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Gambling Disorder

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DESCRIPTION OF GAMBLING DISORDER

Definition

- Gambling disorder, which is sometimes referred to as pathological gambling or disordered gambling (Hodgins, Stea, & Grant, 2011; Slutske, Zhu, Meier, & Martin, 2011; Substance Abuse and Mental Health Services Administration [SAMHSA], 2014), is described in the *Diagnostic and Statistical Manual of Mental Disorders, 5th edition* (DSM-5) as, "persistent and recurrent problematic gambling behavior leading to clinically significant impairment or distress" (American Psychiatric Association [APA], 2013, p. 585).

- Individuals who meet four or more of the following criteria in a 12-month period meet the criteria for having a gambling disorder: increasing the amount of money gambled to reach the same level of excitement; restlessness or irritability when cutting down or stopping; unsuccessful attempts to control or cut back on gambling; preoccupation with gambling; gambling as a coping mechanism for emotional distress; gambling after losing money to recoup losses; lying about gambling; loss of important relationships, employment, or career opportunities due to gambling; and reliance on others for financial support due to financial strain stemming from gambling (APA, 2013).

- Problem gambling is less severe than a gambling disorder, and includes gambling behaviors that cause harm without the co-occurring inability to control gambling behaviors (SAMHSA, 2014).

Prevalence

- An estimated 1.5 million Americans previously -or currently- meet the criteria for pathological gambling. A range of 3-6 million Americans meet the criteria for problem gambling (SAMHSA, 2014).

Resource:
SAMHSA Advisory: Gambling Problems: An Introduction for Behavioral Health Services Providers
http://store.samhsa.gov/shin/content//SMA14-4851/SMA14-4851.pdf

IDENTIFICATION/ASSESSMENT STRATEGIES

Brief Biosocial Gambling Screen (BBGS; Gebauer, LaBrie, & Shaffer, 2010)
The BBGS (Gebauer, LaBrie, & Shaffer, 2010) is a screening tool used to identify individuals who may have a gambling disorder. This three-item screen was designed for use with the general population and with individuals seeking treatment services. Among the general population, the BBGS yielded a sensitivity index—identifying individuals who met the criteria for gambling disorder—of .96 on a 0 to 1 scale. The BBGS yielded a specificity index, or discernment of true negative results from all negative results, of .99 on a 0 to 1 scale (Gebauer et al., 2010). Among individuals in treatment for substance use disorders, the sensitivity index obtained was a .91 and the specificity index obtained was a .87 (Himelhoch et al., 2015). Strengths of this screening tool include its ease of use and adequate specificity

and sensitivity for use as a screening measure. Limitations include reliance on self-report data and the necessity of conducting further assessment to confirm a diagnosis of gambling disorder.

Lie-Bet Questionnaire (Johnson & Hamer, 1998)

The Lie-Bet Questionnaire (Johnson & Hamer, 1998) is a two-item screening tool used to identify individuals who may be experiencing a gambling disorder. During the initial pilot study, the Lie-Bet Questionnaire produced a sensitivity index of .99 and a specificity index of .91. In a follow-up study, the Lie-Bet Questionnaire produced a sensitivity index of 1.00 and a specificity index of .85 (Johnson & Hamer, 1998). Among a sample seeking treatment for substance use disorders, the Lie-Bet Questionnaire produced a sensitivity index of .94 and a specificity index of .66, making this screening slightly less effective in discriminating individuals who do not meet criteria for further assessment among this population than among the general population (Himelhoch et al., 2015). This instrument has adequate sensitivity and specificity for use as a screening tool among the general population. Limitations include its reliance on self-report data, reduced specificity with individuals seeking substance use disorder treatment, and the need for additional assessment to accurately diagnose gambling disorder.

NODS-CLiP (Toce-Gerstein, Gerstein, & Volberg, 2009) and NODS-PERC (Volberg, Munck, & Petry, 2011).

