



Review

Sadism: Review of an elusive construct

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ABSTRACT

Sadism is a personality trait characterised by the enjoyment of other people's pain or suffering. In this narrative literature review, I provide an overview of the sadism research to date, appraising critical issues in the current literature and highlighting future research directions. I start with the issues surrounding the definition and measurement of sadism: there is debate regarding exactly what sadism is, which has led to a number of limitations with existing measures. I then discuss the relationship between sadism and antisocial behaviour: sadism is clearly associated with cruel behaviour towards others, but its exact role in such behaviour, and the precise distinction between sadistic and non-sadistic crimes, has proved hard to characterise. I consider sadism in the context of other antagonistic personality traits – psychopathy, Machiavellianism, and narcissism – and throughout the review I also discuss sexual sadism, a related construct characterised by sexual arousal to others' suffering. Finally, I consider future research directions: clear definitions and measurement tools, the development of sadism in childhood and adolescence, and the evaluation of possible treatments. Sadism often motivates antisocial behaviour, which takes a significant toll on its victims; understanding exactly what sadism is, and whether it can be treated, is of vital importance.

1. Introduction

Sadism is a personality trait, broadly defined as the tendency to experience pleasure from other people's physical or psychological suffering (e.g., O'Meara, Davies, & Hammond, 2011). Sadistic traits are continuously distributed in both community (Buckels, Jones, & Paulhus, 2013) and forensic (Mokros, Schilling, Weiss, Nitschke, & Eher, 2014) samples, and span from the enjoyment of embarrassing others to the enjoyment of committing torture and murder (MacCulloch, Snowden, Wood, & Mills, 1983). It is undisputed, and unsurprising, that individuals with high levels of sadistic traits are more likely to behave antisocially. These individuals get pleasure from being cruel to others, so they are more likely to behave in this way, both online and offline (Ferguson, White, Cherry, Lorenz, & Bhimani, 2003; Sest & March, 2017).

In this narrative review, I provide an overview of the key issues in the sadism research to date, and discuss the questions that remain to be answered (Cronin, Ryan, & Coughlan, 2008; Ferrari, 2015; Green, Johnson, & Adams, 2006). I discuss the scales that have been developed to measure sadism, the exact role it might play in antisocial behaviour, and its association with other malevolent personality traits. I consider where, if anywhere, sadism should appear in the Diagnostic and Statistical Manual of Mental Disorders (DSM; American Psychiatric Association, 2013). Throughout, I also discuss sexual sadism, a variant

of sadism defined as sexual arousal derived from others' pain or suffering.

2. Defining and measuring sadism

2.1. Defining and measuring 'everyday' sadism

Until relatively recently, sadism was considered a forensic phenomenon. Most of the research on sadism was conducted in forensic settings, particularly focusing on sex offences (Mokros et al., 2014). More recently, however, there has been a recognition that sadistic traits exist outside of this setting – a phenomenon termed “everyday sadism” in an attempt to distinguish it from sadism in the context of sex or crime (Buckels et al., 2013). The introduction of this non-forensic, non-sexual sadism concept has been a useful one, since these traits clearly exist in community samples (e.g., O'Meara et al., 2011).

Researchers disagree about how everyday sadism should be defined (Meloy, 1997; O'Meara et al., 2011). It is undisputed that sadism is about deriving enjoyment from other people's physical or psychological suffering (Baumeister & Campbell, 1999; Buckels et al., 2013; Chester, DeWall, & Enjaian, 2018; Meloy, 1997; Pfattheicher, Keller, & Knezevic, 2019), but some researchers suggest that sadism is not *exclusively* about pleasure. These researchers argue that people with sadistic traits engage in cruel behaviour either because it brings *them* pleasure or because

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they want to exert dominance or power over others (O'Meara et al., 2011; Plouffe, Saklofske, & Smith, 2017). However, in this review paper, I use the more narrow definition of sadism – that it is the experience of hedonic value from cruel and antisocial acts – for three reasons. First, the experience of pleasure appears in all definitions of sadism, whereas the power motivation is included in only some of them. Second, in papers describing the Dark Tetrad (i.e., psychopathy, Machiavellianism, narcissism and sadism), it is the enjoyment of cruelty that defines sadism, not the desire for power (Book et al., 2016; Paulhus, 2014). Third, it is difficult to say definitively that someone who acts cruelly to obtain power over someone is not also experiencing pleasure from doing so. In other words, even though an individual may report a motivation to obtain power over an individual, that may be because he/she finds this power enjoyable – meaning that the ultimate motivation could still be pleasure. In this review, I therefore take the stance that sadism is characterised by the hedonic value of being cruel to others, but also note the impact of the debate around this definition.

A number of scales have been developed to measure everyday (i.e., non-forensic, non-sexual) sadism (see Table 1). The development of these measures has been useful, since they have highlighted that sadistic tendencies clearly exist in community samples. However, some scales have not yet been peer reviewed, and others do not report all psychometric properties (see Table 1). In addition, these measures differ from each other in a number of meaningful ways, meaning that the exact phenomenon being measured differs across scales. Here I provide an overview of these measures and the ways in which they differ.

