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The term sexual addiction is used to describe a range of behaviors involving compulsive and maladaptive sexual behavior. There are mixed opinions in the medical literature regarding whether sexual addiction represents a valid psychiatric diagnosis or instead pathologizes behaviors in the expected range of human behavior. The opinions on sexual addiction in case law are similarly mixed. The condition has at times been used as a successful mitigating factor and at other times been rejected for lack of scientific evidence. The authors searched the LexisNexis database for legal cases that involved the use of sexual addiction as a mitigating or aggravating factor to provide an overview of the available case law. This article is focused on the uncertainty surrounding the diagnosis of sexual addiction and how it has been interpreted by the legal system.

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The term sexual addiction is used to describe "inappropriate or excessive sexual cognitions or behaviors that lead to subjective distress or impairment in one or more life domains" (Ref. 1, p 604). Additional terms that have been used over the years have included sex addiction, hypersexual disorder, erotomania, nymphomania, hyperphilia, and compulsive sexual behavior. Sexual addiction appears to be the most widely accepted term in the medical and legal literature; therefore, we use this term throughout this article.

Early terms used to describe sexual addiction can be found in the text *Psychopathia Sexualis*, published in 1886, which uses the description of Satyriasis and Nymphomania to explain excessive sexual desire in males and females, respectively.<sup>2</sup> Since that initial description, sexual addiction has gone through changes in nomenclature and classification in different versions of the Diagnostic and Statistical Manual of Mental Disorders (DSM).

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The DSM-I<sup>3</sup> included a diagnosis of nymphomania under the sexual deviations category, which also included homosexuality, erotomania, and other conditions. The condition was vaguely defined, leaving much of the diagnosis to the clinician's judgment. In the DSM-II,4 the American Psychiatric Association (APA) recognized sexual deviations as a type of personality disorder in the category "Personality disorders and other nonpsychotic mental disorders" (Ref. 4, p 41) but did not include any diagnoses involving excessive or maladaptive nonparaphilic sexual behavior. 4,5 This removed nymphomania from the DSM-II. In 1980, the DSM-III<sup>6</sup> recognized paraphilic disorders as distinct pathologies and introduced a residual diagnostic category known as psychosexual disorder not otherwise specified (Don Juanism for males and nymphomania for females). This category included individuals who felt distressed about "a pattern of repeated sexual conquests with a succession of individuals who exist only as things to be used" (Ref. 6, p 283).

With the introduction of the DSM-III-R<sup>7</sup> in 1987, "Non-Paraphilic Sexual Addiction" first appeared as a distinct term defined as a "distress about a pattern of repeated sexual conquests or other forms of nonparaphilic sexual addiction, involving a succession of people who exist only as things to be used" (Ref. 7, p 296). The term was later discontinued due to limited research and lacking consensus over fundamental aspects of the condition.<sup>5,8</sup> The term sexual disorders not otherwise specified (NOS) was included in both the DSM-IV<sup>9</sup> and DSM-IV-

TR,<sup>10</sup> which defined it as a "distress about a pattern of repeated sexual relationships involving a succession of lovers who are experienced by the individual only as things to be used" (Ref. 9, p 538; Ref. 10, p 582). Despite inclusion in previous editions of the DSM, the concept of a sexual addiction is not included in the DSM-5,<sup>11</sup> either as a diagnosis or an emerging measure and model. Some possible reasons for this exclusion include insufficient scientific evidence supporting the proposed diagnostic criteria and the potential for misuse of sexual addiction in legal settings.<sup>12</sup>

Another major limitation is the broadness of the term sexual addiction, which encompasses a wide range of behaviors. In men, these have included compulsive masturbation and pornography use, casual or anonymous sex with strangers, multiple sexual partners, and paying for sex. <sup>13–16</sup> In women, the definition has included high masturbation frequency, high number of sexual partners, and compulsive pornography use. <sup>13,17</sup>

It is worth mentioning that many conditions present with secondary excessive, compulsive, disinhibited, inappropriate, or maladaptive sexual behaviors, and can mimic sexual addiction. The list of these conditions is extensive and includes, but is not limited to, bipolar mania, Cluster B personality disorders, Alzheimer's and frontotemporal dementias, autism spectrum disorder, Kluver-Bucy syndrome, Kleine-Levin syndrome, and other neuropsychiatric conditions, such as Parkinson's disease and traumatic brain injuries. Similarly, several substances and medications have been associated with a similar presentation, including methamphetamines and antiparkinsonian medications.

The International Classification of Diseases (ICD) has included different descriptions of sexual addiction since 1948. The most recent version, the ICD-11, uses the term compulsive sexual behavior disorder (CSBD) and defines it as a disorder "characterized by a persistent pattern of failure to control intense, repetitive sexual impulses or urges resulting in repetitive sexual behavior" (Ref. 26, code 6C72). The condition is classified as an impulse control disorder, along with kleptomania, pyromania, and intermittent explosive disorder.

Several other frameworks have been proposed to conceptualize sexual addiction. The initial framework was introduced by Patrick Carnes, PhD in his 1983 book *The Sexual Addiction*,<sup>27</sup> later republished in 1992 as *Out of the Shadows: Understanding Sexual* 

Addiction.<sup>28</sup> Basing his criteria on the model of substance use disorders, Carnes groups the symptoms of addictive sexual behavior into five categories: preoccupation with the behavior; loss of control; secondary affective disturbances; secondary relationship disturbances; and associated features (e.g., a history of sexual abuse).<sup>29</sup> Other proposed frameworks are discussed later in the article.

Of relevance to interested readers are two peerreviewed articles with significant overlap with the current article: Ley et al. in 2015<sup>30</sup> and Montgomery-Graham in 2017<sup>31</sup> reviewed the available U.S. and Canadian case law, respectively, for cases involving the use of sexual addiction in legal proceedings. Another, more extensive, resource is the book Compulsive Sexual Behavior Disorder by Balon et al. 32 Although the authors contrast their results with those of these previous reviews, the present article also provides a historical background to contextualize sexual addition, examines the different frameworks that have been used to conceptualize the condition (addictive disorder, impulse control disorder, and sexual disorder), examines the validity of the evidence (clinical, neurobiological, and therapeutic) supporting and refuting its classification as a diagnostic entity, offers a differential diagnosis of hypersexual behavior, and reviews the available case law.

### **Methods**

Despite the uncertainties with defining the condition, sexual addiction has been used as a defense in various criminal, civil, and family court cases. We searched the LexisNexis database for reported federal and state cases involving the use of sexual addiction during legal proceedings. The term sexual addiction yielded 369 cases. The main inclusion criteria were the presence of expert witness testimony or reports, as well as the presence of a diagnosis of sexual addiction or a discussion of sexual addiction. Cases in which sexual addiction was mentioned peripherally, or was secondary to multiple, more relevant comorbid diagnoses, were excluded. Of the cases reviewed, 15 met our inclusion criteria. We highlighted six cases in the text to illustrate the diversity of contexts in which the condition is used. We summarize the remaining cases in Tables 1 and 2. Ten of those cases were criminal cases, four were civil, and one was a family law case. Of the 10 criminal cases, nine involved proceedings against accused criminal sexual offenders.

