

Sexual Sadism: Current Diagnostic Vagueness and the Benefit of Behavioral Definitions

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Abstract

The phenomenon of sexual sadism was first scientifically described by Richard von Krafft-Ebing in 1999 as a sexual preference disorder that focuses on the infliction of suffering, pain, or humiliation to achieve sexual gratification. The present article reviews the historical development of the term *sexual sadism*, including the current descriptive nosology of psychiatric classification. Despite clear definitions that specify the sexual objects, duration, and distress necessary for a disorder, evidence for the diagnostic reliability for sexual sadism in the forensic domain is mixed. We argue that the reliance on the patient's willingness to divulge corresponding violent sexual fantasies is the Achilles' heel of the diagnosis. In an attempt to improve agreement across diagnosticians, we argue for the use of behavioral indicators. We summarize the extant research on the Severe Sexual Sadism Scale (SESAS), which is a file-based observer rating of pertinent crime-scene actions. We conclude that the analysis of crime-scene behavior, as achieved with the SESAS, can provide a useful complement for the clinical diagnosis in forensic psychiatry and psychology.

Keywords

sexual sadism, sexual deviance, paraphilia, diagnosis, Severe Sexual Sadism Scale (SESAS)

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Introduction

In 1999, Richard von Krafft-Ebing provided the first scientific account of sexual sadism in his monograph *Psychopathia Sexualis*. He described the phenomenon that some individuals experience sexual pleasure when looking at or taking part in acts of cruelty toward, or the punishment of, other human beings (Krafft-Ebing, 1999). To this day, there is still controversy surrounding the etiology, proper description, and violence risks of sexual sadism.

Marshall and Hucker (2006) noted that applying a diagnosis of sexual sadism has serious and lasting consequences for the person in question. Failing to apply the diagnosis to a sadistic individual may have serious implications for public safety. However, improperly diagnosing a person as a sadist could stigmatize the person and adversely affect his or her personal liberty, such as through long-term detainment. Notwithstanding these forensic considerations, there has been a strong movement against the diagnosis of sadism, particularly in Scandinavia and Finland (Reiersøl & Skeid, 2006). For instance, a national telephone survey did not show higher rates of psychosocial problems among the respondents who said that they engaged in sadomasochistic activity during the previous year (Richters, de Visser, Rissel, Grulich, & Smith, 2008). Consequently, the inclusion of sexual sadism among mental illnesses was considered stigmatizing, which led to the abolishment of its diagnosis in Sweden and Finland. Therefore, it is critical to differentiate between consensual sadomasochism and forensically relevant forms of sexually sadistic conduct as separate entities. Sadomasochistic role-play requires a mutual agreement between consenting individuals who share sadomasochistic interests. The forensically relevant form of sexual sadism, in contrast, requires the coercive subjugation of a person against his or her own will. In this definition, the infliction of physical and psychological pain on another person, without consent, is essential. For the forensically relevant form of sexual sadism, various authors have used adjectives such as “dangerous,” “predatory,” or “severe” to emphasize its distinction from consensual sadomasochistic behavior (Hucker, 1997; Marshall & Hucker, 2006; Yates, Hucker, & Kingston, 2008). We adopted the term “*severe*” *sexual sadism* for this article.

The aim of this article is to provide an overview of the concept of severe sexual sadism regarding the diagnostic issues, as well as to highlight the potential benefits of a behavior-based approach in diagnosis.

History

Consensual role-play of domination and submission dates back to ancient times. For instance, the *Kamasutra* describes beating techniques that were intended to increase lust (Vatsyayana, 2003). Moreover, bondage and sadomasochistic clubs are not an invention of modern times. There is evidence that so-called flagellation clubs existed in London as early as the 18th century.

Likewise, the severe form of nonconsensual sexual sadism can be traced back to ancient times. For instance, the Roman Emperor Nero—according to the biographer Gaius Suetonius Tranquillus—disguised himself in furs and ravaged the genitals of victims who had been tied to poles (Hurley, 2011). A particularly well-documented case is from the Middle Ages. Gilles de Rais (1404-1440), a noted war hero, Marshal of France, and a companion-in-arms of Joan of Arc, had several children abducted to his castles, where they were mutilated, raped, and killed by Gilles de Rais and his associates (Benedetti, 1971).

