

How should severity be determined for the DSM-5 proposed classification of Hypersexual Disorder?

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Background and aims: The concept of severity among providers working with hypersexual behavior is frequently used despite a lack of consensus about how severity should be operationalized. The paucity of dialogue about severity for hypersexual behavior is disconcerting given its relevance in determining level of care, risk, allocation of resources, and measuring treatment outcomes in clinical practice and research trials. The aim of the current article is to highlight several considerations for assessing severity based on the proposed DSM-5 criteria for hypersexual disorder. *Methods:* A review of current conceptualizations for severity among substance-use disorders and gambling disorder in the DSM-5 were considered and challenged as lacking applicability or clinical utility for hypersexual behavior. *Results and conclusions:* The current research in the field of hypersexual behavior is in its infancy. No concrete approach currently exists to assess severity in hypersexual populations. Several factors in operationalizing severity are discussed and alternative approaches to defining severity are offered for readers to consider.

Keywords: sexual compulsivity, severity, DSM-5, hypersexual disorder, sex addiction, sexual impulsivity

INTRODUCTION

The proposed criteria for the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5, [American Psychiatric Association, 2013](#)) characterize Hypersexual Disorder (HD) as a repetitive and intense preoccupation with sexual fantasies, urges, and behaviors, leading to adverse consequences and clinically significant distress or impairment in social, occupational, or other important areas of functioning. One defining feature of the proposed disorder includes multiple unsuccessful attempts to control or diminish the amount of time an individual engages in sexual fantasies, urges, and behavior in response to dysphoric mood states or stressful life events ([Kafka, 2010](#)). While some have suggested HD should be considered a behavioral addiction the empirical literature appears to fall short of supporting this conceptualization at the present time ([Kor, Fogel, Reid & Potenza, 2013](#)). Nevertheless, there are many parallels concerning HD and addictive-related disorders and this appears especially true for shared commonalities between HD and a gambling disorder ([Farre et al., 2015](#)). However, it is unclear how severity for hypersexual behavior should be conceptualized and this is the first paper in the literature to explore how HD severity might be operationalized. This article is intended to be a catalyst to advancing some perspectives and discussion about assessing severity related to HD. As a caveat, the current article uses the term HD or hypersexual behavior for purposes of referring to the HD criteria proposed for DSM-5 while recognizing that ultimately the proposed disorder was excluded in the final publication for a number of reasons discussed elsewhere ([Reid & Kafka, 2014](#)). However, given the results of the DSM-5 field trial ([Reid et al., 2012](#)), the HD criteria are commonly used as

the standard for measuring this phenomenon in clinical and research applications.

METHODS

Defining severity

The Cambridge Online Dictionary defines severity as something serious or causing great pain, difficulty, or damage. Severity in the DSM-5 has typically been operationalized from mild to severe and assigned to a diagnosis based on the number of symptom criteria endorsed. In the section on *Substance-Related and Addictive Disorders*, severity across time is also measured by reductions or increases in the frequency and/or doses of substances used. Likewise, severity for Gambling Disorder is assigned by the number of symptoms endorsed at the time of evaluation. However, the DSM-5 operationalization of severity for addictive-related disorders is debatable and this is certainly true for HD for a vast array of reasons articulated below.

Severity in the DSM-5 by symptom endorsement

Symptom count is a gross measure of severity and makes an assumption that all symptoms for a given disorder are equal. During the DSM-5 field trial for HD, some patients barely met the diagnostic threshold for HD that would have likely been considered more “serious” or “severe” cases but such

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impressions were based on an examination of the broader scope of their overall clinical presentation that extended beyond the DSM-5 proposed criteria. This observation has also been noted elsewhere in substance-related disorders (Moss, 2011). Complicating matters, symptom endorsement for HD has a much higher threshold required compared to substance-related and gambling disorders. For example, several substance-use disorders can be diagnosed with as few as 2 of 10 or more symptoms. A gambling disorder requires 4 of 9 symptoms. An HD diagnosis, however, required 4 out of 5 of the “A” criteria, evidence of impairment, and symptoms had to occur independent of a substance-related disorder, medical condition, or manic episode (see Figure 1). Collectively, the current structure of the HD proposed criteria makes severity by symptom endorsement difficult insofar as someone meeting the threshold for the diagnosis endorses 80% of the symptoms (e.g., a patient meeting criteria for HD would have either endorsed 4 or 5 of the ‘A’ criteria, which does not allow for the current tri-categorized DSM-5 severity designations — mild, moderate, and severe). The threshold for meeting the HD criteria would need to be lowered to 3 out of 5 of the ‘A’ criteria to accommodate severity categorizations of mild, moderate, and severe, however, such a change would potentially introduce the problem of false-positive HD diagnosis. Finally, symptom count as an index of severity also ignores the *magnitude* of how someone might experience a given symptom. For example patients may report significant clinical distress but the magnitude of the distress may vary across individuals. This is why someone with a greater magnitude across a few symptoms might be considered a more severe case than someone with more symptoms but of a lesser magnitude. Given the limitations of the symptom-count approach to operationalizing severity, studies are needed to compare this method with alternative approaches. The field of hypersexuality research might consider some of the work challenging substance-use