| Table 1 | Additional | Criminal | Cases |
|---------|------------|----------|-------|
|         |            |          |       |

| Table 1   Additional Criminal Cases  |  |
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| Case   | Summary  |
| U.S. v. Maack (U.S. District Court for the Eastern District of Pennsylvania) <sup>33</sup>                 | Richard Maack pled guilty to five counts of mail, wire, and bank fraud. The defense requested a downward departure for diminished mental capacity on the ground of Mr. Maack's "longstanding compulsive sexual addiction." Defense expert witnesses, psychiatrist Dr. Turner and internist Dr. Berman, opined that Mr. Maack suffered "from a primary sexual addiction, dating back to adolescence" (Ref. 33, p 451). Psychologist Dr. Cooke testified for the government that Mr. Maack's behavior did not rise to the level of an addiction over which he lacked control. The court denied Mr. Maack's motion, holding that even if sexual addiction is legitimate, the defense failed to establish a clear link between the crimes and sexual addiction.  |
| U.S. v. Long (U.S. District Court for the District of Columbia) <sup>34</sup>                              | Kenneth Long was charged with multiple counts of trafficking minors, possessing sexually explicit depictions of minors, and sexual exploitation of children. Mr. Long requested a downward departure on the ground that he committed the offenses while experiencing a sexual disorder. Forensic psychiatrist Dr. Berlin testified for the defense, diagnosing Mr. Long with "paraphilic disorder not otherwise specified," noting that he had a "significantly reduced mental capacity, both cognitively and volitionally" (Ref. 34, p 45). The court denied the motion, ruling that "evidence of powerful sexual addiction does not amount to proof that the defendant was without the capacity to decide what course of action to take in order to satisfy his addiction" (Ref. 34, p 47).  |
| U.S. v. Lester (U.S. District Court for the Eastern District of Pennsylvania) <sup>35</sup>                | Robert Lester was charged with two counts of sending child pornography to an undercover FBI agent posing as a 12-year-old girl and one count of attempting to entice a minor to engage in sexual activity. The defense requested a downward departure on the grounds of diminished capacity due to OCD and sexual addiction. Psychologist Dr. Cooke testified for the defense that Mr. Lester's sexual addiction constituted reduced mental capacity. Forensic psychiatrist Dr. Sadoff testified for the government that the term "addiction" did not apply because of the absence of adverse physical response when not engaging in sexual fantasies. He also disagreed with the claim that it constituted a "significant impairment in mental functioning" (Ref. 35, p 519). The court denied the motion, ruling that Mr. Lester did not have an impaired ability to   |
| U.S. v. Boyden (U.S. District Court for the Eastern District of Michigan, Southern Division) <sup>36</sup> | control behaviors he knew were wrong.  Robert Boyden was charged with purchasing access to a site providing online child pornography, as well as possession of sexually explicit depictions of minors. Psychologist Dr. Sugrue testified for the defense that Mr. Boyden was not a pedophile and diagnosed him with sexual addiction, characterized by lack of control. Psychologist Dr. Penix testified for the government and agreed that Mr. Boyden posed limited risk of recidivism but did not opine on the diagnosis of sexual addiction.  The court cited the expert testimony when sentencing Mr. Boyden to 12 months in prison followed by three years of supervised release and counseling by a registered sex therapist (maximum sentence of  |
| U.S. v. Irey (U.S. Court of Appeals for the Eleventh Circuit) <sup>37</sup>                                | 10 years).  William Irey was charged with one count of transporting sexually explicit material involving minors to the United States. During trial, he admitted to engaging in sexual intercourse with more than 50 underage girls (as young as four years old) in Cambodia. He also admitted to starring in and distributing footage and images of his sexual encounters. Forensic psychiatrist Dr. Berlin testified for the defense that Mr. Irey was unable to "appreciate the extent of his improprieties" (Ref. 37, p 1171). Psychologist Dr. Shaw further testified for the defense that Mr. Irey displayed a "long-standing problem with sexual obsession," and "something like sexual addiction" (Ref. 37, p 1173). Many of the arguments focused on likelihood of recidivism and relied heavily on expert testimony. Mr. Irey was sentenced to 17.5 years in prison (from range of 15-30 years). On appeal, the U.S. Court of Appeals ruled that this sentence was unreasonable and imposed a 30-year sentence. |

Case Summary

U.S. v. Wilbur (U.S. District Court for the Middle District of Florida, Tampa Division)<sup>38</sup>

People v. Velasco (Court of Appeal of California, Second Appellate District, Division Eight)<sup>39</sup>

Preston Wilbur was charged with the possession and distribution of several thousand videos and images of child pornography. Forensic psychiatrist Dr. Saks conducted a psychosexual evaluation of Mr. Wilbur. She concluded that he was seeking treatment and had established "more social support and therapeutic connection" and opined that he "may not regress to Internet sexually compulsive behavior" if he continued treatment for sexual addiction (Ref. 38, p 4). The court imposed a 10-year sentence, followed by 20 years of supervised release (significantly less than advised range of 17.5-20 years), citing his treatment as a mitigating factor.

William Velasco, Jr., was charged with one count of burglary and 14 counts of invasion of privacy for planting a hidden camera in the restroom of a restaurant. Forensic psychiatrist Dr. Lavid testified for the defense that he agreed with Mr. Velasco's treating clinicians that his sexual addiction was in remission and that his risk of recidivism remained low. The court acknowledged that Mr. Velasco had sought treatment, though stated that there was no guarantee his disorders could be cured, and his risk of recidivism remained higher than zero. The court sentenced Mr. Velasco to four years imprisonment and lifetime registration to the sex offender registry.

#### Case Law

#### Criminal

U.S. v. Tanasi

In *U.S. v. Tanasi*,<sup>42</sup> Stephen Tanasi was arrested for sending images of child pornography to an undercover officer. During the police interview, Mr. Tanasi admitted to trading hundreds of additional pornographic pictures of underage girls.

Because of the nature of the offense, Mr. Tanasi was referred for a psychosexual evaluation by William F. Hobson, M.S, a clinical member of the Connecticut Association for Treatment of Sexual Offenders. Hobson evaluated Mr. Tanasi and opined that although he was in possession of child pornography, there was no evidence that he had abused a child. Hobson recommended that Mr. Tanasi be administered an Abel Screen test to determine the intent of his sexual interest in children.

The defense hired clinical psychologist Leslie Lothstein, PhD, who evaluated Mr. Tanasi and administered the Abel and Becker Cognition Scale. This scale includes 26 items related to children's attraction to adults and the harmlessness of sexual activity between a child and an adult. They are scored on a 5-point Likert scale ranging from 1 (*completely disagree*) to 5 (*completely agree*). The total score ranges from 26 to 130. The lower the score the more likely the participant harbors cognitive distortions related to sexual activities with children. The results of the

test were within normal limits, with Mr. Tanasi not ascribing to any items suggesting he had an interest in engaging in adult—child sex. Lothstein stated that there was no evidence that Mr. Tanasi was a predator. He concluded that Mr. Tanasi's action of collecting thousands of images of adult pornography was secondary to a compulsive and sexual addiction to pornography.

The U.S. District Court for the Southern District of New York ruled that Mr. Tanasi had a diminished capacity because of his addiction to pornography and granted a downward departure from sentencing guidelines. Mr. Tanasi was sentenced to nine months in federal custody, followed by three years of supervised release, and a special assessment fee.

#### U.S. v. Cernik

In *U.S. v. Cernik*,<sup>44</sup> Christopher Cernik was arrested after he met with an undercover detective who was posing as a 13-year-old girl through an online chat website. Mr. Cernik was charged with one count of coercion and enticement of a minor.