The first distinction between the measures is the extent to which they delineate subtypes of sadism. The Varieties of Sadistic Tendencies (VAST; Paulhus, Jones, Klonsky, & Dutton, 2011), for example, makes a distinction between vicarious and direct sadism. The Comprehensive Assessment of Sadistic Tendencies (CAST; Buckels, 2018) further divides direct sadism into verbal (psychological) and physical sadism. In contrast, other measures contain items relating to these different elements, but are single factor scales: the Short Sadistic Impulse Scale (SSIS; O'Meara et al., 2011), the Negative Social Potency subscale of the Social Reward Questionnaire (SRQ; Foulkes, Viding, McCrory, & Neumann, 2014), the Mean subscale of the Short Dark Tetrad (SD4; Paulhus, Buckels, Trapnell, & Jones, 2018) and the Assessment of Sadistic Personality ASP; Plouffe, Smith, & Saklofske, 2018).¹ Distinct subtypes of sadism may have meaningfully different associations with external correlates – for example, direct sadism may more clearly be associated with antisocial behaviour – so this is an important issue to resolve. A related point is that everyday sadism covers enjoyment of both physical and psychological harm, but with the exception of the CAST, most measures contain items that do not distinguish the two (e.g., “I have hurt people for my own enjoyment”; O'Meara et al., 2011). The factor structure of the CAST indicates the psychological and physical sadism are distinct phenomena, and this may be important: for example, physical sadism may be comparatively rarer in community samples, or may have different consequences for victims. It would be beneficial if future scales used items that clearly distinguish between these two types, as is done in the CAST: for example “I enjoy making jokes at the expense of others” (psychological), “I enjoy physically hurting people” (physical; Buckels, 2018).

The second difference amongst sadism scales is the extent of overlap with other malevolent personality traits. For example, the Negative Social Potency subscale of the SRQ has one item (“I enjoy being nice to someone only if I gain something out of it”; Foulkes et al., 2014) which is more characteristic of Machiavellianism than sadism. The SD4, while brief, should be commended for its attempt to design sadism items that are deliberately less correlated with other Dark Tetrad traits – in other

Table 1
Overview of everyday (non-sexual, non-forensic) sadism measures.

Scale (in chronological order)	Peer reviewed	No. of items	Answer scale	No. and name of factors	Psychometric properties	Internal consistency	Construct validity
Short Sadistic Impulse Scale (SSIS; O'Meara et al., 2011)	Yes	10	Dichotomous (like me/ unlike me)	1	Not reported	Not reported	Negative associations with empathy, interpersonal relating and parental bonding
Varieties of Sadistic Tendencies (VAST; Paulhus et al., 2011)	No	16	7-point Likert scale (not at all to very much)	2: Direct, vicarious	Not reported	Cronbach alpha coefficient = 0.85–0.92 for total scale, 0.77–0.84 for subscales	Positive association with dominance by fear, sexual sadism, partner abuse and SSIS sadism scale
Negative Social Potency subscale of Social Reward Questionnaire (SRQ; Foulkes et al., 2014)	Yes	5	7-point Likert scale (strongly agree to strongly disagree)	1	After 10–14 days interval: (mean = 12.0, SD = 0.06), $r = 0.88$	Cronbach alpha coefficient = 0.87, mean interitem correlation = 0.58	Positive associations with psychopathy, narcissism and Machiavellianism; negative associations with agreeableness and conscientiousness
Assessment of Sadistic Personality (ASP; Plouffe et al., 2017)	Yes	9	5-point Likert scale (strongly agree to strongly disagree)	1	Not reported	Cronbach alpha coefficient = 0.83	Positive associations with psychopathy, narcissism, Machiavellianism and CAST sadism scale; negative associations with emotional intelligence, honesty-humility and agreeableness
Comprehensive Assessment of Sadistic Tendencies (CAST; Buckels, 2018)	No	18	5-point Likert scale (strongly agree to strongly disagree)	3: Direct verbal, direct physical, vicarious	After one year interval: $r = 0.76$ for total scale, $r = 0.64$ – 0.78 for subscales	Cronbach alpha coefficient = 0.89 for total scale, 0.72–0.82 for subscales	Positive associations with psychopathy, Machiavellianism, narcissism, aggression and SSIS sadism scale
Mean subscale of Short Dark Tetrad (SD4; Paulhus et al., 2018)	No	7	5-point Likert scale (strongly agree to strongly disagree)	1	Not reported	Cronbach alpha coefficient = 0.81	Positive associations with other SD4 subscales (psychopathy, narcissism and Machiavellianism); correlations with external measures not reported

¹ This is likely a consequence of the scales' brevity, rather than any definitive evidence that sadism is a unidimensional construct.

words, the authors have deliberately tried to capture what is unique about sadism (Paulhus et al., 2018). Sadism is clearly linked to other dark personality traits (with the SD4, the correlation coefficients between sadism and the other Dark Tetrad scales are still 0.21–0.51), so designing items with no association at all would be unrealistic and inaccurate. However, this attempt to at least minimise overlap with other traits is important.

A broader issue is that most scales contain at least one ambiguous item, i.e., an item that is not clearly measuring sadism or another Dark Tetrad trait. For example, the Short Sadistic Impulse Scale includes the item “Sometimes I get so angry I want to hurt people” (O’Meara et al., 2011). This is more about emotion regulation or provoked aggression than sadism (Buckels, 2018). In others, the exact motivation is unclear, e.g., the VAST item “I never said mean things to my parents” (reverse scored; Paulhus et al., 2011) could be endorsed for a number of reasons that aren’t related to sadism. In the SD4 (Paulhus et al., 2018), the item “I know how to hurt someone with words alone” could be endorsed by a person who knows they have the capacity to upset others (as everyone does), but who wouldn’t necessarily engage in that behaviour or enjoy it.