disorder severity designations as a model for research that could be applied to the HD criteria (Fazzino, Rose, Burt & Helzer, 2014).

Excessiveness, frequency, and duration

One approach to assess severity might consider how much time is spent engaging in sexual fantasies, urges, and behavior (e.g. time spent *planning for* and *recovering from* sexual activities). Generally time — as measured by the frequency and duration of sexual fantasies, urges, and behaviors — can vary and may influence whether an activity is considered excessive or even problematic. For example, masturbation once a week for 15 minutes might not be considered excessive or problematic whereas sex with an extra-dyadic partner outside a monogamous committed relationship once a week for 15 minutes is likely both problematic and excessive. These examples raise questions about whether severity should consider the specific manifestation of sexual behavior. While no attempt was made to pathologize the expression of sexual behaviors with the DSM-5 proposal for HD, it is important to ask how the type of sexual behavior linked to hypersexuality might play a role in assessing levels of severity. For example, do solo-sex behaviors carry more or less potential to contribute to a severity index than relational sexual activities? As evident above, considering severity based exclusively on level of excessiveness or frequency of a sexual activity has several limitations.

Level of impairment, diminished control, and consequences

Another approach might consider severity based on the extent that hypersexual behavior causes significant impairment to one’s social, occupational or other important areas of functioning. Closely related to impairment are the concepts of diminished control and consequences.

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| <p>A. Over a period of at least six months, recurrent and intense sexual fantasies, sexual urges, and sexual behavior in association with four or more of the following five criteria:</p> <ol style="list-style-type: none"> 1. Excessive time is consumed by sexual fantasies and urges, and by planning for and engaging in sexual behavior. 2. Repetitively engaging in these sexual fantasies, urges, and behavior in response to dysphoric mood states (e.g., anxiety, depression, boredom, irritability). 3. Repetitively engaging in sexual fantasies, urges, and behavior in response to stressful life events. 4. Repetitive but unsuccessful efforts to control or significantly reduce these sexual fantasies, urges, and behavior. 5. Repetitively engaging in sexual behavior while disregarding the risk for physical or emotional harm to self or others. <p>B. There is clinically significant personal distress or impairment in social, occupational or other important areas of functioning associated with the frequency and intensity of these sexual fantasies, urges, and behavior.</p> <p>C. These sexual fantasies, urges, and behavior are not due to direct physiological effects of exogenous substances (e.g., drugs of abuse or medications), a co-occurring general medical condition, or to manic episodes.</p> <p>D. The person is at least 18 years of age.</p> <p>Specify if: Masturbation, Pornography, Sexual Behavior With Consenting Adults, Cybersex, Telephone Sex, Strip Clubs</p> |
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Figure 1. DSM-5 Proposed criteria for hypersexual disorder

Certainly, these three concepts have some overlap and interaction. Diminished control contributes to repetitive hypersexual behaviors that create consequences which impair one's ability to function. These concepts could be considered with respect to operationalizing severity. For example, multiple unsuccessful attempts to control or significantly reduce sexual fantasies, urges and behaviors might suggest a greater level of severity. Perhaps diminished control in one context might have greater consequences than others (e.g. inability to refrain from pornography on a work vs. a home computer). Of course, the notion of diminished control makes an assumption that attempts to control the frequency or manifestations of hypersexual behavior have occurred. In cases where a patient may be pre-contemplative about change, it is possible attempts to control or change their behavior have never been made, and thus patients would deny experiencing multiple unsuccessful attempts to control their sexual behavior. Further, the presence or absence of such efforts may occur, independent of the severity of their condition.

