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Debate: Behavioral addictions in the ICD-11

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COMMENTARY



Contradicting classification, nomenclature, and diagnostic criteria of Compulsive Sexual Behavior Disorder (CSBD) and future directions Commentary to the debate: "Behavioral addictions in the ICD-11"

BEÁTA BŐTHE^{1,3}* , MÓNIKA KOÓS^{2,3} and ZSOLT DEMETROVICS^{3,4}

¹ Département de Psychologie, Université de Montréal, Montréal, Canada

² Doctoral School of Psychology, ELTE Eötvös Loránd University, Budapest, Hungary

³ Institute of Psychology, ELTE Eötvös Loránd University, Budapest, Hungary

⁴ Centre of Excellence in Responsible Gaming, University of Gibraltar, Gibraltar, Gibraltar

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ABSTRACT

Building on the conclusions of the debate papers by Gola et al. (2022) and Sassover and Weinstein (2022), the present commentary further addressed the contradictions between the current classification, nomenclature, and diagnostic criteria of Compulsive Sexual Behavior Disorder (CSBD) with elaborating on the potential roles impulsivity and compulsivity may play in CSBD, and how these characteristics may relate to addictive behaviors in particular. Moreover, it briefly discussed how the classification of CSBD might impact research and clinical practice and proposed potential future research directions that may help to reach a consensus on the classification and core symptoms of CSBD.

KEYWORDS

addictive behavior, compulsivity, compulsive sexual behavior, impulsivity, pornography, sexuality

The debate papers by Gola et al. (2022) and Sassover and Weinstein (2022) discuss important questions about the conceptualization and diagnostic criteria of Compulsive Sexual Behavior Disorder (CSBD). Both papers mention that impulsivity and compulsivity may play important roles in CSBD, and discuss the current classification and diagnostic criteria of CSBD included in the eleventh edition of the *International Classification of Diseases* (ICD-11) (World Health Organization, 2019). In this commentary, we (1) reflect on the contradictions between the current classification, nomenclature, and diagnostic criteria of CSBD; (2) elaborate on the potential roles impulsivity and compulsivity may play in CSBD and how these characteristics may relate to addictive behaviors in particular; and (3) briefly discuss how CSBD's classification may impact research and clinical practice with suggesting potential future research directions helping to address the long-standing debate on the classification and symptomatology of CSBD (Bőthe, Tóth-Király et al., 2019; Grubbs et al., 2020; Kor, Fogel, Reid, & Potenza, 2013; Kraus, Voon, & Potenza, 2016; Potenza, Gola, Voon, Kor, & Kraus, 2017; Prause, Janssen, Georgiadis, Finn, & Pfaus, 2017).

*Corresponding author. E-mail: beata.bothe@umontreal.ca; beabothe@gmail.com



CONTRADICTIONS IN THE CLASSIFICATION, NOMENCLATURE, AND DIAGNOSTIC CRITERIA OF CSBD IN ICD-11

CSBD is currently included in the Impulse Control Disorders category in ICD-11. Therefore, the general description of Impulse Control Disorders should apply to CSBD, which includes a criterion that "repeated failure to resist an impulse, drive, or urge to perform an act that is rewarding to the person" should be present in these disorders, suggesting that sexuality should be rewarding for individuals with CSBD (World Health Organization, 2019). However, when we take a closer look at the specific diagnostic criteria of CSBD, one criterion contradicts the previously described rewarding nature of Impulse Control Disorders. Specifically, it is stated in the CSBD diagnostic guidelines that individuals engage in sexual behaviors "deriving little or no satisfaction from it" (World Health Organization, 2019). While based on the classification of CSBD, sexual behaviors should be rewarding and pleasurable for the individuals and thus be the reason for engaging in them (i.e., reward-driven, impulsive activity), the CSBD diagnostic guidelines describe the opposite of it by emphasizing that pleasure and satisfaction are not the drivers of sexual behaviors in CSBD, reflecting the compulsive nature of the behavior (Fineberg et al., 2014; Gola et al., 2022; World Health Organization, 2019).