In sum, all everyday sadism questionnaire essentially capture the phenomenon of experiencing pleasure from other people’s pain or suffering, and so are useful measures. However, all existing scales have their limitations, particularly regarding the lack of specificity of items and/or the scope of the covered construct. For example, one measure focuses clearly on hedonic value as all items begin with the phrase “I enjoy” (Foulkes et al., 2014), but one item overlaps with Machiavellianism, and the brevity of this scale means that potential subtypes of sadism are not captured. Importantly, several scales have also not yet been peer reviewed. The field would therefore benefit from a peer-reviewed measure that firstly distinguishes potential subcategories of sadism using robust factor analysis techniques, and secondly exclusively captures sadistic pleasure (see Section 5.1 for further discussion).

2.2. Defining and measuring sexual sadism

Sexual sadism is defined as sexual arousal in response to another person’s suffering (Dietz, Hazelwood, & Warren, 1990; Eher et al., 2016; Hamilton & Rosen, 2016; MacCulloch et al., 1983; von Krafft-Ebing, 1886). Both psychological – particularly humiliation – and physical pain are mentioned in almost all definitions, although there is a lack of clarity as to whether psychological or physical pain are distinct motivations and whether one is more central to sexual sadism than the other (Longpré, Guay, & Knight, 2019; Marshall & Kennedy, 2003).

There is also debate regarding whether the sadist’s sexual arousal is elicited by the victim’s pain per se or whether it comes from the accompanying power and control exerted over victims (Knoll & Hazelwood, 2009; MacCulloch et al., 1983; Proulx, Blais, & Beauregard, 2006). This is also an issue in the everyday sadism literature (see Section 2.1). Untangling the relative importance of power and pain in sexual sadism is complex, perhaps especially in forensic samples. Exerting power and causing genuine distress occur together in sexual crimes: these crimes involve total submission of a victim, in circumstances that are likely to be life threatening. Signals of genuine suffering from a victim are also signals that control and power have been achieved. It may therefore not be possible, or even meaningful, to try and distinguish whether it is one or both of these phenomena that elicits arousal in forensic sexual sadism. In this review, I use the definition that sexual sadism is the sexual arousal to another person’s physical or psychological suffering, without attempting to tease apart the relative value of achieving power versus causing the victim pain.

2.2.1. Non-forensic sexual sadism

In community samples, thoughts about sexual sadism are not especially rare: in one sample of 367 men aged 40–79 years, 21.8%

admitted sexual fantasies about causing physical or psychological pain (Ahlers et al., 2011); another of 1040 males and females aged 18–64 found that 5.5% of participants had engaged in sadistic sexual behaviour at least once (Joyal & Carpentier, 2017). Critically, sexual sadism in community samples is typically expressed consensually, as part of the BDSM (bondage, discipline, sadism and masochism) subculture of sexual behaviour (Jozifkova, 2013).

Assessments of sexual sadism in community samples typically occur alongside measurement of broader BDSM practices or other paraphilia (e.g., voyeurism). Recently, a detailed measure of community sexual sadism has been developed: the Sadomasochism Checklist (Weierstall & Giebel, 2017). This measure consists of two lists of the same 24 behaviours, one focusing on enacting the behaviours (sadism, e.g., “Whipping, paddling or flogging your partner”) and one focusing on receiving them (masochism, e.g., “Getting whipped, paddled or flogged by your partner”). The measure is particularly useful as it not only asks about experience of behaviour on a 3-point scale (i.e., Not at all/Masturbation fantasy/Tried out) but also asked respondents to rate the hedonic value of each behaviour (‘pleasure gain’) on a 5-point scale (i.e., Not at all to Extremely). This is useful as it provides the opportunity to assess individual differences in the extent of sexual arousal to different behaviours, and to examine how variance in these might be associated with external correlates.

In particular, it would be useful to examine associations between this scale and harmful sexual behaviour and attitudes. Community studies of sexual sadism have primarily focused on consensual behaviour, but clearly sexual sadism with non-consenting victims can exist outside of the forensic samples (i.e., people in the community may be aroused by the thought of causing harm to a non-consenting victim, but either haven’t enacted this behaviour or haven’t been prosecuted for it). To date, studies that have looked at the association between sadism and harmful sexual behaviour in the community have relied on non-sexual sadism measures (Russell, Doan, & King, 2017; Russell & King, 2016; see Section 4.1); it would be valuable to re-examine these questions with a comprehensive sexual sadism measure such as the Sadomasochism Checklist (Weierstall & Giebel, 2017).

It is worth noting briefly that, as with the above measure, discussion of sexual sadism often occurs alongside sexual masochism (the enjoyment of receiving pain in a sexual context). Discussion of sexual masochism is outside the scope of this review, but existing research indicates that they are relatively distinct phenomena (Baumeister, 1988). A community study found that 24% reported lifetime experience of masochistic acts, compared to only 6% for sadistic acts (Joyal & Carpentier, 2017). A forensic study found that of 61 offenders with sexual sadism, only 9 of them (14.8%) also had sexual masochism (Hill, Habermann, Berner, & Briken, 2006). Future research would benefit from further assessment of the theoretical link between these two constructs, in both forensic and non-forensic populations (Knoll & Hazelwood, 2009).