The defense provided a forensic psychological evaluation by Steven Miller, PhD. Miller opined that Mr. Cernik suffered from a "sexual addiction type of sexual disorder" and noted many behaviors that were linked to sexual addiction, including "thinking sex is love, cognitive distortions of human sexuality, periods of loneliness, compulsive masturbation, and frequent viewing of pornography" (Ref. 44, p 7). Miller

Table 2 Additional Civil and Family Cases

Case Summary In re: Gole (Supreme Court of Indiana)<sup>40</sup> The Indiana Supreme Court Disciplinary Commission charged attorney Richard Gole with two counts of professional misconduct after clients reported that he made sexually explicit remarks to them. The commission and Mr. Gole reached an agreement to impose a six-month suspension from the practice of law with conditional probation. The parties cited Mr. Gole's diagnosis of sexual addiction as a mitigating factor. They also alluded to his subsequent treatment in a 12-step group and his voluntary participation in a psychiatric evaluation that found him to present a low risk of recidivism. At the commission's request, Mr. Gole was also evaluated by a psychologist, who determined that his efforts to address his sexual addiction appeared substantial and sincere. The Indiana Supreme Court approved the conditional agreement. In re: Vogel (Supreme Court of Tennessee, At Nashville)<sup>41</sup> The Board of Professional Responsibility initiated disciplinary proceedings against attorney Robert Vogel for engaging in sexual intercourse with a client whom he had employed while representing. The Hearing Panel petitioned the court for an order enforcing a suspension from the practice of law for one year, with all but 30 days to be serviced on probation. A psychologist testified that sexual addiction is a treatable condition and is a type of impulse control disorder, which is "recognized in the DSM [...] similar to alcoholism" (Ref. 41, p 527). He stated that Mr. Vogel was "compliant with all the elements of the monitoring agreement" and believed it was unlikely Mr. Vogel would engage in similar conduct (Ref. 41, p 528). The Tennessee Supreme Court found

active suspension.

diagnosed Mr. Cernik with bipolar II disorder and "moderately severe Sexual Addiction Disorder" and stated that Mr. Cernik's behavior was "more likely the result of his sexual addiction when combined with his bipolar disorder and cognitive deficiencies than any sexual deviancy" (Ref. 44, p 7). Dr. Miller concluded that Mr. Cernik had no history of seeking sex with children, denied having a strong sexual interest in underage females, and that the cognitive deficits responsible for his behavior could be successfully treated in a community setting.

The U.S. District Court for the Eastern District of Michigan, Southern Division relied on expert testimony and ruled that an extensive prison sentence would not benefit Mr. Cernik or the public. Mr. Cernik was sentenced to 60 days of probation, continued psychological therapy, mandatory counseling with a registered sex-offender therapist, participation in a relapse prevention therapy, and enrollment in Sexual Addictions Anonymous.

#### U.S. v. Thombson

In U.S. v. Thompson, 45 a grand jury indicted Mark Anthony Thompson and Rosalie Dornellas in April 2014 on one count each of attempting to use a child

to produce a visual depiction of sexually explicit conduct and attempting to entice a minor to engage in criminal sexual activity. In June 2014, Ms. Dornellas met with psychologist Margot Hasha, PhD. Hasha found that Ms. Dornellas exhibited symptoms of major depression and PTSD and had "difficulty understanding concepts and exhibited a level consistent with the cognitive development of a 6 or 7-yearold" (Ref. 45, p 761). Ms. Dornellas pleaded guilty and agreed to assist in the case against Mr. Thompson.

the Hearing Panel's judgment inadequately lenient and moved to impose a 12-month suspension, all of which would be considered

Mr. Thompson reported during his trial that he had fantasized about having sex with Ms. Dornellas's daughter but did not intend to act on his fantasy. The district court found Mr. Thompson guilty on both counts and sentenced to 360 months in prison, followed by 10 years of supervised release.

At the request of the defense, licensed counselor Jennifer Weeks, PhD, who specialized in sexual and substance addiction, evaluated Mr. Thompson. She performed a sexual addiction screening that suggested Mr. Thompson might be hypersexual. Nonetheless, she testified that the test was not well studied and did not have a validity scale. Because of the lack of validity and complete exclusion of sexual addiction in the DSM-5, the district court excluded her testimony. Mr. Thompson challenged the district court's exclusion of expert testimony. The Fifth Circuit Court of Appeals affirmed Mr. Thompson's conviction.

## **Civil and Family**

Winston v. Maine Technical College (1993)

In Winston v. Maine Technical College, 46 Donald Winston was terminated from his employment as a teacher in the Maine Technical College System for violating the school's sexual harassment policy by kissing one of his 18-year-old female students after a sexually suggestive conversation. Although the termination letter mentioned only the single incident, the college was aware of four prior instances of sexual behavior with students.

Mr. Winston subsequently filed a lawsuit against the school alleging that he was unlawfully discriminated against based on his mental handicap of compulsive sexual addiction. The record contains evaluations of Mr. Winston by three mental health professionals, two of whom diagnosed his sexual addiction as impulse control disorder not otherwise specified. Both stated that Mr. Winston's disorder led to his termination, that the addiction was a permanent condition, and that he could perform his job as a teacher without accommodation. The third expert testified that he did not believe the DSM-III-R was intended to be applied to sexual behavior, and that even if it were, Mr. Winston's behavior was controllable rather than compulsive.

The Supreme Judicial Court of Maine ruled in favor of the College on all claims, ruling that Mr. Winston's claimed disability did not qualify him for protection under the Rehabilitation Act of 1973,<sup>47</sup> which aimed to protect persons with disabilities from discrimination based on their conditions.

#### In Re Leonard

In September 2015, the FBI executed a search warrant at the residence of Mr. Leonard (first name not disclosed), which he shared with his then-wife, Megan Wolgast, and their children, who were two and four years old at the time. The FBI seized Mr. Leonard's computer and found that he had downloaded approximately 5,000 images of child pornography, many of which contained images of penetration of preschool-aged children. Mr. Leonard

admitted to accessing and downloading child pornography since 2012. 48

While on bond, Mr. Leonard was granted courtordered, supervised visitation with his children. In July 2017, he pleaded guilty to one count of possession of child pornography. He was sentenced to 36 months in prison (a downward departure from the guidelines of 97 to 121 months), after which he would be required to register as a sex offender. At sentencing, the court cited as mitigating factors his seeking of treatment for addiction to pornography and his appearing "to be treatable."

Approximately three months after Mr. Leonard's arrest, Ms. Wolgast initiated divorce proceedings and sought termination of Mr. Leonard's parental rights. Mr. Leonard testified about the devastating effect of the death of their first child on him and could not recall any use of child pornography prior to the child's death. He testified that he took steps to protect his family from his addiction and continued to care for his children during this time. He also stated that shortly after his arrest, he began counseling and therapy and was diagnosed with a pornography addiction, which he believed he could overcome.

Psychologist Steven Miller, PhD, an expert in psychosexual risk assessment, evaluated Mr. Leonard on three occasions between 2016 and 2017. Miller diagnosed Mr. Leonard with "adjustment disorder with both depression and anxiety" and some passiveaggressive traits that did not meet criteria for a personality disorder (Ref. 48, p 3). Miller also conducted an Abel Assessment for Sexual Interest-3 test, 49 which revealed that Mr. Leonard did not demonstrate a sexual interest in children aged 13 and younger. Miller testified that Mr. Leonard exhibited "characteristics of some compulsive features . . . of a sexual addiction" and that he was taking steps to address his addiction (Ref. 48, p 3). He also testified that Mr. Leonard showed no signs of "predatory offending" and was capable of being a fit parent.

Jennifer Zlkowski, MS, LLO, also conducted a psychological evaluation, which revealed that Mr. Leonard's view of pornography became increasingly deviant, that Mr. Leonard knew what he was doing was wrong and wanted to stop but was afraid to seek help. She also noted that Mr. Leonard turned to pornography to relieve stress.

After considering several factors, including the children's bond to their father, the ages of the children in the images being the same as the Leonard

children, and the graphic quality of the images, the trial court concluded that the termination of Mr. Leonard's parental rights was in the children's best interest. Mr. Leonard appealed the decision. Because the trial court failed to weigh all the evidence when reviewing the children's best interests, the State of Michigan Court of Appeals reversed and remanded the decision.