This seemingly contradictory classification (i.e., impulse control disorder), nomenclature (compulsive sexual behavior disorder), and diagnostic criteria (i.e., sexual activities should be rewarding based on the impulse control disorders diagnostic criteria vs. sexual activities should provide little or no satisfaction based on the CSBD diagnostic criteria) may relate to and suggest similarities with the conceptualizations of addictive disorders (Brand, Young, Laier, Wölfling, & Potenza, 2016, 2019; Fineberg et al., 2014). However, in accordance with the conclusions of Sassover and Weinstein (2022) and prior work (Bőthe, Tóth-Király et al., 2019; Kor et al., 2013; Kraus et al., 2016; Potenza et al., 2017; Prause et al., 2017), we believe there is no sufficient scientific evidence yet to conclusively determine whether CSBD should be classified as an impulse control, compulsivity-related, or addictive disorder. Therefore, carefully examining transdiagnostic features, such as impulsivity and compulsivity, are crucial next steps in contributing to this prolonged debate (Bőthe, Tóth-Király et al., 2019; Fineberg et al., 2014).

THE POTENTIALLY COMPLEX ROLES OF IMPULSIVITY AND COMPULSIVITY IN CSBD

As Sassover and Weinstein (2022) mentioned in their debate paper, both impulsivity and compulsivity share similarities in terms of impaired control or behavioral disinhibition regarding given activities and are important features of psychiatric disorders (Fineberg et al., 2014; Stein & Hollander, 1995). When comparing the diagnostic criteria of Impulse Control Disorders, Obsessive-Compulsive and Related Disorders (represented by obsessive-compulsive disorder), Substance Use-Related Disorders (represented by alcohol use disorder), and Non-Substance Use-Related Disorders (represented by gambling disorder) in DSM-5 and ICD-11, impaired control is present in all (Table 1). However, crucial differences can be observed between impaired control in impulsivity and compulsivity and how they appear in different disorders. While impaired control is characterized by rapid and unplanned reactions to gratifying stimuli without considering potential negative consequences (i.e., reward-driven risk-taking) in the case of impulsivity, it occurs as repetitive engagement in behaviors in a habitual manner following rigid rules to avoid adverse consequences (i.e., habit-related harm-avoidance) in compulsivity (Fine-

berg et al., 2014; World Health Organization, 2019). Both the reward-driven impulsive and habit-related compulsive features of impaired control might contribute to and be present in addictive disorders. The findings of previous studies suggest that impulsivity may be considered as a risk factor of addictive behaviors and pronounced at the early stages of addictions (Fineberg et al., 2014). These findings align with the propositions of the Interaction of Person-Affect-Cognition-Execution (I-PACE) Model, suggesting that engagement in potentially addictive behaviors may start as a given activity can provide reward and gratification for the individual. Thus, impulsivity might be an important drive for engagement in the early stages of developing addictive behaviors (Brand et al., 2016, 2019). However, in the later stages of addictions, as the gratification gradually decreases, the compensatory processes and effects increase, and the engagement in the behavior or substance use becomes more rigid and habitual (Brand et al., 2016, 2019). This notion might relate to the findings of previous studies in substance use disorders, in which case compulsivity appeared after prolonged substance use, especially in impulsive individuals (Fineberg et al., 2014; Verdejo-García, Lawrence, & Clark, 2008).

Supporting these hypothesized processes in CSBD, findings from previous studies reported CSBD's positive associations with both impulsivity and compulsivity in treatment-seeking and community samples (Bőthe, Tóth-Király et al., 2019; Kafka, 2015; Reid, Bramen, Anderson, & Cohen, 2014; Reid & Carpenter, 2009; Walton, Cantor, & Lykins, 2017). Moreover, findings from a community sample of more than 9,000 individuals from three countries suggest that while 2.8% of individuals might demonstrate high levels of all ICD-11 diagnostic criteria of CSBD (i.e., high-risk group), there was a second group including 4.5% of individuals (i.e., satisfied at-risk group), who reported similar levels of salience, control, relapse and negative consequences as the high-risk group, but did not show elevated levels of dissatisfaction with their sexual activities (Bőthe, Potenza et al., 2020). These results may suggest that individuals in the satisfied at-risk CSBD group might be at the early stages of the development of the addiction process when gratification