The National Opinion Research Center DSM-IV Screen for Gambling Problems (NODS) Control, Lying, and Preoccupation (NODS-CLiP) and NODS Preoccupation and Escape, Chasing and Risked Relationships (NODS-PERC) screening instruments were both developed from the overall NODS questionnaire (Toce-Gerstein, Gerstein, & Volberg, 2009; Volberg, Munck, & Petry, 2011). The NODS-CLiP is a three-item screen with an overall sensitivity index of .99 and a specificity index of .88 among a national sample (Toce-Gerstein et al., 2009). Among individuals receiving treatment for a substance use disorder, the NODS-CLiP produced a sensitivity index of 1.00 and a specificity index of .54 (Himelhoch et al., 2015). The NODS-PERC is a four-item screen that yielded a sensitivity index of 1.00 and a specificity index of .39 in a sample of individuals seeking brief intervention services for gambling-related concerns (Volberg et al., 2011). Among individuals seeking substance use disorder treatment, the NODS-PERC yielded a sensitivity of 1.00 and a specificity of .57 (Himelhoch et al., 2015). Strengths of these screening tools include brevity and high degree of sensitivity. Limitations include less specificity than other evidence-based screening tools, reliance on self-report data, and the need for further assessment to diagnose gambling disorder.

South Oaks Gambling Screen (SOGS; Lesieur & Blume, 1987)

The SOGS is a 20-item self-report assessment used to identify problem gambling. The SOGS was developed in accordance with the DSM-III criteria for pathological gambling (Lesieur & Blume, 1987). Internal-consistency reliability of the SOGS in the initial development was a .97, with a test-retest reliability correlation coefficient of .71 over a 30-day or more time period. Analysis of SOGS in the initial validation process yielded a sensitivity index of .98. The specificity index obtained was a .95. The validation sample included individuals from Gamblers Anonymous, students, and hospital employees. Additional researchers have supported the reliability and validity of the SOGS as an assessment for identifying individuals who may have a gambling disorder (Slutske, Zhu, Meier, & Martin, 2011). Strengths of the SOGS include high inter-item reliability, adequate sensitivity and specificity, and strong empirical support. Limitations of the SOGS includes its reliance on self-report data and lack of revision as diagnostic criteria have been revised.

Problem Gambling Severity Index (PGSI; Holtgraves, 2009)

The PGSI is a nine-item assessment tool for discriminating between individuals with low risk, moderate risk, and problem gambling behaviors (Holtgraves, 2009). The overall inter-item reliability of the PGSI obtained through a Canadian national sample was .86. Factor analysis yielded a distinct single-factor structure for individuals categorized by the instrument as 'problem gamblers,' while discrete factors related to item content emerged for individuals identified as low risk or moderate risk (Holtgraves, 2009). Follow-up analysis of the test-retest reliability of the PGSI yielded a coefficient of .63 over a 14-month test-retest period (Currie, Hodgins, & Casey, 2013). In follow-up research, researchers also supported the PGSI's discernment between non-problem and problem gamblers, with poor discriminant validity demonstrated between individuals identified as low or moderate risk; this issue was resolved by adjusting the scoring system for the PGSI in the follow-up study (Currie et al., 2013). Strengths of this assessment include brevity, identification of an individual's risk level related to gambling disorder, and psychometric properties congruent with diagnosing gambling disorder. Limitations include the reliance on self-report data, issues of discriminant validity when scored according to the original PGSI scoring protocol, and modest test-retest reliability.

Resources:
California Council on Problem Gambling Screening Tools
http://www.calpg.org/screening-tools

New York State Office of Alcoholism and Substance Abuse Services: OASAS Approved Gambling Screening/Assessment Tools
https://www.oasas.ny.gov/gambling/tools.cfm

INTERVENTION STRATEGIES

Cognitive-Behavioral Therapy

Cognitive-Behavioral Therapy (CBT) has demonstrated effectiveness with gambling disorder in both individual and group settings (Hodgins et al., 2011; Rash & Petry, 2014; Stea & Hodgins, 2011). CBT for gambling disorder focuses upon the maladaptive and faulty thoughts and beliefs surrounding gambling and the behavioral components involved in the gambling process. Emphasis is placed upon increasing awareness of relationships between these faulty cognitions, an individual's affective states, and problematic behavioral responses (Rash & Petry, 2014). Interventions may vary in the degree to which cognitions and behaviors are emphasized, although both are addressed in some capacity during the CBT intervention (Rash & Petry, 2014). Follow-up studies on CBT interventions support the effectiveness of CBT at six-month and one-year follow up (Rash & Petry, 2014).