2.2.2. Forensic sexual sadism

The majority of sexual sadism research is conducted in forensic samples, which has found that sexual sadism is a primary motivating factor in some sexual crimes (see Section 4.2). There has been disagreement with respect to how to measure sexual sadism in forensic samples, with one paper referring to the ‘current diagnostic vagueness’ of the sexual sadism construct (Nitschke, Mokros, Osterheider, & Marshall, 2013). Self-report assessments are not considered reliable, as sexual offenders are generally unwilling to admit such fantasies (Nitschke et al., 2013). In early studies, as an alternative, researchers and forensic experts tended to use their own specific criteria for determining the presence of sexual sadism: the life history of the offender, material seized by police, specific criminal behaviours and/or phallometric assessment procedures (Marshall & Kennedy, 2003). When different specialists were asked to diagnose the presence of sexual sadism in a series of vignettes of criminals, unsurprisingly the inter-rater

reliability was low (e.g., Marshall, Kennedy, Yates, & Serran, 2002).

To overcome these reliability issues, the idea of using behavioural markers to assess sadism was proposed, particularly the use of crime scene indicators. For example, the Severe Sexual Sadism Scale (Mokros, Schilling, Eher, & Nitschke, 2012) consists of 11 yes/no items that code for behaviours indicating sexual sadism within sexual offences, such as “Offender humiliates or degrades the victim”. The scale has clinical utility: the presence of four or more of the 11 indicators is reliably associated with a diagnosis of sexual sadism based on the DSM-IV, in samples in Austria, Germany and the United States (Nitschke et al., 2013; see Section 3.2 for further discussion of sexual sadism in the DSM). Some issues with the psychometric properties of this scale (e.g., negative inter-item correlations) have led to the development of a second measure using crime scene indicators: the recent MTC (Massachusetts Treatment Center) Sadism Scale (Longpré et al., 2019). The approach of using behaviour indicators is not without its critics, with some arguing that it can be difficult to ascertain from a crime scene whether certain behaviours were motivated by sadism as opposed to, for example, anger (Beech & Harkins, 2012). There remains controversy around how to determine whether or not a crime was motivated by sexual sadism; see Section 4.2.

2.3. Distinguishing sadism from other antisocial personality traits

As mentioned in Section 2.1, both sexual and non-sexual sadism often co-occur with other antagonistic personality traits. A wide body of research has been conducted on three such traits known as the Dark Triad: psychopathy, Machiavellianism, and narcissism (Paulhus & Williams, 2002). Briefly defined, psychopathy is characterised by antisocial behaviour and a lack of empathy; Machiavellianism by a willingness to manipulate and exploit others; and narcissism by grandiosity and self-importance (Paulhus & Williams, 2002). Researchers have documented the positive associations found between the Dark Triad and everyday sadism (e.g., Plouffe et al., 2018), so much so that sadism is now considered a fourth negative type of personality that forms a Dark Tetrad with the original three (Buckels et al., 2013). There are also associations between one facet of the Dark Triad – psychopathy – and sexual sadism, in both community (Baughman, Jonason, Veselka, & Vernon, 2014) and forensic (Mokros, Osterheider, Hucker, & Nitschke, 2011) samples.

Despite these associations, there are two lines of evidence to indicate that sadism is relatively independent from the other antisocial personality traits, and therefore worthy of its own label. First, associations with the Dark Triad are only modest: correlation coefficients with measures of psychopathy, Machiavellianism and narcissism range from 0.31 to 0.37 (Chabrol, Van Leeuwen, Rodgers, & Séjourné, 2009), 0.29 to 0.57 (Craker & March, 2016) and 0.32 to 0.61 (Pajević, Vukosavljevic-Gvozden, Stevanovic, & Neumann, 2018). Second, sadism explains unique variance when explaining antisocial behaviour, above and beyond the variance explained by the Dark Triad. This is true whether that behaviour is blasting task opponents with white noise (Buckels et al., 2013), cyberbullying (Smoker & March, 2017; van Geel, Goemans, Toprak, & Vedder, 2017), trolling (Buckels, Trapnell, Andjelovic, & Paulhus, 2019; Craker & March, 2016), or a number of other measures of aggression (Chester et al., 2018). Interestingly, sadism also uniquely predicts an antisocial behaviour that doesn't involve directly harming others: vandalism (Pfattheicher et al., 2019). This suggests that the pleasure of causing distress that is fundamental to sadism may extend to behaviours that indirectly harm others (i.e., by damaging their property). There is also evidence that, in a series of unstructured dyad conversations, sadistic traits are associated with negative first impressions above and beyond the Dark Triad traits (Rogers, Le, Buckels, Kim, & Biesanz, 2018). However, the relationship between sadism and these traits continues to be a complex one, not least because each of the Dark Triad traits has their own definitional issues. For example, they are all multidimensional constructs with

various potential factor structures (Corry, Merritt, Mrug, & Pamp, 2008; Derefinko & Lynam, 2006; Rauthmann & Will, 2011; Wright, Lukowsky, Pincus, & Conroy, 2010). For further discussion of the relationship between these four constructs, see Book et al. (2016) and Tran et al. (2018).

3. Sadism in the DSM

For many years there has been a debate about whether sadism and sexual sadism should appear as psychiatric disorders in the DSM (Diagnostic and Statistical Manual of Mental Disorders; American Psychiatric Association, 2013). Here I discuss the history of two such entries: Sadistic Personality disorder and Sexual Sadism Disorder.