The number or types of consequences might also influence how severity is assigned. Consequences however, vary depending on several other factors and some consequences might be considered more severe based on the implications, frequency, or subjective values. In attempt to understand consequences, researchers developed the Hypersexual Behavior Consequences Scale which offered several insights about the types of consequences encountered by hypersexual patients (Reid, Garos & Fong, 2012). For example, consequences leading to interference with friendships typically have different ramifications than those leading to divorce. A consequence such as job loss might also vary in severity depending on other variables. For example, job loss might be associated with greater severity if one is financially struggling for money or if it is highly publicized in the media as with some political scandals, celebrities, or well-known sports figures. The related legal problems that can be associated with hypersexual behavior can also heighten the seriousness of a case presentation and by extension, how severity is conceptualized. A patient's moral values might also influence whether a specific consequence is considered severe. One patient marginalized the consequence of an unintended pregnancy resulting from hypersexual behavior stating "it wasn't an issue, she just got an abortion." However, upon further investigation, it was discovered the woman felt pressured into having the abortion and afterward experienced significant depression, shame, and guilt as it contradicted her religious values. Subsequently, it might be important to consider the extent to which others may be physically or emotionally harmed by hypersexual behavior and such factors weighted in assessing severity. Further, a way of quantifying consequences is necessary to determine what types of consequences should be given more attention in assessing severity.

An extension of the vast array of consequences encountered by hypersexual patients might consider whether hypersexual behavior contributes to comorbid psychological conditions such as depression, anxiety, substance abuse, suicidality or personality traits such as shame (Raymond, Coleman & Minor, 2003; Reid, Stein & Carpenter, 2011). Such cases require special consideration and their

complexity can influence the seriousness, pain, or suffering leading to a greater level of severity.

Level of risk taking

One symptom of the HD proposal involves risk taking: "Repetitively engaging in sexual behavior while disregarding the risk for physical or emotional harm to self or others." Arguably, not all risk taking behavior is equal and can vastly influence how severity might be operationalized. The word severe can also imply damage and some risk-taking behavior has significantly higher potential for greater damage. Some examples might include risks associated with sexually transmitted infections, unintended pregnancies, physical harm to self or others, legal problems, job loss, divorce, and so forth. During the DSM-5 field trial, patients reported masturbating to the extent of incurring genital lesions requiring medical attention. Some described watching pornography on their digital devices while driving placing them at risk for automobile accidents. A few patients meeting criteria for HD also had a comorbid paraphilic disorder of autoerotic asphyxiation, which has also been linked to unintended deaths. Several patients described pursuing sex in neighborhoods that were known to have high crime rates that compromised their physical safety. While not part of the DSM-5 criteria for a gambling disorder, several studies show individuals with a gambling disorder and co-occurring illegal activities associated with gambling exhibited greater levels of gambling severity in comparison to gamblers without criminal histories (Ledgerwood, Weinstock, Morasco & Petry, 2007; Potenza, Steinberg, McLaughlin, Rounsaville & O'Malley, 2000; Strong & Kahler, 2007). Subsequently, if gambling research generalized to hypersexual patients, those who commit illegal acts in order to engage in sexual activities may represent more severe cases. Collectively, the level of risk a patient is willing to disregard to pursue sexual fantasies, urges, and behaviors should be considered in assessing levels of severity.

Cravings and urges

Understanding severity for HD based on sexual cravings and urges creates several challenges. First, unlike substance-use disorders where abstinence is often a goal, clinicians try to help hypersexual patients reorganize their relationship with sexual cravings in order to cultivate healthy expressions of sexuality. Thus, a sexual craving leading to sexual behavior may not always be problematic whereas a craving to use cocaine is likely always considered problematic.

Another challenge is the lack of research specifically focused on the role of cravings in the etiology or maintenance of hypersexual behavior. The field is in its infancy and only recently began developing measures of craving (Kraus & Rosenberg, 2014). However, more investigations are needed to understand the role of craving and its relationship to the concept of severity. For example, ecological momentary assessment could be used to further understand how cravings manifest among hypersexual individuals (Shiffman, Stone & Hufford, 2008). Such research might help resolve existing controversy where some have argued HD falls short of a pathological condition and is merely

a manifestation of high sexual desire (e.g. craving) of behaviors and not an addictive process per se (Carvalho, Stulhofer, Vieira & Jurin, 2015; Steele, Staley, Fong & Prause, 2013; Winters, Christoff & Gorzalka, 2010).

As the field evolves, researchers might consider drawing on the work of those in the field of gambling disorders who have found some evidence between self-reported cravings and relapse (Oei & Gordon, 2008), risk-taking propensity in wagering (Ashrafioun, Kostek & Ziegelmeyer, 2013), and gambling severity as measured by the Problem-Gambling Severity Index (Ferris & Wynne, 2001) among gambling populations (Young & Wohl, 2009). However, other researchers in the field of behavioral addictions have considered alternative models to help explain the construct of cravings such as those often reported in food addiction (Rogers & Hendrik, 2000). Collectively, further research is needed to understand the construct of cravings among hypersexual populations in order to consider how sexual cravings might be linked (if at all) in characterizing the severity of HD. Regardless, cravings, as an index of severity, relapse, treatment response, or etiology, is likely to pose a difficult and challenging area of scientific inquiry as noted by other prominent craving researchers in the field of substance-use disorders (Tiffany & Wray, 2009).

