

Chapter 19



Multifaceted Assessment of Sadistic Tendencies

The Varieties of Sadistic Tendencies and Comprehensive Assessment of Sadistic Tendencies Measures

Erin E. Buckels

Department of Psychology, University of Winnipeg, Manitoba, Canada

The Varieties of Sadistic Tendencies (VAST) and Comprehensive Assessment of Sadistic Tendencies (CAST) originated with a research group at the University of British Columbia during the years 2006–2013. The group included a personality psychologist (i.e., Delroy Paulhus), a clinician (i.e., David Klonsky), a social psychologist (i.e., Donald Dutton), and two graduate students (i.e., Daniel Jones and the author of this chapter). Our working theme was that sadistic behavior is not as rare as commonly assumed; nor is it necessarily sexual; nor is it necessarily criminal in nature. Instead, we proposed the notion of everyday sadism. From our perspective, enjoyment of cruelty was widespread in the context of violent sports, video games, books, and film. Indeed, ordinary people will pay a great deal for such popular entertainment.

Preliminary Work

To develop preliminary questionnaires, our sadism group brainstormed a wide range of items. The diversity of panel members ensured a diversity of angles of view on the topic. We collected several large datasets from undergraduate student samples and several community samples using Mechanical Turk. Meanwhile, in 2009, Henri Chabrol and colleagues published some provocative sadism results using a sample of high school students studying in Toulouse, France (Chabrol et al., 2009). The authors had translated an unpublished measure – the *Hurting Scale* – developed by Jason Davies and his students (Davies & Hand, 2003). It was later published as the Short Sadistic Impulse Scale (SSIS; O’Meara et al., 2011; see Chapter 18 by O’Meara & Davies, in this volume). Importantly, the Chabrol paper showed that sadism could be distinguished from narcissism, Machia-

vellianism, and psychopathy – that is, from the Dark Triad (Paulhus & Williams, 2002). Indeed, all three correlations with sadism were less than .38.

Although our core items were like those on the Hurting Scale (e.g., “I like to hurt people”), we generated a much broader set of components. Those components allowed us to test several hypotheses (Paulhus et al., 2011). First, we speculated that *direct sadism* (e.g., “I enjoy physically hurting people”) would correlate with *vicarious sadism* (e.g., “I enjoy torture scenes in films”). That hypothesis was supported. Hence, those who enjoy harming others also enjoy observing cruelty. We also speculated that direct sadism would correlate positively with self-harm (e.g., “I have cut myself to cope with mental pain”). That hypothesis was not supported (Paulhus et al., 2011). Hence, Freud’s conception of *thanatos* (i.e., the death drive that is expressed through both aggressive and self-destructive behaviors) was not supported by our data.

Another hypothesis was that everyday sadism overlaps with sexual sadism (e.g., “I like to hurt my partner during sex”). Only a small positive correlation emerged. The same was true for items tapping aggressive child protection (e.g., “I’d hurt people who threaten my children”). The correlation with mental health (e.g., “I have high self-esteem”) was virtually zero. Although many of these associations with sadism were small-to-moderate, they emerged despite being assessed with single items. We considered the results tentative until the outcome variables could be beefed up with more reliable scales. Most important to our research program, the endorsement rates of self-report sadism items were substantial. These results supported our theme that sadism is an “everyday” phenomenon, not a rarity among normal people.

The VAST – Varieties of Sadistic Tendencies

Based on the empirical support for our first hypothesis, we assembled a bidimensional instrument assessing both direct and vicarious sadism. The correlation between these subscales in our preliminary work suggested that they were tapping the same psychological construct. After a series of revisions, we finalized the measure as a single seven-item direct subscale and a nine-item vicarious subscale. That 16-item version of the VAST showed acceptable internal consistencies (.80 and .81, respectively). It was later published by Paulhus and Jones (2015). Below are a few key studies that have exploited this instrument.