#### State of New York v. Victor H.

In *State of New York v. Victor H*,<sup>50</sup> Victor H. was arrested for a burglary in 1990. Days after his release, he broke into a woman's home, raped her at knifepoint, robbed her, and escaped the scene. Mr. H was arrested after his former prison cell mate informed law enforcement that Mr. H told him of his plan to "rape a white woman" (Ref. 50, p 2). Based on the cell mate's reports, Mr. H was also linked to another rape on the day of the burglary in 1990. He was charged with, and pleaded guilty to, two counts of first-degree rape. The trial court sentenced him to an indeterminate term of imprisonment of 11 to 22 years, to be served concurrently.

In 2013, as Mr. H was nearing anticipated release, the Department of Corrections and Community Supervision gave notice to the Office of Mental Health and the Office of the Attorney General that Mr. H may be a detained sex offender. Mr. H was referred to a case review team to evaluate whether he met the criteria of a sex offender requiring civil commitment upon his release. The examining psychologist employed by the Office of Mental Health, Ronald Field, PhD, diagnosed Mr. H with antisocial personality disorder, cocaine use disorder, and hypersexuality. Field opined that there was mounting evidence to support that Mr. H met criteria for hypersexuality, which he testified was supported by a "history of multiple sexual partners, regular use of prostitutes, massage parlors, phone sex, Internet use, disturbing sexual thoughts or dreams" (Ref. 50, p 32). The case review team concluded Mr. H was a sex offender and required civil commitment. Field took into consideration Mr. H's incarceration time, during which he targeted young inmates who appeared to be homosexual and forced them to have sex with him. He was quoted as saying the following: "I overpower;" "I rip off their shirts;" and "I dominate, plain and simple" (Ref. 50, p 7).

Subsequently, Mr. H filed a motion for a *Frye* hearing. The defense argued that the state of New

York failed to prove that the condition of hypersexuality was generally accepted by the scientific community. The defense called two experts, forensic psychologist Leonard Bard, PhD, and Raymond Knight, PhD, a professor emeritus of Psychology at Brandeis University. The defense argued that there were no established criteria or consensus for the definition of hypersexuality and the criteria for hypersexuality had not been subjected to vigorous scientific research. The defense added that a similarly defined hypersexuality disorder diagnosis was rejected for inclusion in the DSM-5.

The state called upon two experts, Rory Reid, MD, an Assistant Professor of Psychiatry at the University of California, Los Angeles, and Jacob Hadden, PhD, a consulting forensic psychologist who had previously worked for the Office of Mental Health. The state argued that it met its burden to prove that the condition of hypersexuality is generally accepted in the scientific community but did not proffer a diagnosis of hypersexuality, which had been rejected in the DSM. Rather, it relied on characteristics of hypersexuality that had previously gained more widespread acceptance, as evidenced by the inclusion of hypersexual behaviors in personality disorders, mania, and other disorders. Defense expert Bard testified that because of its broad definition, the term "condition" does not hold clinical significance, stating he only relied on DSM-approved diagnostic entities in his assessments.

The state argued that the DSM revision process was politically charged and resistant to the addition of any diagnosis that could be used in support of the civil confinement of sexual offenders. The defense argued that the exclusion was simply the result of the disorder not being generally accepted in the field, as evidenced by an open letter written to the president of the APA and signed by approximately 100 psychologists urging the exclusion of hypersexuality disorder.

The Kings County Supreme Court of New York ultimately determined that the state had met its burden to show that the condition of hypersexuality was generally accepted in the relevant psychological community and could be admitted at trial.

#### **Discussion**

We first discuss diagnostic limitations of the different frameworks used to conceptualize sexual addiction. Subsequently, we review the perception

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and interpretation of the condition in the case law, as well as offer advice for forensic clinicians.

## **Diagnostic Limitations**

In 2010, Martin Kafka, MD, a psychiatrist who specializes in sexual disorders, proposed a diagnosis of hypersexuality disorder (HD) for consideration to the DSM-5 Taskforce. A field trial conducted by a DSM-5 Work Group demonstrated strong reliability and validity in outpatient settings. He Board of Trustees of the APA ultimately declined to include hypersexuality disorder in DSM-5 and did not include the condition in the emerging measures and models (conditions for further study) section of the diagnostic manual. A primary reason for excluding the proposed diagnosis was concern for potential misuse of HD in the legal setting. 51–53

Another major concern raised by the APA Board of Trustees was the lack of sufficient evidence, especially as related to pathophysiology, epidemiology, anatomical and functional imaging, molecular genetics, and neuropsychological testing.<sup>54</sup> Despite these concerns, some have argued that these fears are unwarranted and that a sexual addiction diagnosis would have minimal impact on legal proceedings.<sup>12</sup> Our review of the literature identified numerous examples where the concept was used, despite the uncertain validity of sexual addiction as a diagnosis.<sup>30</sup> Ley et al. argued that this gap between current use and available knowledge could be due to "the ways in which the 'sex addiction' construct is used, or due to legal skepticism regarding the notion that sex constitutes an addictive disorder, which in part is justified" (Ref. 30, p 114).

#### Classification

Addiction Model

Carnes defined a sexual addict as an individual who "substitutes a sick relationship to an event or process for a healthy relationship with others" (Ref. 28, p 14). The constant need to achieve sexual gratification can have a negative impact on an individual's personal and professional life.

Two critics of the term sexual addiction, Martin Levine, PhD, and Richard Troiden, PhD, have claimed that the concept of sexual addiction arose as an attempt to re-pathologize the forms of sexual behavior that had become more socially acceptable in the 1960s and 1970s. 55,56 Janice Irvine, PhD, argued

that the concept was so vague and difficult to define that it had the potential to be misattributed to a wide range of normal sexual behaviors.<sup>55,57</sup>

Similarities between sexual addiction and other types of addictive disorders have been noted. In a comprehensive 2016 review, Kraus *et al.* defined CSBD as "difficulties in controlling inappropriate or excessive sexual fantasies, urges/cravings, or behaviors that generate subjective distress or impairment in one's daily functioning" (Ref. 13, p 2097). They noted that subjects with CSBD experience "intense and repetitive sexual fantasies, urges/cravings, or behaviors [that] may increase over time and have been linked to health, psychosocial, and interpersonal impairments" (Ref. 13, p 2097). Other symptoms such as risky sexual practices, impaired control, attentional bias, and cravings have been documented. 13,58

Carnes' addiction model includes 10 criteria, most of which are similar to those of substance use disorders. The substance use disorder criterion of use in physically hazardous situations was omitted, and the withdrawal criterion was reformulated to a feeling of anxiety or irritability when unable to engage in sexual acts. Some concerns arise with following this classification. The first is that the DSM-5 classification of substance use disorders has already been criticized for being overinclusive, especially for milder cases.<sup>59</sup> As Norko and Fitch argue,<sup>60</sup> the concept of addiction has very specific implications, especially in forensic settings, some of which include impaired control, which could qualify as a mitigating factor. The "use disorder" model can be problematic, since substance use, misuse, and abuse, have been viewed as lifestyle choices, which could qualify them as aggravating factors.<sup>60</sup> Other factors that can contribute to false positives include expanding the number of criteria from seven to eleven, lowering the diagnostic threshold to two criteria, and the presence of significant overlap between some criteria wherein one behavior may simultaneously meet criteria for two or more criteria. 61 For example, one problem can lead to satisfying the criteria of failure to fulfill obligations, activities given up or reduced, and use despite social/interpersonal problems.<sup>52</sup>