3.1. Sadistic Personality Disorder: a short-lived diagnosis

Sadistic Personality Disorder (SPD) is not recognised as a mental disorder in the current (fifth) version of the DSM (American Psychiatric Association, 2013), but it did appear briefly in the earlier DSM-III-R, in an appendix entitled “Proposed diagnostic categories needing further study” (American Psychiatric Association, 1988). It was included because forensic psychiatrists found that some patients showed a pattern of cruel behaviour towards others that seemed to be driven by pleasure, and that this was not adequately covered by criteria for other personality disorders (Fiestner & Gay, 1991). The focus of their observations were not related to sexual crimes, but rather crimes like domestic abuse, assault and murder (Fiestner & Gay, 1991). However, there were a number of issues with the proposed category of SPD that meant it never progressed beyond that version of the DSM.

First, there was concern, even though sadism was not adequately captured in existing disorders, that SPD was not a distinct disorder in itself. This was because of high rates of comorbidity with other disorders, particularly narcissistic and antisocial personality disorders (Fiestner & Gay, 1991). From the literature to date, it seems most likely that sadism is a feature that is sometimes present alongside other personality disorders, but is not a distinct disorder within itself (Fiestner & Gay, 1991). Other issues with creating a diagnostic category of SPD were more about the consequences of labelling a person with SPD, with two seemingly opposing concerns. On the one hand, critics were concerned that a diagnosis of SPD could be unfairly stigmatising; for example, there was a concern that patients with this label may be more at risk of abuse from prison officers (Spitzer, Feister, Gay, & Pfohl, 1991). On the other hand, there was concern that a diagnosis of SPD could be misused in the legal system, inappropriately diminishing criminal responsibility and allowing the ‘medicalisation of evil’ (Spitzer et al., 1991). For all these reasons, the proposed category of SPD never appeared beyond the third version of the DSM.

3.2. Sexual sadism as a paraphilic disorder

One sadistic disorder does appear in the DSM-5: Sexual Sadism Disorder (SSD), which is primarily used in forensic settings in an attempt to identify a distinctive group of sexual offenders. In the DSM-5, SSD appears under the category of Paraphilic Disorders – disorders centred around sexual arousal to deviant stimuli or scenarios. For a diagnosis of SSD, an individual must have experienced recurrent and intense sexual fantasies relating to the pain or suffering of others, or have engaged in actual sadistic sexual behaviour with a nonconsenting individual. Note that for a person to qualify as having a paraphilic disorder such as SSD, rather than merely a deviant sexual interest, the interest must carry negative consequences for either the person themselves (i.e., fantasies so intense or frequent that they cause distress or disrupt daily functioning) or for society at large (i.e., harmful or criminal behaviour; First, 2010). These criteria separate sexual sadism as a pathology from less frequent or intense sexual sadism fantasies or consensual behaviour, which should not be considered a clinical

problem; as already discussed (see Section 2.2), sexual sadism fantasies are not rare and do not necessarily represent pathology in and of themselves (Hamilton & Rosen, 2016). However, there has been criticism and concerns about SSD, largely because it is unclear whether such a diagnosis meaningfully delineates a unique group of offenders in terms of criminal behaviours or recidivism risk; this is discussed further in Section 4.2.

4. The role of sadism in antisocial behaviour

It is interesting to note that sadistic behaviour – acting on sadistic fantasies – is not necessary for obtaining a diagnosis of SSD. Similarly, definitions of both sexual and non-sexual sadism centre around the hedonic value of others' suffering rather than the tendency for an individual to inflict such suffering. However, a basic tenet of psychology is that people are likely to seek out and repeat the behaviours that have reward value for them (Berridge & Robinson, 2003) – and indeed, it could be argued that individuals can only report how much they enjoy a behaviour if they have tried it out themselves. It therefore stands to reason that people with high levels of sadistic traits are also more likely to actually inflict suffering on others. In the following section, I discuss the existing evidence that sadistic traits are associated with a range of antisocial behaviours, including harmful sexual behaviour.

4.1. Community samples

In community samples, experimental evidence has demonstrated the association between everyday sadism and antisocial behaviour. For example, in one study, participants were given the opportunity to blast an opponent (in fact a confederate) with white noise if the participant pressed a button faster than their opponent. Higher sadism scores were associated with greater intensity and duration of white noise blasts, and the frequency with which participants chose to work on a boring letter-counting task that would enable them to blast their opponent again (Buckels et al., 2013). In addition, sadism predicts antisocial punishment – punishment of cooperative behaviour – in a one-shot economic game (Pfattheicher, Keller, & Knezevic, 2017). A recent collection of eight laboratory aggression experiments demonstrated that individuals with higher levels of sadistic traits report more enjoyment from behaving aggressively, and that the extent of enjoyment predicts the extent of aggression (Chester et al., 2018). Interesting, these authors found that sadistic traits were associated with lower mood *after* the aggressive act, even controlling for prior mood; the reasons for this remain unclear and are worthy of further investigation (Chester et al., 2018).