As demonstrated by these examples, the entire range of sexually sadistic behavior, from consensual role-play to sadistic homicide (i.e., severe sexual sadism), may have existed throughout history.

Definitions of Severe Sexual Sadism

Although von Krafft-Ebing (1999, 1912) was the first to give a psychiatric description of the salient symptoms of sexual sadism, he did not use the term *sadism* in the first edition of his book *Psychopathia Sexualis*, but rather he initially subsumed the relevant traits under the concept of “lust murderer” (Krafft-Ebing, 1999). Only in the second edition of *Psychopathia Sexualis* did von Krafft-Ebing (1912) coin the term of sadism in reference to the Marquis de Sade, who wrote novels about his practice of sexually violent acts in 18th-century France. Richard von Krafft-Ebing (1912) defined sadism as a feeling of deriving sexual pleasure, sometimes involving orgasm, in response to observing or taking part in cruelty toward human beings or animals. According to Krafft-Ebing, sadists would have an urge to humiliate living beings and therefore inflict pain or injuries on them to evoke feelings of erotic pleasure.

Current psychiatric diagnostic manuals, namely, the International Classification of Mental and Behavioral Disorders, 10th edition (ICD-10; World Health Organization, 2004), as well as the text revision of the *Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV-TR)* (American Psychiatric Association [APA], 2000), identify similar features of sexual sadism. The ICD-10, however, uses the same diagnostic category for both sadism and masochism, describing the disorder of sadomasochism as a sexual preference for activities involving the infliction of pain, humiliation, or bondage. The active role is called sadism, whereas the passive role is referred to as masochism. Furthermore, it is assumed that some degree of sadomasochistic stimulation may accompany a normal sexual life, and therefore sadomasochism should only be diagnosed if it is the primary source of arousal or is indispensable for sexual gratification. Finally, ICD-10 differentiates between sadism and pure cruelty or anger in a sexual context.

The *DSM-IV-TR*, in contrast, assigns sadism and masochism to different and unique diagnostic categories. According to the *DSM-IV-TR*, sexual sadism involves “recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving acts (real, not simulated) in which the psychological or physical suffering (including

humiliation) of the victim is sexually exciting to the person” (APA, 2000, p. 574). Furthermore, the *DSM-IV-TR* requires these urges, fantasies, and behaviors to be acted out with a nonconsenting person.

Both the ICD-10 and *DSM-IV-TR* also specify that the sexual fantasies, urges, or corresponding behavior must have been present for at least half a year. Moreover, the pertinent fantasies, urges, or acts must have led to significant distress or social impairment in the individual. The current planning for the successor of *DSM-IV-TR*, the *DSM-V*, involves a distinction between paraphilia and paraphilic disorder (APA, 2012). Only the latter diagnosis would entail significant distress or adverse effects in the affected person due to sexual preference. This corresponds with a dimensional interpretation of sexual sadism in accordance with the degree of severity. According to Knight (2010), sexual sadism is likely to be found on an agonistic continuum that includes severe sexual sadism, consenting BDSM, and nonsadistic sexual coercion, which is considered as a new diagnosis called “paraphilic coercive disorder” for the *DSM-V* (APA, 2012). A self-report study by Sims-Knight and Guay (2011) supports this notion because—according to the results of this study—items dealing with sexual coercion and items describing sexual sadism are loaded onto a single factor.

Diagnosing Severe Sexual Sadism

Reliability of the Diagnosis

The first question that needs to be addressed with a diagnosis concerns its reliability (Nelson-Gray, 1991). According to our literature review, there are relatively few studies dealing with this subject. The reliability of psychiatric diagnoses primarily refers to the objective agreement among diagnosticians (i.e., interrater reliability).

Marshall, Kennedy, and Yates (2002) were the first to examine the reliability of the diagnosis of sexual sadism in a forensic context (i.e., severe sexual sadism). They extracted data from the prison files of a sample of 51 sexual offenders, 32% of whom had been diagnosed as sexual sadists by experienced forensic psychiatrists, whereas the remaining offenders were regarded as nonsadistic. The study did not find any differences between severe sexual sadists and nonsadists regarding self-reported sadistic fantasies or acts. Furthermore, a greater percentage of the nonsadists were aroused by forceful nonconsenting sex, as evidenced by their phallometric responses. Marshall and his colleagues concluded that the current features, deemed to be indicative of severe sexual sadism, could not distinguish those diagnosed as such from the remainder of their sample.