Onset and clinical course

During the DSM-5 field trial for HD, the onset and clinical course of HD among participants was explored (Reid, Carpenter et al., 2012). While the proposal limited an HD diagnosis to adults over the age of 18, surprisingly, 54% of participants stated they began to experience difficulties regulating their sexual behavior as adolescents and 30% during college-age years. Most (82.6%) reported a gradual onset lasting several months or years with 17.4% indicating a rapid-acute onset > 90 days. The clinical course was split with 48.6% reporting a continuous pattern of hypersexual behavior and 51.4% stating episodic patterns. The substantial number of participants reported patterns of escalation including time (83.5%), frequency or intensity (81.7%), types of manifestations (62.4%), and increased risk (60.6%). There is no consensus about how these data might be associated with severity of HD, but similar data have been considered as surrogates for other indicators of severity in alcohol use disorders (e.g. Hingson, Heeren & Winter, 2006). At present, further research is needed to investigate what implications the onset and clinical course of HD symptoms may have on attrition in therapy, treatment adherence, relapse, refractoriness to treatment – all which might be markers of severity – and the overall prognosis for hypersexual patients. Such research might consider naturalistic longitudinal studies assessing the trajectory of sexual behaviors and HD across the lifespan in relation to different conceptualizations of severity.

Statistical approaches

Recently, item response theory (IRT) has been used to evaluate severity (Saha, Chou & Grant, 2006) based on the assumption that symptoms less commonly endorsed reflect outliers with greater problems or severity. A key advantage

of IRT is the ability to select items based on the information they contribute which can inform the development of a severity index (Conway et al., 2010). For example, an IRT approach has been used to assess the continuum of gambling problems using DSM criteria in exploring an index of problem severity (Strong & Kahler, 2007). Alternatively, cluster analysis could be used to examine latent dimensions of HD and used to assess how best to threshold cases among populations of patients seeking help for hypersexual behavior. Survival analysis is a plausible solution to evaluate the relationship between time and symptom remission in hypersexual patients allowing insights about treatment profiles and resistance to change. This “resistance” could subsequently be utilized as part of classifying a severity index. For example, if a particular patient profile is predictive of greater resistance to change and requires more treatment resources, such a profile might be classified as having a greater level of severity.

RESULTS AND CONCLUSIONS

The concept of severity among providers working with hypersexual behavior is frequently used, despite any lack of consensus about how severity should be operationalized. This article has highlighted several challenges to operationalizing severity for the DSM-5 proposed criteria for HD. Regardless of what approach to classifying severity is ultimately adopted, the field should start dialogue about this concept given its relevance to determining level of patient care, risk, allocation of resources, and measuring treatment outcomes in clinical trials.

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REFERENCES

- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders*, Fifth Edition. Arlington, VA: American Psychiatric Association.
- Ashrafioun, L., Kostek, J. & Ziegelmeyer, E. (2013). Assessing post-cue exposure craving and its association with amount wagered in an optional betting task. *Journal of Behavioral Addictions*, 2(3), 133–137.
- Carvalho, J., Stulhofer, A., Vieira, A. L. & Jurin, T. (2015). Hypersexuality and high sexual desire: Exploring the structure of problematic sexuality. *Journal of Sexual Medicine*, 12(6), 1356–1367.