Outside of experimental contexts, everyday sadism has been associated with online trolling (Buckels, Trapnell, & Paulhus, 2014; March, Grieve, Marrington, & Jonason, 2017; Sest & March, 2017), cyberbullying (van Geel et al., 2017), cyberstalking, the repeated and malicious harassment and/or surveillance of an intimate partner or ex-partner (Smoker & March, 2017) and vandalism (Pfattheicher et al., 2019). Everyday sadism in community samples is also associated with harmful sexual behaviour: it is associated with sexual harassment and coercion in males (Russell & King, 2016) and indirectly predicts sexual violence in females (mediated by adversarial sexual attitudes such as rape myth acceptance; Russell et al., 2017).

4.2. Forensic samples

In forensic samples, sadistic pleasure has been reported as a motivating factor in some non-sexual crimes, including assault and murder (Ferguson et al., 2003; MacCulloch et al., 1983), but the majority of the forensic sadism research has focused on sexual crimes such as rape and sexual murder (e.g., Warren, Hazelwood, & Dietz, 1996). This body of research has indicated that some sexual crimes are indeed motivated by the perpetrator's sexual arousal to their victim's pain and suffering:

between 19% and 40% depending on the study (Barbaree, Seto, Serin, Amos, & Preston, 1994; Berger, Berner, Bolterauer, Gutierrez, & Berger, 1999).

There has been a great deal of research trying to identify whether crimes committed by individuals with sexual sadism are distinct from those committed by individuals without it. For example, a comparison of sex offenders with and without Sexual Sadism Disorder (SSD; according to DSM-IV criteria) found that those with the disorder were more likely to make preparations for their offence in advance, to offend without any considered provocation by the victim, and to make the offence last longer (Hill et al., 2006). The use of physical restraints, mutilation and humiliation has also been reported to distinguish criminals with a diagnosis of SSD (Healey, Lussier, & Beauregard, 2013). Others have suggested that criminals with sexual sadism are more likely to destroy or remove crime scene evidence, and more likely to leave the victim's body in a remote location, suggesting that sadistic criminals may display higher levels of 'investigative awareness' that delays their detection (Reale, Beauregard, & Martineau, 2017a).

However, many researchers dispute the usefulness of trying to categorise offenders or offences on these grounds. Recent evidence suggests that forensic sexual sadism is dimensional and that we should view offenders as having different grades of sexual sadism (Longpré, Guay, Knight, & Benbouriche, 2018), rather than viewing it as either present or absent. This is supported by recent empirical studies, including one cluster analysis of 350 cases of sexual murder (Reale et al., 2017a). This study found that perpetrators could be divided into a non-sadistic group and a highly sadistic group, with distinct criminal features between the two, but that there was also a third 'mixed' group that displayed some, but not all, aspects of sadism (Reale, Beauregard, & Martineau, 2017b). This has important legal implications: authorities in the justice system are interested in using a diagnosis of SSD (amongst other paraphilic disorders) as a marker of recidivism risk amongst violent or sexual offenders (e.g., Levenson, 2004). However, a recent meta-analysis found that neither a diagnosis of SSD nor sadistic behaviours more generally increased the risk of violent or sexual re-offending (Eher et al., 2016), again calling into question the usefulness of taking a dichotomous approach to sexual sadism. Based on this evidence, this approach should be abandoned, and sexual sadism should be viewed as a continuously distributed trait in offenders (Longpré et al., 2018). However, this is unfortunate for the legal system and the DSM (American Psychiatric Association, 2013), both of which would benefit from a clear sadism/non-sadism dichotomy in criminals.

5. Future directions

The extant research on sadism and sexual sadism demonstrates that some individuals clearly find pleasure in other people's pain and suffering. However, as highlighted so far, the field contains a number of questions that remain to be answered. In this section, I highlight important future directions for sadism research.

5.1. A definitive measure of everyday sadism

In Section 2.1, I provided an overview of current everyday sadism measures. Although these measures usefully capture the broad construct of sadism, the field could benefit from a refined measure. Specifically, a measure of everyday sadism is needed that isolates what makes the construct distinct from other dark personality traits, while also comprehensively capturing the breadth of the construct (e.g., both direct and vicarious sadism). Since several measures of everyday sadism already exist, the best items from these measures could be combined, then robust factor analysis techniques could be conducted to decipher the underlying factor structure – as has been done to explore the structure of other constructs (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006). At present, it is unclear whether sadism is a unitary construct or whether it is made up of several components, such as

vicarious and direct sadism, or sadism arising from psychological versus physical harm; factor analysis on a group of items pooled from across sadism measures would allow us to answer this question. In particular, items that assess the desire for dominance and control over others should be included. This could include existing items (e.g., “I would hurt somebody if it meant I would be in control”; ASP, Plouffe et al., 2017), but also redesigned versions of these items that explicitly assess the hedonic value of this behaviour (e.g., “I enjoy being in control of someone”). This would help to clarify the extent to which obtaining control, and/or the pleasure that comes from this, is fundamental to the sadism construct.

Care must be taken when using this item-pooling approach, to ensure that items that are essentially identical in content should not both be entered into the factor analysis. Instead, a theory-driven approach should be taken so that a comprehensive but selective list of items is entered into the exploratory factor analysis. This is to avoid the phenomenon of ‘bloated specifics’, which are narrow constructs and therefore not true factors (Cattell, 1963). Once this has been conducted, the resulting scale would be a clear measure of the construct of sadism, which could then be used to assess associations with other phenomena including other personality traits and antisocial behaviour.