To our knowledge, there are seven studies examining the observer agreement regarding severe sexual sadism. These studies are listed in Table 1.

The studies mentioned in the table show that estimates of the clinician agreement in diagnosing severe sexual sadism (i.e., within a forensic context) differs widely, depending on the sample and methodology of the study, with κ values ranging from .14 to .93. Consequently, the interrater reliability coefficients spanned the range from

Table 1. Studies Pertaining to the Interrater Reliability of the Diagnosis of Sexual Sadism.

Authors	Year	Sample	Sample size (n)	Number of raters	Qualification of raters	Interrater reliability
Marshall, Kennedy, Yates, and Serran	2002	Prison files	12	15	"International experts"	$\kappa = .14$
Levenson	2004	Prison files	295	2	Psychiatrist, psychologist	$\kappa = .3$
Packard and Levenson	2006	Prison files	295	2	Psychiatrist, psychologist	PABAK = .93
Hill, Habermann, Klusmann, Berner, and Briken	2008	Forensic files	20	3	Psychiatrists, psychologist	$\kappa = .79$
Doren and Elwood	2009	Prison files	12	34	Psychologist	90.5% agreement rate on sexual sadist cases
Nitschke, Osterheider, and Mokros	2009	Forensic files (high-security facility)	25	2	Trained forensic psychiatrists	$\kappa = .86$
Thornton, Palmer, and Ramsay	2011	Prison files and interviews	65	2	Trained clinicians and psychologists	$\kappa = .53$

Note: κ = Cohen's κ value; PABAK = prevalence-adjusted bias-adjusted kappa.

slight to almost perfect agreement, according to the framework for interpreting κ values provided by Landis and Koch (1977).

The discrepancy between the findings described above may be understandable when we examine the ICD-10 and *DSM-IV-TR* criteria of sadomasochism and severe sexual sadism, respectively. Within forensic settings, it is difficult to determine whether sadism is the main source of sexual arousal or indispensable for sexual gratification (ICD-10). To answer this question, it is necessary to rely on the self-report of the patient. The same rationale applies to the identification of sexual fantasies and urges, as required by *DSM-IV-TR*. Both sets of criteria are necessary for applying the diagnosis, yet they require the client to be forthcoming, unless the diagnostician feels justified to make such inferences based on other available information. Certainly, in the case of offenders who committed violent attacks on their victims, we can expect reluctance on their part to divulge sexual fantasies or desires that revolve around coercion. When clinicians are faced with such clients who are not forthcoming, they will have to make inferences based on what may be limited or distorted information, leading to a situation that is likely to reduce reliability.

Diagnosing Severe Sexual Sadism Through Indexing Crime Scene Behavior

Due to the difficulties in diagnosing severe sexual sadism, several authors recommend against a complete reliance on the *DSM-IV-TR* or ICD-10 criteria, and they advocate use of the crime-scene behavior as an additional source of information (e.g., Marshall & Hucker, 2006). Kingston, Seto, Firestone, and Bradford (2010) conducted a 20-year follow-up study of sexual offenders, and they found that indicators of severe sexual sadism enabled the prediction of sexual and violent recidivism at an above-chance

level. Most importantly, the strength of these associations, albeit of a moderate effect size, was greater for crime-scene behavior than for clinical *DSM* diagnoses. Richards and Jackson (2011) reached a similar conclusion by examining the offense behavior of 39 sexual offenders who were diagnosed with severe sexual sadism compared with a group of 39 civilly committed offenders who were randomly selected from a pool of 81 offenders diagnosed with paraphilia—not otherwise specified (PNOS)—nonconsent. According to their results, sadistic acts are better characterized by the humiliation of the victim through the exercise of power and control compared with the PNOS-Nonconsent group, where they found a higher level of violence. One way of integrating the behavioral items into the diagnostic process of paraphilias includes scaling techniques, which are explained in the next chapter.