When behaviors such as gambling, sex, or internet gaming are included, the definition expands and becomes even more inclusive. By this definition, one could argue that almost any food and behaviors such as exercising, speeding, and gaming could be included. Using a 12-month diagnostic period for a

lifelong diagnosis further complicates the matter, given the fluctuations in sexual interest across the lifespan. Finally, the sexual addiction criteria present additional concerns with duplicate criteria, with further overlap between the criteria failure to resist impulses and history of unsuccessful attempts to stop. Although these concerns could be raised about pathological gambling, the condition has shown reliable and significant similarities in presentation, biological genetic liability, and treatment approaches to substance use disorders. <sup>62–71</sup>

Several differences between sexual addiction and other more established addictive disorders remain. The first and most obvious difference is that sex is a normal bodily function, as opposed to pathological gambling. Maladaptive sexual behaviors are therefore more akin to maladaptive eating or sleeping habits than an addictive disorder. Some experts have expressed concern about the possibility of pathologizing normal variants of behavior or poor coping skills and impulse control. <sup>13,51,53,72</sup> Some argue against the notion of setting limits, either in terms of quality or frequency, on sexual behaviors considered normal. <sup>51,53</sup>

## Impulse Control Disorder Model

The World Health Organization replaced the concept of excessive sexual drive in ICD-10 with a term that emphasizes behavior in ICD-11, CSBD, with the goal to view compulsive sexual behavior disorder as characterized by repeated failures to resist impulses, drives, or urges, despite long-term harm, like other impulse control disorders. CSBD is characterized by a persistent pattern of failure to control these urges for at least six months and excludes paraphilias. Some similarities with other impulse control disorders include compulsive use due to distress, distress secondary to use, and loss of control. These features are also shared with multiple other diagnostic categories, however, such as eating disorders, addictive disorders, and sexual disorders.

The major concern with these classifications is the lack of evidence to support a lack of control in these subjects, and the lack of consistent research to support the compulsive or impulsive nature of the behavior. In fact, studies using neuropsychological and psychometric tests found no significant differences in executive functioning or impulsivity between hypersexual men and controls. Moreover, Reid and Grant argue that most clinicians

would find it challenging to distinguish unique aspects of these models to differentiate between them.<sup>76</sup> For example, impulsivity may be a confounding factor in comparing CSBD and sexual addiction, although some people with addictions show low impulsivity.<sup>78,79</sup>

#### Sexual Disorder Model

Kafka proposed the Hypersexual Disorder (HD) criteria to the DSM-5 work Group on Sexual and Gender Identity Disorders.<sup>5</sup> These criteria included recurrent and intense sexual fantasies, urges, or behaviors, causing clinically significant distress and not due to another condition. This condition was conceptualized as being on the opposite end of hyposexual desire disorder, although also drew from several criteria of substance use disorders. Its exclusion of paraphilic disorders poses a challenge, since all paraphilic disorders involve increased sexual urges, fantasies, or behaviors of a sexual nature. This could result in anyone meeting criteria for a paraphilic disorder simultaneously meeting criteria for HD. Unlike paraphilic disorders which describe specific and well-defined behaviors or sexual interests, HD lacks discriminant validity, and presents a concerningly heterogeneous population with significant differences in phenomenology, ranging from legal internet pornography to illegal child pornography, rape, and sex trafficking.5

In Kafka's proposed criteria for HD, some differences with other addictive disorders were apparent.<sup>5</sup> Those differences included the absence of criteria related to social impairments and physiological symptoms such as withdrawal or tolerance. Kafka also added two novel criteria related to repetitive engagement in sexual acts as a response to dysphoric mood states and stressful life events.<sup>5</sup> Kraus et al. argued that this suggests sexual addiction may stem from maladaptive coping skills related to other psychiatric disorders, and not an entity by itself, especially considering the high comorbidity rate with other psychiatric diagnoses. 13 The same problem of duplicate criteria is seen in this classification, with sexual activity secondary to dysphoric mood and sexual activity secondary to stressful events presenting considerable risk of overlap.

#### Paraphilic Disorder Model

There are many challenges in the relationship of paraphilic disorders to sexual addiction. In his conceptualization of sexual addiction, Carnes did not exclude paraphilias, meaning subjects with paraphilic behaviors may receive both diagnoses. As with Kafka's proposed HD, the APA elected not to field test the paraphilia diagnoses. In a 2011 review of the DSM-5 criteria for paraphilic disorders, concerns about the lack of operationalized criteria for hypersexual disorder and risks for abuse or misuse of the diagnosis were already being voiced. 80 The main concern Fedoroff raised for the category of paraphilic disorders as well as for HD was the addition of the term "ascertainment" in the diagnostic criteria, which he claims makes it "hard to imagine how any person who is sexually active (even if just with himself) could avoid being labeled" (Ref. 80, p 239). In his review of DSM-5, Zonana states that the category "lacks a principled basis for considering inclusions and exclusions, which makes it vulnerable to societal pressures rather than advances in science" (Ref. 81, p 249). In addition, the ICD-11 classification lists paraphilic disorders as an exclusion criterion for CSBD. Similarly, in his proposed criteria, Kafka specifically classifies HD as a "nonparaphilic sexual disorder with an impulsivity component," which he defines as excessive and maladaptive normophilic sexual appetite (Ref. 5, p 377).

## **Legal Challenges**

#### Mitigation

In all the criminal cases presented in this article (except *Victor H.*<sup>50</sup>), sexual addiction was raised as a mitigating factor. In 10 of the 15 cases, sexual addiction was perceived as a mitigating factor by the court. The majority of cases included possession, distribution, soliciting, or production of child pornography, followed by cases involving sexual activities with minors, and cases involving sexual assault of adults.

Sexual addiction has been described in the case law as both an aggravating and a mitigating factor. Sexual addiction has been perceived by some courts as an illness that limits free will, thereby mitigating compulsive, impulsive, or illegal behaviors. Other courts, as evidenced by the case of Mr. H,<sup>50</sup> perceived sexual addiction as a threat or liability, heightening concerns for ongoing risk of recidivism. Factors presented in the published decisions have included motivation for and adherence to treatment,<sup>38–41</sup> impulse control,<sup>36,42</sup> historical judgment,<sup>50</sup> overall prognosis,<sup>50</sup> perceived risk of recidivism,<sup>36,37,41</sup> and comorbid psychiatric conditions.<sup>44</sup>

Notable articles include a 2015 review of U.S. legal cases by Ley *et al.*, which discussed marked differences in the perception of sexual addiction, with the term being used both punitively by plaintiffs, and in an exculpatory manner by defendants. Similar to the cases reviewed in our article, the courts did not subject testimony related to sexual addiction to evidentiary proceedings to make a final determination on the legitimacy of the sexual addiction diagnosis. Another similarity pertained to the lack of evidence supporting the claim that individuals with sexual addiction show a lack of impulse control. 30,74,75

Montgomery-Graham<sup>31</sup> reviewed Canadian legal cases where the concept of sexual addiction was presented. The author concluded that most courts and judges avoided tackling the legitimacy of sexual addiction because "fundamental differences exist in the epistemologies of law and science" (Ref. 31, p 212). Montgomery-Graham also found that different experts often presented conflicting opinions in the same court, with various definitions offered for sexual addiction.<sup>31</sup> Finally, an observation was made as to the influence of popular media in conceptualizing the condition as an addictive disorder, with the author noting the lack of evidence to support the concept of tolerance (i.e., increase in frequency or escalation in quality of sexual behavior) in this population.<sup>31</sup>

Finally, it remains equivocal whether sexual addiction is a mitigating or an aggravating diagnosis. Our review corroborates previous findings that the court's perception of sexual addiction depends more on factors such as number of offenses, nature of the offense, degree of remorse as reflected by investment in treatment (pharmacological or psychological), and presence of comorbid psychiatric and personality disorders. Because these independent factors had a significantly larger influence on the court's decision than the presence of a diagnosis, and the legitimacy of this diagnosis was rarely discussed, there is little benefit from using the condition as a mitigating or aggravating factor.