- Conway, K. P., Levy, J., Vanyukov, M., Chandler, R., Rutter, J., Swan, G. E. & Neale, M. (2010). Measuring addiction propensity and severity: The need for a new instrument. *Drug and Alcohol Dependence*, 111, 4–12.
- Farre, J. M., Fernandez-Aranda, F., Granero, R., Aragay, N., Mallorquí-Bague, N., Ferrer, V., More, A., Bouman, W. P., Arcelus, J., Savvidou, L. G., Penelo, E., Aymami, M. N., Gómez-Peña, M., Gunnard, K., Romaguera, A., Menchón, J. M., Vallès, V. & Jiménez-Murcia, S. (2015). Sex addiction and gambling disorder: Similarities and differences. *Comprehensive Psychiatry*, 56, 59–68.
- Fazzino, T. L., Rose, G. L., Burt, K. B. & Helzer, J. E. (2014). A test of the DSM-5 severity scale for alcohol use disorder. *Drug and Alcohol Dependence*, 141, 39–43.
- Ferris, J. & Wynne, H. (2001). *The Canadian Problem Gambling Index: Final report*. Ottawa, Ontario: Canadian Centre on Substance Abuse.
- Hingson, R. W., Heeren, T. & Winter, M. R. (2006). Age at drinking onset and alcohol dependence: Age at onset, duration, and severity. *Archives of Pediatrics & Adolescent Medicine*, 160(7), 739–746.
- Kafka, M. P. (2010). Hypersexual Disorder: A proposed diagnosis for DSM-V. *Archives of Sexual Behavior*, 39(2), 377–400.
- Kor, A., Fogel, Y. A., Reid, R. C. & Potenza, M. N. (2013). Should hypersexual disorder be classified as an addiction? *Sexual Addiction & Compulsivity*, 20(1–2), 27–47.
- Kraus, S. & Rosenberg, H. (2014). The Pornography Craving Questionnaire: Psychometric properties. *Archives of Sexual Behavior*, 43, 451–462.
- Ledgerwood, D. M., Weinstock, J., Morasco, B. J. & Petry, N. M. (2007). Clinical features and treatment prognosis of pathological gamblers with and without recent gambling-related illegal behavior. *Journal of the American Academy of Psychiatry and the Law*, 35(3), 294–301.
- Moss, H. B. (2011). How do addiction psychiatrists think about “severity”? American Academy of Addiction Psychiatry Summer Newsletter. *AAAP News*, 7.
- Oei, T. P. & Gordon, L. M. (2008). Psychosocial factors related to gambling abstinence and relapse in members of gamblers anonymous. *Journal of Gambling Studies*, 24(1), 91–105.
- Potenza, M. N., Steinberg, M. A., McLaughlin, S. D., Rounsaville, B. J. & O’Malley, S. S. (2000). *Journal of the American Academy of Psychiatry and the Law*, 28(4), 389–403.
- Raymond, N. C., Coleman, E. & Miner, M. H. (2003). Psychiatric comorbidity and compulsive/impulsive traits in compulsive sexual behavior. *Comprehensive Psychiatry*, 44(5), 370–380.
- Reid, R. C., Carpenter, B. N., Hook, J. N., Garos, S., Manning, J. C., Gilliland, R., Cooper, E. B., McKittrick, H., Davtian, M. & Fong, T. W. (2012). Report of findings in a DSM-5 Field Trial for Hypersexual Disorder. *Journal of Sexual Medicine*, 9(11), 2868–2877.
- Reid, R. C., Garos, S. & Fong, T. (2012). Psychometric development of the Hypersexual Behavior Consequences Scale. *Journal of Behavioral Addictions*, 1(3), 115–122.
- Reid, R. C. & Kafka, M. P. (2014). Controversies about Hypersexual Disorder and the DSM-5. *Current Sexual Health Reports*, 6, 259–264.
- Reid, R. C., Stein, J. A. & Carpenter, B. N. (2011). Understanding the roles of shame and neuroticism in a patient sample of hypersexual men. *Journal of Nervous and Mental Disease*, 199(4), 263–267.
- Rogers, P. J. & Hendrik, J. S. (2000). Food craving and food “addiction”: A critical review of the evidence from a biopsychosocial perspective. *Pharmacology Biochemistry & Behavior*, 66(1), 3–14.
- Saha, T. D., Chou, S. P. & Grant, B. F. (2006). Toward an alcohol use disorder continuum using item response theory: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Psychological Medicine*, 36(7), 931–941.
- Shiffman, S., Stone, A. A. & Hufford, M. R. (2008). Ecological momentary assessment. *Annual Review of Clinical Psychology*, 4, 1–32.
- Steele, V., Staley, C., Fong, T. & Prause, N. (2013) Sexual desire, not hypersexuality, is related to neurophysiological responses elicited by sexual images. *Socioaffective Neuroscience and Psychology*, 3, 20770.
- Strong, D. R. & Kahler, C. W. (2007). Evaluation of the continuum of gambling problems using the DSM-IV. *Addiction*, 102(4), 713–721.
- Tiffany, S. T. & Wray, J. (2009). The continuing conundrum of craving. *Addiction*, 104, 1618–1619.
- Winters, J., Christoff, K. & Gorzalka, B. B. (2010). Dysregulated sexuality and high sexual desire: Distinct constructs? *Archives of Sexual Behavior*, 39(5), 1029–1043.
- Young, M. M. & Wohl, M. J. A. (2009). The Gambling Craving Scale: Psychometric validation and behavioral outcomes. *Psychology of Addictive Behaviors*, 23(3), 512–522.