Scaling of Behavioral Items as a Tool for Diagnosis of Paraphilias

Nye and Short (1957) presented an empirically based measure of juvenile delinquent behaviors using a scaling approach. Later research on sexual offenders utilized similar multivariate scaling or clustering techniques, with the aim of deriving empirical classification schemes of offense (and offender) types, based on particular crime-scene details (Canter, Bennell, Alison, & Reddy, 2003). Knight and Prentky (1990) also related crime-scene actions to a range of potential motivational aspects of sexual violence, such as anger, vindictiveness, opportunism, or sexual sadism.

An example of the successful implementation of behavioral data is the Screening Scale for Pedophilic Interests (SSPI; Seto & Lalumière, 2001). The development of the SSPI involved a sample of 1,113 offenders who had committed sexual offenses against children. Seto and Lalumière (2001) found that four behavioral items derived from sexual offense histories (e.g., having male victims, multiple victims, younger victims, and extrafamilial victims) were significantly related to pedophilic sexual arousal, as measured phallometrically, and these items identified pedophilic interests among child molesters significantly better than chance. In a later study, Seto, Harris, Rice, and Barbaree (2004) examined two different samples of convicted child molesters ($n = 113$, $n = 145$). They were able to replicate the findings reported by Seto and Lalumière in both samples. Furthermore, the SSPI displayed good predictive validity regarding sexual reoffending in both samples.

Scaling of Behavioral Items Regarding the Diagnosis of Severe Sexual Sadism

Knight, Warren, Reboussin, and Soley (1998) compared a sample of repeat rapists ($n = 116$) derived from police records with a sample of rapists ($n = 254$) from a treatment center. Across all subjects, the crime-scene data produced promising results in terms of predicting antisocial and aggressive behavior. For the severe sexual sadists, more specifically, these data displayed high internal consistency and good to high consistency across offenses. As Knight and his colleagues noted, these findings suggest that valuable

scales could be generated for the various domains they examined, including severe sexual sadism.

According to a study by McLawsen, Jackson, Vannoy, Gagliardi, and Scalora (2008), 60 professionals were able to reliably discriminate crime-scene behaviors as sadistic or nonsadistic. The three types of behavior deemed most indicative of severe sexual sadism included the following: (a) the use of threats to evoke fear (not simply to gain compliance); (b) cutting, stabbing, strangling, biting, or beating the victim during the sexual assault; and (c) infliction of pain to sexual areas by the use of a physical object.

Summarizing the studies listed above, it appears that scales utilizing behavioral data may prove helpful in diagnosing sexual sadism and possibly offense recidivism.

The Severe Sexual Sadism Scale (SESAS) as a Diagnostic Aid

With the aim of improving the reliability of severe sexual sadism, Marshall and Hucker (2006) evaluated the responses of the 15 experts in their earlier study (Marshall, Kennedy, Yates, & Serran, 2002) to extract the items that the experts considered most important. Marshall and Hucker (2006) then weighted each of these items according to the degree of relevance, as indicated by the experts. This resulted in a measure that included 17 behavioral items in total, predominantly derived from crime-scene or police data. The 5 items with the strongest weightings included the following: (a) the offender is sexually aroused by sadistic acts, (b) the offender exercises power/control/ domination over the victim, (c) the offender humiliates and/or degrades the victim, (d) the offender tortures the victim or engages in acts of cruelty to the victim, and (e) the offender mutilates sexual parts of the victim's body.

Whereas this represented a potentially useful measure, Marshall and Hucker (2006) provided no data as to whether the resulting scale would meet empirical psychometric standards, such as internal consistency or reliability. Face validity of the items was, of course, implied through the expert ratings from Marshall, Kennedy, Yates, and Serran (2002). As a result, Nitschke, Osterheider, and Mokros (2009) evaluated the psychometric properties of the scale. The corresponding sample was derived from a review of the files of all offenders treated at a German high-security psychiatric hospital, including individuals who had committed any sexual offense or murder, manslaughter, or assault. Data were available on 535 patients in total. Fifty patients were diagnosed as sexual sadists, all of whom admitted sadistic fantasies. Next, Nitschke and colleagues randomly selected 50 patients from those who had been diagnosed as nonsadistic sexual offenders as a comparison group. Scaling analysis was carried out based on these 100 cases (50 sexual sadists and 50 nonsadistic sex offenders) using nonmetric item response theory methods.