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	Impulse Control Disorders		Obsessive- Compulsive Disorder ^b		Alcohol Use Disorder/Alcohol Dependence ^c		Gambling Disorder ^d		Compulsive Sexual Behavior Disorder ^e	
Criteria ^a	DSM-5	ICD-11	DSM-5	ICD-11	DSM-5	ICD-11	DSM-5	ICD-11	DSM-5	ICD-11
Impaired control Negative consequences Salience/Preoccupation Unsuccessful efforts to control or reduce behavior	✓ ✓ □	✓ ✓ □	✓ ✓ □	✓ ✓ □	1 1 1	✓ ✓ □	1 1 1	✓ ✓ □	✓ ✓ ✓	↓ ↓ ↓
Tolerance Withdrawal Craving Mood modification/Coping Dissatisfaction Chasing one's losses Lies to conceal involvement Relying on others' financial support Moral incongruence towards the behavior					✓ ✓ ✓ □ □ □ □ □ □	✓ ✓ □ □ □ □ □ □	``			

 Table 1. Comparison of the diagnostic criteria of Impulse Control Disorders, Obsessive-Compulsive Disorder, Alcohol Use Disorder, Gambling Disorder, and Compulsive Sexual Behavior Disorder in the current diagnostic manuals

Note. DSM-5 = Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders; ICD-11 = Eleventh Edition of the International Classification of Diseases. ^a = It is important to note that although a symptom is not mentioned in the diagnostic criteria of a given disorder, it may be an important feature of it both from theoretical and practical perspectives. ^b = We selected Obsessive-Compulsive Disorder from DSM-5 and ICD-11 to represent Obsessive-Compulsive or Related Disorders in the present comparison. ^c = We selected Alcohol Use Disorder and Alcohol Dependence from DSM-5 and ICD-11, respectively, to represent substance use disorder in the present comparison. ^d = We selected Gambling Disorder from DSM-5 and ICD-11 to represent Non-Substance-related Addictive Disorders in the present comparison. ^e = Based on the proposed but rejected diagnosis of Hypersexual Disorder (Kafka, 2010).

and reward deriving from sexual activities are present, while the high-risk CSBD group may be at later stages of the addiction process when tolerance and compulsive engagement in sexual activities might be more dominant (Brand et al., 2016, 2019; Gola et al., 2022; Sassover & Weinstein, 2022). However, given that these identified profiles of individuals were examined in a cross-sectional setting, it was not possible to examine whether individuals' satisfaction may indeed decrease over time and they may eventually transfer to the high-risk CSBD group (i.e., the gradual shift from reward-seeking to habitual, compulsive engagement) (Brand et al., 2016, 2019; Fineberg et al., 2014). Other potential explanations may be applicable, such as individuals with higher levels of sexual desire might have reported elevated levels of preoccupation with sexual activities, difficulties with controlling or cutting back on their sexual activities, and some negative consequences without CSBD (Stulhofer, Jurin, & Briken, 2016).

In sum, theoretical models and empirical findings suggest that both impulsivity and compulsivity may play crucial roles in the development and maintenance of addictive disorders and should be carefully examined to better understand CSBD's etiology. Nevertheless, it needs to be noted that no single personality trait or set of traits may result in the development of addictive disorders (Brand et al., 2016, 2019; Conway, Kane, Ball, Poling, & Rounsaville, 2003; Griffiths, 2017; Kerr, 1996; Tóth-Király, Bőthe, & Orosz, 2018). Rather, they develop and maintain as a result of the

interaction between several structural (e.g., accessibility of pornography), situational (e.g., loneliness), psychological (e.g., basic psychological needs), and genetic and biological characteristics (e.g., suboptimal functioning of the dopamine system) of a given individual (Bőthe, Tóth-Király et al., 2019, 2020; Brand et al., 2016, 2019; Griffiths, 2005; Tóth-Király et al., 2018).