## **Expert Testimony**

In the cases reviewed above, there are several instances in which the admissibility of expert testimony regarding sexual addiction was challenged. In *People v. Gray*,<sup>82</sup> a California civil commitment case, psychiatrist Allen Frances, MD, a former editor of the DSM-IV, testified against the use of a sex addiction

 Table 3
 Most Commonly Used Instruments to Quantify Sexual Addiction (Partly Based on Hook et al., 2010)<sup>83</sup>

| Instrument  | Type of Questionnaire                          | Scoring and Results  | Samples Studied  | Psychometric<br>Properties  | Comments   |
|---|--|--|--|---|--|
| Sexual Addiction Screening Test (SAST) <sup>28,84</sup>   | Self-Report Checklist<br>(25 questions)        | Yes/No<br>Scores 0-25<br>Cutoff of 13 suggests<br>sexual addiction   | Psychotherapy<br>patients, college<br>students, commu-<br>nity sample, physi-<br>cians. Mostly<br>heterosexual males.                            | Internal consistency<br>0.89–0.95<br>Good evidence of<br>convergent validity<br>(to other question-<br>naires) and dis-<br>criminant validity<br>with normal<br>controls                                    | Widely used in practice and research Validated in heterosexual male samples. Variants for women and gay men lack sufficient evidence. New version (SAST-R, 2010) has been validated across gender and orientation (N = 1604) <sup>84</sup> |
| Sexual Compulsivity<br>Scale (SCS) <sup>85</sup>  | Self-Report Rating<br>Scale (10 questions)     | Likert scales<br>Scores 10-40<br>Cutoff of 24 indicates<br>a problem with<br>sexual addiction  | More than 30 samples, including community samples, college students, patients with HIV, heterosexual and homosexual male and female samples      | Internal consistency<br>0.59-0.92 (mostly<br>above 0.7)<br>Good evidence of<br>convergent and<br>discriminant<br>validity   | Most widely used in research   |
| Sexual Addiction Scale<br>(SAS) of the Disorder<br>Screening Inventory<br>(SDI) <sup>86</sup>             | Self-Reports Rating<br>Scale (5 questions)     | Likert scale<br>Scores 0-20<br>0-5: Low risk<br>5-11: Moderate risk<br>12-20: High risk  | 1 sample of 34 heter-<br>osexual male psy-<br>chotherapy patients  | Internal Consistency<br>0.83<br>Some evidence for<br>discriminant valid-<br>ity with controls   | Examines five components of sexual addiction: compulsive use, loss of control, negative consequences, covertness of use, codependent response  |
| Sexual Dependence<br>Inventory-Revised<br>(SDI-R, 1998) <sup>87</sup>                                     | Self-Report Rating<br>Scale (179<br>questions) | Likert scale Each question has 2 answers: Frequency (0-5) Power (0-5) 3 scores: Total score 2 composite scores 10 subscale scores for subdivisions of sexual addiction | Multiple samples including psychotherapy patients, community samples, sex offenders. Mostly studied in heterosexual males.                       | Internal consistency 0.99 for total scores (Power and Frequency), and 0.9-0.99 for sub- scale scores Some evidence for convergent and dis- criminant validity Some evidence of cri- terion-related validity | Long, in-depth<br>10 subscales: fantasy,<br>seductive role play-<br>ing, voyeurism, exhi-<br>bitionism, paying for<br>sex, trading sex, pain<br>exchange, intrusive<br>sex, exploitive sex,<br>and anonymous sex                           |
| Compulsive Sexual<br>Behavior Inventory<br>(CSBI) <sup>88</sup>   | Self-Report Rating<br>Scale (28 questions)     | Likert scale (1 indi-<br>cates highest fre-<br>quency) Scores 28-140 (28<br>being most severe) 3 subscale scores: Loss of control Violence Abuse                       | Heterosexual males,<br>heterosexual<br>females, homosex-<br>ual males, commu-<br>nity samples,<br>college students,<br>psychotherapy<br>patients | Internal consistency<br>0.68-0.87<br>Substantial psycho-<br>metric support:<br>good convergent<br>and discriminant<br>validity  | Used in several studies<br>Focuses on past abuse<br>and connection to<br>violence  |
| Yale-Brown Obsessive-<br>Compulsive Scale—<br>Compulsive Sexual<br>Behavior (YBOCS—<br>CSB) <sup>14</sup> | Clinician Rating Scale<br>(10 questions)       | Likert scale<br>Scores 0-40<br>Higher scores indi-<br>cating higher risk   | Samples of gay and<br>bisexual men   | Internal consistency<br>0.66-0.99<br>Some convergent va-<br>lidity<br>Sensitive to change<br>over time  | Limited initial evidence<br>for reliability and va-<br>lidity<br>Not studied in other<br>populations   |

Table 3 Continued

| Instrument           | Type of Questionnaire     | Scoring and Results  | Samples Studied   | Psychometric<br>Properties  | Comments  |
|----------------------|---------------------------|--|---|---|---|
| PATHOS <sup>89</sup> | Self-Report Checklist (6) | Yes/No<br>Scores 0-6<br>Cutoff of 3 suggests<br>sexual addiction | 2 Studies done by Carnes et al.(95) Study 1: Inpatients receiving treat- ment for sexual addiction N = 1908 (30% females) Study 2: Outpatients receiving treatment for sexual addiction (N = 646, 86.8% males), college students (N = 203, 23.2% males), inpatients receiving treatment for sexual addiction (N = 64, 100% females) | Internal consistency<br>0.94<br>Good convergent<br>and discriminant<br>validity | Questions extracted from SAST: Preoccupied Ashamed Treatment sought Hurt others Out of control Sad as a result Designed to resemble CAGE questionnaire for alcohol use disorder (desire to Cut down, Annoyed with people's comments, Guilt about use, Eyeopener drinks) |

diagnosis, cautioning against the pathologizing of normal sexual behavior, such as promiscuity.<sup>82</sup>

The forensic expert should consider several points when offering testimony. Although some mental health professionals support the validity of sexual addiction, a consensus among the scientific community is still lacking. Furthermore, within the group of proponents, there is disagreement on how to classify sexual addiction in the DSM-5 diagnostic categories (addictive, sexual, or impulse control disorder). Each of these classifications uses a unique set of criteria that emphasize specific elements of the condition (i.e., frequency of sexual acts, loss of control, related distress, negative consequences, etc.). Similarly, a wide variety of scales have been developed and are used in research, each adopting a specific model (see Table 3). Using the ICD-11 definition, CSBD poses the same challenges as the addiction model, as this condition lacks widespread acceptance, and was classified as an impulse control disorder because of insufficient evidence to include it with addictive disorders. 13,90 Admissibility of expert testimony on sexual addiction varies by jurisdiction and may be raised during any case involving the diagnosis.

Despite the inclusion of CSBD in the ICD-11, there is insufficient quantity and quality of evidence regarding definition, classification, prevalence, natural course, neurobiology, neuropsychology, genetics, treatment, screening, and prevention of the conditions. Thus, the benefit of using a diagnostic

entity is unclear, as reliable predictions on the risk of recidivism and ways to minimize it cannot be made at this time. The risks, on the other hand, are clear and include misallocation of resources, mislabeling of violent, inappropriate, or illegal sexual behavior, and the potential to miss more established diagnoses that may have confounded the results.