5.2. Sexual vs. non-sexual sadism

Future research should also focus on understanding whether sexual sadism and sadism outside of this context are distinct entities. To date, the two areas of research have been largely separate, and studies that have addressed the relationship between the two have primarily looked at non-sexual sadistic behaviour in individuals with sexual sadism. Early studies of community samples found that individuals who engage in consensual sexually sadistic acts tend not to engage in sadistic acts outside of this context (Breslow, Evans, & Langley, 1985; Spengler, 1977). A study of sex offenders, on the other hand, found relatively high comorbidity between the two types of sadism: 46% of offenders with sexual sadism also had a diagnosis of (non-sexual) sadistic personality disorder (SPD), and 68.4% of those with SPD displayed sexual sadism (Berger et al., 1999). It may be that at sufficiently high levels (i.e., those seen in forensic samples), sexual sadism co-occurs with non-sexual sadistic thoughts and behaviours, whereas this is not the case at lower levels in community samples. This speculation needs further investigation by directly comparing associations between sexual and non-sexual sadism in forensic and community samples in the same study.

5.3. Developmental antecedents of sadism

Sadism is not an adult-onset phenomenon. Community samples show that some adolescents also report enjoyment from behaving cruelly towards others (Chabrol et al., 2009; Foulkes, Neumann, Roberts, McCrory, & Viding, 2017). In forensic samples, one study of 5–21 year olds showing sexually abusive behaviour found that 18% of them reported sadistic sexual fantasies (Vizard, Hickey, French, & McCrory, 2007). A small number of case studies have reported that some non-sexual juvenile offenders also experience pleasure in causing suffering to others (Bailey, 1997; Johnson & Becker, 1997), often first expressed as enjoyment derived from inflicting pain on animals, which is commonly an antecedent to antisocial behaviour towards humans (Merz-Perez, Heide, & Silverman, 2001). Sadism clearly exists in some children and adolescents; to understand its aetiology in future research, it seems pertinent to assess sadism in developmental samples.

Child maltreatment may be relevant, as children who enjoy torturing and harming animals are likely to be victims of abuse themselves (Fiester & Gay, 1991; McEwen, Moffitt, & Arseneault, 2014; Spitzer et al., 1991). However, researchers assessing the development of other antisocial personality traits and behaviour suggest that there are both biological and environmental factors involved. For example, a review of children and adolescents who display sexually abusive behaviour

highlighted neurocognitive deficits (e.g., learning disabilities or language problems), mental illness and dysfunctional family environment (maltreatment, witnessing abuse, family breakdown) as risk factors for displaying this behaviour (Vizard et al., 2007). In the development of psychopathy, genetics and structural and functional brain differences are known to play an important role alongside environmental factors such as abusive parenting (e.g., Viding & McCrory, 2012).

When examining the development of sadism, gene-environment correlations (*rGE*) should be considered, as these are known to be important in the development of psychopathy and antisocial behaviour (Beaver, Barnes, May, & Schwartz, 2011; O'Connor, Deater-Deckard, Fulker, Rutter, & Plomin, 1998). These occur when a person's genotype increases the likelihood that they will be exposed to certain environmental conditions, and there are three types, all of which may be relevant when trying to understand the development of sadism. First, *passive rGE* occurs when there is an association between a child's genes and the home environment in which they are raised. For example, a child who had a genetic propensity to experience sadism may also then be raised by parent/s who display this propensity in their parenting practices – so a child that has a predisposition to sadism may therefore also be brought up in an environment where cruel and sadistic behaviour is modelled as typical. *Evocative rGE* occurs when a child's heritable behaviour evokes a specific kind of response in their environment; in the case of sadism, this could mean that a child displaying sadistic tendencies elicits more harsh punishment or more social isolation – which could then feed their sadistic attitudes towards others. Finally, *active rGE*, where an individual's genotype might lead them to seek out specific environments, is also relevant when thinking about sadism: children with a predisposition towards sadistic feelings may then be more likely to seek out environments in which they can test out their behaviour, in turn confirming and consolidating their sadistic traits. Thus all variants of gene-environment correlations are likely important to understanding why sadism develops. These should be assessed in future research alongside possible neurocognitive correlates (see Section 5.4).

5.4. Neurological underpinnings

Future research should also examine the underlying neural mechanisms that give rise to sadism, across age ranges. There has been extensive evaluation of structural and functional neurological deficits that underlie another malevolent personality trait, psychopathy (Baskin-Sommers, Neumann, Cope, & Kiehl, 2016; Kiehl, 2006; Seara-Cardoso & Viding, 2015), including in developmental samples (Caldwell et al., 2019; Yoder, Lahey, & Decety, 2016). In contrast, few neuroimaging studies have investigated sadism, but this is likely key to understanding how sadism develops. Existing research has focused on sexual sadism, and this research has indicated neural differences between sadists and non-sadists. An fMRI study included 15 sexual offenders, eight of which scored above cut off on the Severe Sexual Sadism Scale, and showed participants images of people in pain and not in pain (Harenski, 2012). Relative to non-sadists, sadists showed greater amygdala activation when viewing pain pictures, a region involved in sexual arousal (Harenski, 2012). There has also been one EEG study, which found that male participants with paraphilic interests (which included sadomasochism) showed greater P600 responses to paraphilic images at the F3 (left frontal) site, relative to male participants without these interests (Waismann, Fenwick, Wilson, Hewett, & Lumsden, 2003).