Motivational Enhancement Therapy

Brief motivational enhancement interventions which use motivational interviewing to increase awareness of and motivation to address problematic gambling patterns have demonstrated efficacy for treating gambling disorder (Hodgins et al., 2011; Rash & Petry, 2014; Stea & Hodgins, 2011). Motivational enhancement interventions may range from a brief consultation with feedback related to reducing negative consequences of gambling to multiple sessions focusing on changing problematic gambling patterns (Rash & Petry, 2014). These interventions typically are cost-effective and brief (Hodgins et al., 2011; Rash & Petry, 2014; Stea & Hodgins, 2011). Motivational enhancement interventions also may be used to support abstinence or harm-reduction related to consequences of gambling, making this

treatment modality particularly appropriate for individuals who are unwilling to consider abstinence from gambling (Stea, Hodgins, & Fung, 2015).

Family Therapy
Family therapy for gambling disorder attempts to address the systemic impact of the disorder on the family system and to support the family system in making changes to improve family and individual functioning. Family-based interventions developed for use with gambling disorder have demonstrated modest empirical support (Hodgins et al., 2011; Stea & Hodgins, 2011). The Community Reinforcement and Family Therapy (CRAFT) approach, initially created as a family-based intervention for substance use disorders, has been modified for the treatment of gambling disorder. The CRAFT approach empowers family members to behaviorally reinforce the individual's non-gambling behaviors, develop coping mechanisms throughout the family system, improve overall family functioning, and encourage individual pursuit of treatment for the gambling disorder (Hodgins et al., 2011; Stea & Hodgins, 2011). Coping skills training (CST) is a family-based intervention that aims to increase awareness among members of the family system surrounding the role of gambling as a coping mechanism for stress. Emphasis on changing coping mechanisms throughout the system supports effective coping skills that may reduce the individual's use of gambling as a stress coping mechanism (Hodgins et al., 2011; Stea & Hodgins, 2011). Congruence couple therapy (CCT) is an intervention based upon the work of Virginia Satir. CCT for gambling disorder focuses upon increasing individual and couple congruence across multiple dimensions of functioning including intrapsychic, interpersonal, intergenerational and spiritual domains. Participants CCT interventions reported improved relational functioning and improvement in gambling-related concerns (Hodgins et al., 2011; Lee & Awosoga, 2015).

Gamblers Anonymous
Gamblers Anonymous (GA) is a peer support group based upon the 12-step model. This self-help program promotes abstinence from gambling activities and encourages regular participation in 12-step meetings, work with a sponsor, and engaging in the process of recovery from problem gambling. Few empirical studies have been conducted on GA. Results from the few studies focusing on GA as a primary treatment modality present equivocal support for GA as a primary form of treatment, although GA added to formal treatment programs was found to support overall progress in treatment (Hodgins et al., 2011; Rash & Petry, 2014; Stea & Hodgins, 2011).

Pharmacological Treatments
The use of medication in the treatment of gambling disorder is an expanding area of research. Studies have been conducted on the utility of antidepressants, opioid antagonists, mood stabilizers, and atypical antipsychotics, with varying results (Grant, Odlaug, & Schrelber, 2012; Hodgins et al., 2011). Researchers have identified promise in the opioid antagonist Naltrexone in managing symptoms and behaviors associated with gambling disorder, although additional research on the utility of this medication with gambling disorder is warranted (Grant et al., 2012; Hodgins et al., 2011).

Resources:
National Center for Responsible Gaming. (2012). What clinicians need to know about gambling disorders. *Increasing the Odds: A Series Dedicated to Understanding Gambling Disorders* (vol. 7). Retrieved from http://www.ncrg.org/sites/default/files/uploads/docs/monographs/ncrgmonograph7final.pdf

Substance Abuse and Mental Health Services Administration. (2014). *Gambling problems: An introduction for behavioral health service providers.* Retrieved from http://store.samhsa.gov/shin/content//SMA14-4851/SMA14-4851.pdf

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Stea, J. N., Hodgins, D. C., & Fung, T. (2015). Abstinence versus moderation goals in brief motivational treatment for pathological gambling. *Journal of Gambling Studies, 31*, 1029-1045. DOI:10.1007/s10899-014-9461-6

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