The resulting scale included 10 of the original 17 items from the list of Marshall and Hucker (2006), plus the additional item of inserting objects into the victim's bodily orifices. Furthermore, the scale included the 5 items that the experts had regarded as most relevant in the survey by Marshall, Kennedy, Yates, and Serran (2002). The SESAS fulfilled the scaling criteria of Guttman (1950) and Mokken

Table 2. Studies Pertaining to the Validity of the SESAS (11 Items) at a Cutoff of 4 Points.

Authors	Year	Sample	Gender	Sample size	Sensitivity (%)	Specificity (%)	Base rate (%)
Nitschke, Osterheider, and Mokros	2009	Forensic files	Male	100	100.0	100.0	50.0
Mokros, Schilling, Eher, and Nitschke	2011	Prison files	Male	105	83.3	57.5	17.1
Pflugradt and Bradley	2011	Prison files	Female	90	100.0	97.6	5.6
Wilson, Pake, and Duffee	2011	Civil commitment center files	Male	296	71.4	100.0	2.4

Note: Sensitivity = rate of individuals with a SESAS score equal to or above the cutoff who were clinically diagnosed as sexual sadists (according to the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; DSM-IV-TR; American Psychiatric Association, 2000) criteria, that is, true-positive rate). Specificity = rate of individuals with a SESAS score below the cutoff who were not clinically diagnosed as sexual sadists (according to DSM-IV-TR criteria, that is, true-negative rate). Base rate = proportion of sexual sadists (DSM-IV-TR diagnosis) in the sample.

(1997), yielding high coefficients of scalability ($H = .83$, $p < .001$) and reliability ($r_{tt} = .93$), respectively, as well as a strong coefficient of reproducibility ($Rep = .97$). An analysis of the SESAS scores revealed high interrater agreement ($\kappa = .86$) in a subsample of 25 cases that were independently coded by two psychiatrists. Using a sum score of 4 of the 11 items as a cutoff, the scale distinguished perfectly between the samples of sexual sadists and nonsadistic sexual offenders. Replications of the scaling analysis on other samples have been conducted by members of the same working group (Mokros, Schilling, Eher, & Nitschke, 2011), as well as by Pflugradt and Bradley (2011). Pflugradt and Bradley analyzed the data of female sexual offenders from a high-security correctional facility in the United States, and they could only partially replicate the scale structure. Mokros and colleagues (2011) found support for a one-dimensional scale in 108 sexual offenders from Austria. Finally, Wilson, Pake, and Duffee (2011) used the scale in a sample of 296 men detained in a civil commitment center in the United States. Table 2 gives an overview of the aforementioned studies of the SESAS.

We used the subroutine “midas” in Stata for Mac, Version 11.2 (StataCorp, College Station, Texas) to find the overall estimates of the diagnostic properties of the SESAS in the studies listed in Table 2. The summation of the sensitivity and specificity values of these four studies yielded an overall sensitivity estimate of 95% (95% confidence interval [CI] = [66, 99]), with an overall specificity estimate of 99% (95% CI = [64, 100]). The positive likelihood ratio at the given cutoff of 4 points would be 153.9. In other words, based on the studies summarized in Table 2, the ratio of true-positive and false-positive rates (i.e., the positive likelihood ratio) would calculate to 154.

Given that the first of these studies was based on a development sample that equally represented sexual sadists and nonsadists (Nitschke et al., 2009), one should omit this study when estimating the prevalence of the disorder among sexual offenders in correctional and detention facilities. Limiting our prevalence estimate to the later three studies (Mokros et al., 2011; Pflugradt & Bradley, 2011; Wilson et al., 2011) yields a prevalence estimate of 6.1% (95% CI = [4.1, 8.4]). Based on the overall estimates for

sensitivity and specificity (95% and 99%, respectively), one could expect a posterior probability of 86.7% (95% CI = [76.8, 93.1]) that the diagnosis of sexual sadism is present if a participant obtained a SESAS score of 4 or above. Clearly, the posterior probability of 86.7% is much higher than the probability expected by chance that the prevalence estimate implies (6.1%), which attests to the diagnostic utility of the SESAS. (The CIs for the prevalence estimates, as well as for the posterior probability, were obtained through a custom-built program in MAPLE [Waterloo Maple Inc., Waterloo, Ontario, Canada]. We used bootstrapping for the prevalence CI and the objective Bayesian routine described by Mossman and Berger, 2001, for the posterior probability CI.)

