to participate in some types of gambling activities than others (e.g., pai gow, cockfights, blackjack, horse racing).

- Prevalence rates of gambling disorder are higher among African Americans than among European Americans, with rates for Hispanic Americans similar to those of European Americans.

- Indigenous populations have high prevalence rates of gambling disorder.
Critiques

- Eliminating “committing illegal acts” as a symptom for the diagnosis neglects the findings that it appears only at high severity levels of gambling disorder.

- The effect of lowering the threshold from five out of 10 symptoms to four out of nine symptoms will have an effect of reducing diversity because of the fewer number of combinations that can occur with diagnostic criteria.

- Although the task force concluded that there was insufficient empirical evidence to warrant including behavioral disorders other than gambling at this time, the creation of such a classification leaves the door open for other non-substance-based disorders.
Implications for assessing individuals with a Gambling Disorder.

• With gambling disorder grouped with substance-use disorders, this could lead to new developments, both in terms of research and in terms of the practical application of that research in prevention, treatment and public policy.

• For example, while there is plenty of evidence that gambling treatment of various types does help people, there is a lot to be learned about how it works, and for whom.

• By integrating research in brain imaging, genetics and clinical trials, there is an opportunity to understand the mechanisms of effective behavioral change, and then tailor programs to increase their reach and success rates.

• Prevention – this change reminds clinicians to educate and screen for gambling

• Treatment – clinicians treating addictions may now broaden their area to gambling

• Insurance – how knows yet but policies that cover addiction treatment may now expand to include gambling