In fact, it is unclear whether this set of behaviors represent a normal variant or a disorder, and in the case of the latter, which category of disorder. Whether it is included with the addictive disorders, impulse control disorders, or sexual disorders, has little if any bearing on this risk, or on what treatment would achieve which outcome. For these reasons, until these questions are addressed, the risks of using the condition in trial proceedings outweigh the proposed benefits, regardless of whether sexual addiction is included in the DSM-5, or in which category it might be included. Forensic experts should make the current debates, concerns, and gaps in knowledge clear to the courts regardless of the opinion offered.

Finally, as explained in the book *Compulsive Sexual Behavior Disorder*,<sup>32</sup> which offers an extensive review of the condition for interested readers, it would be highly unlikely for someone to meet criteria for an insanity defense purely based on a diagnosis of sexual addiction, as this would not account for the inability to understand the wrongfulness, nature, or quality of offense.

#### **Conclusion**

There is an ongoing controversy surrounding the validity of sexual addiction. Finding universally accepted terminology and classification proves challenging. The first step to reaching an improved understanding of sexual addiction is to achieve a widely accepted definition of the condition. If that is established, new sound and consistent evidence may emerge, which could lead to more widespread acceptance of sexual addiction as a diagnostic entity.

#### References

- Kuzma JM, Black DW. Epidemiology, prevalence, and natural history of compulsive sexual behavior. Psychiatr Clin North Am. 2008; 31(4):603–11
- Krafft-Ebing RV. Psychopathia Sexualis with Special Reference to the Antipathic Sexual Instinct: A Medico-Forensic Study. New York: Bell Publishing Company Inc; 1965
- American Psychiatric Association. Diagnostic and Statistical Manual: Mental Disorders (DSM-I). Washington, DC: American Psychiatric Association Mental Hospital Service; 1952
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Second Edition (DSM-II). Washington, DC: American Psychiatric Association; 1968
- Kafka MP. Hypersexual disorder: A proposed diagnosis for DSM-V. Arch Sex Behav. 2010; 39(2):377–400
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Third Edition (DSM-III). Washington, DC: American Psychiatric Association; 1980
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised (DSM-III-R). Washington, DC: American Psychiatric Association; 1987
- 8. Widiger TA, Frances AJ, Pincus HA, et al. DSM-IV sourcebook, Vol. 3. Arlington, VA: American Psychiatric Publishing; 1997
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV). Washington, DC: American Psychiatric Association; 1995
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR). Washington, DC: American Psychiatric Association; 2000
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5). Washington, DC: American Psychiatric Association; 2013
- 12. Kafka MP. What happened to hypersexual disorder? Arch Sex Behav. 2014; 43(7):1259–61
- 13. Kraus SW, Voon V, Potenza MN. Should compulsive sexual behavior be considered an addiction? Addiction. 2016; 111(12):2097–106
- Morgenstern J, Muench F, O'Leary A, et al. Non-paraphilic compulsive sexual behavior and psychiatric co-morbidities in gay and bisexual men. Sex Addict Compulsivity. 2011; 18(3):114–34
- Reid RC, Carpenter BN, Hook JN, et al. Report of findings in a DSM-5 field trial for hypersexual disorder. J Sex Med. 2012; 9 (11):2868–77
- Scanavino MdT, Ventuneac A, Abdo CHN, et al. Compulsive sexual behavior and psychopathology among treatment-seeking men in São Paulo. Psychiatry Res. 2013; 209(3):518–24
- Klein V, Rettenberger M, Briken P. Self-reported indicators of hypersexuality and its correlates in a female online sample. J Sex Med. 2014; 11(8):1974

  –81

- Dhikav V, Anand K, Aggarwal N. Grossly disinhibited sexual behavior in dementia of Alzheimer's type. Arch Sex Behav. 2007; 36(2):133–4
- Mendez MF, Shapira JS. Hypersexual behavior in frontotemporal dementia: A comparison with early-onset Alzheimer's disease. Arch Sex Behav. 2013; 42(3):501–9
- Codling D, Shaw P, David AS. Hypersexuality in Parkinson's disease: Systematic review and report of 7 new cases. Mov Disord Clin Pract. 2015; 2(2):116–26
- Miller BL, Cummings JL, McIntyre H, et al. Hypersexuality or altered sexual preference following brain injury. J Neurol Neurosurg Psychiatry. 1986; 49(8):867–73
- Vogel HP, Schiffter R. Hypersexuality—a complication of dopaminergic therapy in Parkinson's disease. Pharmacopsychiatria. 1983; 16(4):107–10
- Uitti RJ, Tanner CM, Rajput AH, et al. Hypersexuality with antiparkinsonian therapy. Clin Neuropharmacol. 1989; 12(5):375–83
- 24. Kozian R. Sexuelle Enthemmung bei Therapie mit Aripiprazol [Hypersexuality Induced by Aripiprazole]. Psychiatrische Praxis. 2020; 47(1):43–5
- 25. Krueger RB. Diagnosis of hypersexual or compulsive sexual behavior can be made using ICD-10 and DSM-5 despite rejection of this diagnosis by the American Psychiatric Association. Addiction. 2016 Dec; 111(12):2110–1
- World Health Organization. International Classification of Diseases, 11<sup>th</sup> Revision [Internet]; 2020. Available from: https://icd.who.int/en/. Accessed September 6, 2021
- Carnes P: The Sexual Addiction. Minneapolis, MN: CompCare Publications; 1983
- 28. Carnes P: Out of the Shadows Understanding Sexual Addiction. Center City, MN: Hazelden; 2001
- Carnes PJ, Hopkins TA, Green BA. Clinical Relevance of the proposed sexual addiction diagnostic criteria: Relation to the Sexual Addiction Screening Test–Revised. J Addict Med. 2014; 8(6):450–61
- Ley D, Brovko JM, Reid RC. Forensic applications of "sex addiction" in US legal proceedings. Current Sexual Health Reports. 2015; 7(2):108–16
- 31. Montgomery-Graham S. Disorder in the court: The approach to sex addiction in Canadian legal proceedings. The Canadian Journal of Human Sexuality. 2017; 26(3):205–15
- Balon R, Briken P, editors. Compulsive Sexual Behavior Disorder: Understanding, Assessment and Treatment. Washington, DC: American Psychiatric Association Publishing; 2021
- 33. United States v. Maack, 59 F. Supp. 2d 448 (E.D. Pa. 1999)
- 34. United States v. Long, 185 F. Supp. 2d 30 (D.D.C. 2001)
- 35. United States v. Lester, 268 F. Supp. 2d 514 (E.D. Pa. 2003)
- 36. United States v. Boyden, LEXIS 43048 (E.D. Mich. 2007)
- 37. United States v. Irey, 612 F.3d 1160 (11th Cir. 2010)
- 38. United States v. Wilbur, LEXIS 31390 (M.D. Fla. 2013)
- 39. People v. Velasco, LEXIS 3050 (Cal. App. 2014)
- 40. In re Gole, 715 N.E.2d 399 (Ind. 1999)
- 41. In re Vogel, 482 S.W.3d 520 (Tenn. 2016)
- 42. United States v. Tanasi, LEXIS 2075 (S.D. N.Y. 2003)
- 43. Abel GG, Gore DK, Holland CL, *et al.* The measurement of the cognitive distortions of child molesters. Annals of Sex Research. 1989; 2(2):135–52
- 44. United States v. Cernik, LEXIS 56462 (E.D. Mich. 2008)
- 45. United States v. Thompson, 709 F. App'x 758 (5th Cir. 2017)
- 46. Winston v. Maine Technical College Sys., 631 A.2d 70 (Me. 1993)
- 47. U.S. Equal Employment Opportunity Commission. The Rehabilitation Act of 1973 [Internet]; 2009. Available from: https://www.eeoc.gov/statutes/rehabilitation-act-1973. Accessed June 2, 2021
- 48. In re Leonard, LEXIS 3092 (Mich. Ct. App. 2018)