Taking the above studies on SESAS into account, the scale represents a validated diagnostic tool for severe sexual sadism; however, questions and limitations of the scale remain. For example, how could the SESAS discriminate diagnosed sadists if they were not reliably diagnosed? According to our literature review, Nitschke et al.'s (2009) study involved a sample of individuals who were very open about their severe sexual sadism. For instance, all of the participants admitted to having sadistic fantasies and had no reasons for dissimulation, given that it would not have changed their situations. The high interrater reliability regarding the diagnosis of severe sexual sadism supports this hypothesis. For these reasons, we think that severe sexual sadists were reliably diagnosed in this study, and therefore it was possible to correlate the correct diagnosis with behavioral items and to validate the items created by Marshall and Hucker (2006). In summary, the SESAS appears to be a viable complement for diagnostic procedures concerning sexual sadism in forensic settings. By no means should the SESAS be regarded as an actuarial instrument that could replace regular diagnostic procedures (such as the detailed clinical interview). Rather, we are planning to develop the SESAS into a structured professional judgment instrument that would result in a working hypothesis on whether a person is suffering from severe sexual sadism. Such an instrument can then help to guide the strategies for subsequent clinical interviews. Currently, such research in the United Kingdom and in Austria, using extended samples of sexual offenders, is underway.

Conclusion

The interrater reliability of the diagnosis of sexual sadism, as applied according to *DSM-IV-TR* or ICD-10 criteria, is likely to be insufficient, based on three of seven studies reviewed. Given the important implications for both the offender and the public at large, an insufficient agreement across diagnosticians may lead to adverse consequences. One reason for the suboptimal reliability is the reliance on a person's openness about possibly violent sexual fantasies and urges during the clinical interview—a criterion that will often not be met in forensic settings.

We suggest using behavioral indicators derived from a person's sexual offense history as a complementary method, and we summarize recent research on the SESAS. The 11 behavioral items of the SESAS should assist diagnosticians to overcome the

problem of relying on the statements of forensic psychiatric patients, who have an understandable propensity for dissimulation.

According to the SESAS, an individual would likely be classified as meeting the diagnostic criteria for sexual sadism if he meets at least 4 of the criteria in the 11-item set. Based on a review of four studies on the SESAS (including the development sample), the diagnostic utility of the instrument seems to be high, with extremely high levels of sensitivity and specificity among male and female sexual offenders in three different countries (Austria, Germany, and the United States).

It should be kept in mind, however, that the summary estimate of sensitivity and specificity of the SESAS, as presented in the present article, included the original development sample. Furthermore, the samples on which this summary estimate was based comprised samples of both male and female sexual offenders. Therefore, estimates of prevalence, as well as of the diagnostic utility, remain tentative. Further research on the properties of the SESAS from other samples and jurisdictions are needed. Finally, the clinical diagnosis of sexual sadism is likely a suboptimal criterion on which to compare the performance of the SESAS, given our earlier description of the mixed results for the observer agreement of the clinical diagnosis of sexual sadism. The use of other diagnostic methods (such as physiological arousal to violent stimuli using penile plethysmography) would be sufficient alternatives.

There is, however, disagreement about the value of using behaviorally based scales for the diagnosis of sexual sadism. In discussions of future *DSM-V* criteria (<http://www.dsm5.org>), Krueger (2010) claimed that, at that stage, there was not sufficient evidence to support the inclusion of behavioral items among the alternative definitional terms of sexual sadism. The studies highlighted in Table 2 may lead to more research in this area, possibly leading to the consideration of behavioral indicators in the long run. For this reason, it is paramount to secure a high level of content validity to prevent equating excessive violence with sexual sadism.

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