An examination of the reward system would also be informative. When humans are given rewarding stimuli, such as food or money, a network of regions in the brain become activated (Berridge & Robinson, 2003). It would be interesting to assess the extent to which this network becomes activated when people with sadistic traits see others in pain. One study focusing on psychopathy found that regions in this network – the orbitofrontal and ventromedial prefrontal cortices – became activated when inmates with psychopathy viewed images of individuals in

pain (Decety, Chen, Harenski, & Kiehl, 2013). It is not possible to infer psychological processes from neural activation alone as these brain regions are involved in other processes besides reward (Stalnaker, Cooch, & Schoenbaum, 2015), so a key future research direction would be to examine the relationship between sadistic traits, activation to images of others in pain in reward-related regions in the brain, and self-reported enjoyment of these images.

5.5. Sex differences

Possible sex differences in sadism should be examined in future research. Most community studies of sadism do not report measuring sex differences. The handful that do indicate that both everyday and sexual sadism are present in females in community samples, but at lower rates than in males (Breslow et al., 1985; Chabrol et al., 2009). In forensic research, almost all studies have assessed exclusively male offenders, likely reflecting the fact that only a minority, up to 11%, of sexual crimes are committed by women (Cortoni, Babchishin, & Rat, 2017; Vandiver & Walker, 2002). One study found that the Severe Sexual Sadism Scale was a valid measure of sadism in incarcerated females (Pflugradt & Allen, 2013). A second study interviewed five female sex offenders diagnosed with sexual sadism (Pflugradt & Allen, 2012). This study tentatively suggests that sexual sadism may manifest itself differently in women: most of the participants had a co-offender, whereas men tend to act alone; the women were also more likely to know their victim, with their offences tending to occur in a 'pseudo-family unit' (Pflugradt & Allen, 2012). However, these possibilities need to be evaluated with more robust study designs, using larger sample sizes and directly comparing men and women in a single study.

5.6. The role of sadism in antisocial behaviour

Several questions remain regarding the relationship between sadism and antisocial behaviour. First, the role of sadism should be investigated in non-sexual crimes: the vast majority of forensic sadism research has assessed sexual offences only. Second, we need to identify to what extent sadism affects criminal behaviour relative to other known predictors. Many offenders show no signs of sadism, so it is evidently not a necessary precondition for crime to take place (Beech, Ward, & Fisher, 2006; Seto, 2017). It is also not sufficient: many people have sexual fantasies about sadism but do not enact these with non-consenting individuals (Jozifkova, 2013). For a sadistic sexual offence to occur, sadism would need to be paired with some other impairment such as reduced self-control, either chronic or temporary (Seto, 2017). However, to date, the relationship between these risk factors and how they predict crimes have not been clearly quantified. For example, do sadistic traits and low self-control have additive or interactive effects on type or frequency of crime? The relationship between anger and sadism in motivating crime is also unclear: some research has stated that sadistic offenders have generalised feelings of anger and resentment towards others (Beech et al., 2006) while others have argued that sadism and anger are two distinct types of motivation that do not tend to co-occur (Robertiello & Terry, 2007). In sum, it remains unclear exactly what defines a crime that is motivated by sadism, how these crimes differ from non-sadistic crimes, and to what extent the presence of sadism predicts antisocial behaviour above and beyond other predictors of such behaviour.

5.7. Treatment: the ultimate goal for sadism research

The final critical direction for future sadism research is that of treatment. At present there is a great deal of literature describing and measuring the phenomenon of sadism, but almost nothing on its treatment (Beech et al., 2006; McManus, Hargreaves, Rainbow, & Alison, 2013) – if indeed it can be treated at all. Victim empathy training – a common component of interventions for other offenders – is

likely not appropriate, since it may only serve to highlight the source of enjoyment or arousal for sadistic offenders (Beech et al., 2006). Treatment studies that do exist focus on sexual sadism, and include a case study of Fixed Role Therapy, a type of psychotherapy (Horley, 2005) and a case study using covert sensitisation to pair initially arousing images with aversive ones (Hayes, Brownell, & Barlow, 1978), both of which report some success. There have also been small, uncontrolled studies evaluating pharmacological treatments for sexual sadism (Hill, Briken, Kraus, Strohm, & Berner, 2003), but larger, randomised control trials are needed to evaluate their effectiveness. In addition, the target of treatment needs to be expanded to include non-sexual sadism. Sadism inflicts misery on its victims; whether through the use of medication and/or a programme of therapy involving desensitisation, identifying potential treatments for sadism is a vital direction for future research.

6. Conclusion

Most individuals experience enjoyment from seeing and causing other people's happiness (e.g., Foulkes et al., 2014). However, a wide body of research now demonstrates the existence of sadism: a personality trait characterised by derivation of pleasure from others' pain and suffering. Sadism is clearly associated with increased levels of antisocial behaviour, from cyberbullying to rape and murder. Future research should tackle a number of pertinent issues, for both sexual and non-sexual sadism. The hedonic pleasure that is unique to sadism should be highlighted and isolated in a reliable measure; the relationship between sadism and other antagonistic personality traits should be examined; and the role that sadism plays in antisocial behaviour, relative to other variables such as poor self-control, should be assessed. Finally, the field should address where sadism comes from – its developmental antecedents – and whether there is anything that can be done to prevent or treat it. To truly understand the motivations behind antisocial behaviour, it is vital to take sadism into account, and to recognise that some people actively engage in these behaviours because they enjoy them.

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