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- Gray SR, Abel GG, Jordan A, et al. Visual reaction time<sup>TM</sup> as a predictor of sexual offense recidivism. Sex Abuse. 2015; 27 (2):173–88
- Matter of State of New York v. Victor H., 2018 NY Slip OP 50369 (U) (N.Y. App. Div. 2018)
- Moser C. Hypersexual disorder: Searching for clarity. Sexual Addiction & Compulsivity. 2013; 20(1–2):48–58
- Wakefield JC. The DSM-5's proposed new categories of sexual disorder: The problem of false positives in sexual diagnosis. Clin Soc Work J. 2012; 40(2):213–23
- Winters J. Hypersexual disorder: A more cautious approach. Arch Sex Behav. 2010; 39(3):594–6
- Piquet-Pessôa M, Ferreira GM, Melca IA, et al. DSM-5 and the decision not to include sex, shopping or stealing as addictions. Curr Addict Rep. 2014; 1(3):172–6
- 55. Reay B, Attwood N, Gooder C. Inventing sex: The short history of sex addiction. Sexuality & Culture. 2013; 17(1):1–19
- Levine MP, Troiden RR. The myth of sexual compulsivity. J Sex Res. 1988; 25(3):347–63
- 57. Irvine JM. Reinventing perversion: sex addiction and cultural anxieties. J History of Sex. 1995; 5(3):429–50
- Mechelmans DJ, Irvine M, Banca P, et al. Enhanced attentional bias towards sexually explicit cues in individuals with and without compulsive sexual behaviours. PLoS One. 2014; 9(8):e105476
- Kopak AM, Proctor SL, Hoffmann NG. The elimination of abuse and dependence in DSM-5 substance use disorders: What does this mean for treatment? Curr Addict Rep. 2014; 1(3):166–71
- Norko MA, Fitch WL. DSM-5 and substance use disorders: Clinicolegal implications. J Am Acad Psychiatry Law. 2014 Dec;42(4):443–52
- 61. Chung T, Martin CS, Maisto SA, *et al.* Greater prevalence of proposed DSM-5 nicotine use disorder compared to DSM-IV nicotine dependence in treated adolescents and young adults. Addiction. 2012; 107(4):810–8
- Petry NM, Stinson FS, Grant BF. Comorbidity of DSM-IV pathological gambling and other psychiatric disorders: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. J Clin Psychiatry. 2005; 66(05):564–74
- Kessler RC, Hwang I, LaBrie R, et al. DSM-IV pathological gambling in the National Comorbidity Survey Replication. Psychol Med. 2008; 38(9):1351–60
- 64. Welte J, Barnes G, Wieczorek W, et al. Alcohol and gambling pathology among U.S. adults: Prevalence, demographic patterns and comorbidity. J Stud Alcohol. 2001; 62(5):706–12
- Petry NM. Should the scope of addictive behaviors be broadened to include pathological gambling? Addiction. 2006; 101(Suppl 1):152–60
- Potenza MN, Leung HC, Blumberg HP, et al. An FMRI Stroop task study of ventromedial prefrontal cortical function in pathological gamblers. Am J Psychiatry. 2003; 160(11):1990–4
- 67. Slutske WS, Eisen S, True WR, *et al.* Common genetic vulnerability for pathological gambling and alcohol dependence in men. Arch Gen Psychiatry. 2000; 57(7):666–73
- Hodgins DC, Currie SR, el-Guebaly N. Motivational enhancement and self-help treatments for problem gambling. J Consult Clin Psychol. 2001; 69(1):50–7
- Petry NM, Ammerman Y, Bohl J, et al. Cognitive-behavioral therapy for pathological gamblers. J Consult Clin Psychol. 2006; 74(3):555–67

- Petry NM, Weinstock J, Ledgerwood DM, et al. A randomized trial of brief interventions for problem and pathological gamblers. J Consult Clin Psychol. 2008; 76(2):318–28
- Petry NM, Blanco C, Auriacombe M, et al. An overview of and rationale for changes proposed for pathological gambling in DSM-5. J Gambl Stud. 2014; 30(2):493–502
- 72. Giles J. No such thing as excessive levels of sexual behavior. Arch Sex Behav. 2006; 35(6):641–2
- 73. Grant JE, Atmaca M, Fineberg NA, *et al.* Impulse control disorders and "behavioural addictions" in the ICD-11. World Psychiatry. 2014; 13(2):125–7
- Reid RC, Garos S, Carpenter BN, et al. A surprising finding related to executive control in a patient sample of hypersexual men. J Sex Med. 2011; 8(8):2227–36
- Reid RC, Cyders MA, Moghaddam JF, et al. Psychometric properties of the Barratt Impulsiveness Scale in patients with gambling disorders, hypersexuality, and methamphetamine dependence. Addict Behav. 2014; 39(11):1640–5
- 76. Reid RC, Grant JE. In search of a parsimonious model to explain hypersexual behavior. Arch Sex Behav. 2017; 46(8):2275–7
- Winters J, Christoff K, Gorzalka BB. Dysregulated sexuality and high sexual desire: Distinct constructs? Arch Sex Behav. 2010; 39 (5):1029–43
- 78. Li C-SR, Luo X, Yan P, *et al.* Altered impulse control in alcohol dependence: Neural measures of stop signal performance. Alcohol Clin Exp Res. 2009; 33(4):740–50
- Gola M, Wordecha M, Sescousse G, et al. Can pornography be addictive? An fMRI study of men seeking treatment for problematic pornography use. Neuropsychopharmacology. 2017; 42(10):2021–31
- Fedoroff JP. Forensic and diagnostic concerns arising from the proposed DSM-5 criteria for sexual paraphilic disorder. J Am Acad Psychiatry Law. 2011 Jun; 39(2):238–41
- Zonana H. Sexual disorders: New and expanded proposals for the DSM-5–do we need them? J Am Acad Psychiatry Law. 2011 Jun; 39(2):245–9
- 82. People v. Gray, 229 Cal. App. 4th 285 (Cal. Ct. App. 2014)
- 83. Hook JN, Hook JP, Davis DE, *et al.* Measuring sexual addiction and compulsivity: A critical review of instruments. J Sex & Marital Ther. 2010; 36(3):227–60
- 84. Carnes P, Green B, Carnes S. The same yet different: Refocusing the sexual addiction screening test (SAST) to reflect orientation and gender. Sex Addict Compulsivity. 2010; 17(1):7–30
- Kalichman SC, Johnson JR, Adair V, et al. Sexual sensation seeking: Scale development and predicting AIDS-risk behavior among homosexually active men. J Pers Assess. 1994; 62(3):385–97
- Carter DR, Ruiz NJ. Discriminant validity and reliability studies on the sexual addiction scale of the disorders screening inventory. Sex Addict Compulsivity. 1996; 3(4):332–40
- 87. Delmonico DL, Bubenzer DL, West JD. Assessing sexual addiction with the sexual dependency inventory-revised. Sex Addict Compulsivity. 1998; 5(3):179–87
- 88. Coleman E, Miner M, Ohlerking F, *et al.* Compulsive sexual behavior inventory: A preliminary study of reliability and validity. J Sex Marital Ther. 2001; 27(4):325–32
- Carnes PJ, Green BA, Merlo LJ, et al. PATHOS: A brief screening application for assessing sexual addiction. J Addict Med. 2012; 6 (1):29–34
- 90. Kraus SW, Krueger RB, Briken P, *et al.* Compulsive sexual behaviour disorder in the ICD-11. World Psychiatry. 2018; 17 (1):109–10