Therefore, if we want to gain deeper insights on the complex roles of impulsivity and compulsivity in CSBD and get closer to a consensus on the classification of this disorder, more nuanced research questions and more sophisticated study designs and methods are necessary. Future research should examine not only whether impulsivity and compulsivity are related to CSBD, but should also explore in which phases of CSBD impulsivity and compulsivity may play essential roles, which features of impulsivity and compulsivity may relate to CSBD (e.g., sensation seeking, urgency, or motor impulsivity), and in interaction with which other characteristics they may be associated with CSBD, considering well-established theoretical models (Grubbs et al., 2020). Future studies should strive to apply optimally powered longitudinal study designs, ecological momentary assessment methods, and neuroscientific and experimental paradigms that may be more suitable to address the aforementioned questions than cross-sectional study designs with small, homogenous samples (e.g., university students) (Grubbs et al., 2020; Grubbs & Kraus, 2021). In terms of study populations, both community and treatment-seeking as well as adult and adolescent populations, including non-WEIRD (i.e., white, educated, industrialized, rich, democratic) and minority populations (e.g., sexual minority individuals) should be involved in future studies (Bőthe et al., 2021; Bőthe, Vaillancourt-Morel, Bergeron, & Demetrovics, 2019; Fineberg et al., 2014; Grubbs et al., 2020; Grubbs & Kraus, 2021; Klein, Savaş, & Conley, 2021).

WHY IS IT IMPORTANT HOW CSBD IS CLASSIFIED?

Although both debate papers (Gola et al., 2022; Sassover & Weinstein, 2022) mention the ongoing scientific debate about the classification of CSBD in diagnostic manuals, they do not elaborate on why it is important for researchers, practitioners, and treatment-seeking individuals how we classify out-of-control sexual behaviors, despite that appropriate classification holds several implications (Potenza, 2015b). From a research perspective, disorders classified in the same category may provide theoretical frameworks for testing potential mechanisms regarding the etiology of given disorders, contributing to more refined insights into the development of CSBD and may also advance the field, which is mostly based on atheoretical studies (Potenza, 2015b; Grubbs et al., 2020). Both in research and clinical practice, the adequate classification of CSBD may promote a better understanding and accelerate the assessment of potential comorbid disorders (e.g., if CSBD shares similarities with compulsive disorders and is classified so, other should be screened for) (Fuss, Briken, Stein, & Lochner, 2019).

From a practical perspective, a proper classification may help clinicians to develop new or use already existing interventions with demonstrated efficacy to reduce CSBD (e.g., if CSBD is classified as an addiction, interventions efficient in reducing substance use-related addictions may hold promise reducing CSBD as well) (Potenza, 2015b). In addition, treatment efficacy and dropout rates, and reasons for dropout may vary in different disorders. For example, previous studies showed that impulsivity in addictive disorders might result in early dropout and higher relapse rates (Cox, Hogan, Kristian, & Race, 2002; Fineberg et al., 2014; Streeter et al., 2007). Thus, adding impulsivity-related dropout prevention strategies to interventions reducing addictive disorders may contribute to the success and achievement of treatment goals. Lastly, identifying the functions of transdiagnostic features (e.g., impulsivity and compulsivity) and arriving at a conclusion about the classification of CSBD may guide prevention programs, policy making, and public health decisions as well (Potenza, 2015a, 2015b).

CONCLUSIONS

We agree with the conclusions of the two debate papers and previous work (Gola et al., 2022; Grubbs et al., 2020; Kor

et al., 2013; Kraus et al., 2016; Potenza et al., 2017; Sassover & Weinstein, 2022) that no sufficient scientific evidence is available to conclude on the most adequate classification and symptomatology of CSBD. We propose potential future research directions that may contribute to key insights on the roles of impulsivity and compulsivity in CSBD, advancing the classification of CSBD. With a better understanding and classification, we may not only move the field forward by integrating understandings of CSBD into larger theoretical frameworks, such as the network models of psychopathology (Bőthe, Lonza, Štulhofer, & Demetrovics, 2020; Chen et al., 2021; Werner, Štulhofer, Waldorp, & Jurin, 2018), which is almost absent from the literature (Grubbs et al., 2020), but we might also assist theory development, research, and clinical work.

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