Early Experimental Work

To confirm the surprisingly frank admissions to cruelty on questionnaires, we devised a pair of studies to isolate cruel behaviors in the laboratory (Buckels et al., 2013). However, behavioral confirmation raised several challenges, including ethical ones. How could we, in good conscience, induce university students to engage in cruel acts? This dilemma was overcome in two ways. In Study 1, participants believed that they were harming bugs rather than other people. In Study 2, participants believed they were administering white noise punishment to a nonthreatening participant; actually, it was a computer-simulated partner. Using both the VAST and the SSIS, we confirmed the behavioral reality of everyday sadism. Those two questionnaire measures predicted (a) the willingness to crunch

bugs and (b) white-noise aggression against an innocent partner. Again, these predictions held above and beyond scores on the Dark Triad. The publication of our study triggered a burgeoning interest in other sadism laboratory research (e.g., Chester et al., 2019; Pfattheicher et al., 2021; Themelidis & Davies, 2021).

Early Online Research

A second influential study (Buckels et al., 2014) inspired a wealth of research on internet misbehavior. It showed that the VAST could predict the tendency to troll online – that is, make nasty comments designed to upset individuals or groups on the internet. Mediation analyses led us to conclude that trolling was inherently pleasurable, hence our article was titled “Trolls Just Want to Have Fun” (Buckels et al., 2014). Its publication set off a cascade of empirical interest in trolling (in 2014, the article was ranked 77th in global interest across all domains of science; <https://www.altmetric.com/top100/2014/>). We followed up that study with an examination of psychological mediators (Buckels et al., 2019), but used an expanded measure of sadistic tendencies (described in the second half of this chapter).

Validation From Other Researchers

Further research showed the distinctiveness of direct and vicarious sadism: In Međedović and Petrović (2015), for example, the intercorrelation was a modest .45. Recent research by Dinić and colleagues (2020) confirmed the distinction: Structural analyses showed that the nine-item direct subscale loaded with the SSIS and Assessment of Sadistic Personality (ASP; Plouffe et al., 2017, 2019), thereby validating it against other sadism measures. By contrast, the vicarious subscale fell separately and showed different external correlates (for an investigation of the broader nomological network of the VAST, see Anderson & Marcus, 2019).

The CAST – Comprehensive Assessment of Sadistic Tendencies

A follow-up instrument, dubbed the Comprehensive Assessment of Sadistic Tendencies (CAST), was developed in 2013 to facilitate research on the personality predictors of online trolling (Buckels et al., 2014, 2019). We anticipated that a narrower construct – *verbal sadism* – could be distinguished from other forms of sadistic tendencies. The CAST extends the VAST to three subscales – direct verbal sadism, direct physical sadism, and vicarious sadism – and it operationalizes the sadistic personality as a chronic tendency to enjoy cruelty in three distinct variants.

Scale development followed a classical test theory approach. The initial pool contained 27 items that drew heavily from the VAST. New candidate items were primarily focused on verbally sadistic tendencies. Results of exploratory factor analyses and parallel analyses with student and community samples supported a three-factor solution. A total of

18 items were retained for further construct validation efforts (Buckels, 2018). The 18-item CAST scale was also distributed to other researchers for their independent evaluation of its psychometric properties and predictive utility (resulting in a surprising number of citations for an unpublished measure: 85 citations as of February 2022). It was used to anchor the ASP (Plouffe et al., 2017, 2019), which in turn spurred structural investigations of the Dark Tetrad personality space (see Jones & Paulhus, Chapter 21 in this volume). The CAST's three-factor structure, internal consistency, and test-retest reliability has been supported by research from our lab (e.g., Buckels et al., 2019) and others (e.g., Amrhein, 2018; Erickson & Sagarin, 2021; Greitemeyer & Sagioglou, 2017; Kay, 2021; Pfattheicher et al., 2021; Plouffe et al., 2017; Russell et al., 2017). It has also been successfully adapted into German (Voggeser & Göritz, 2020) and Spanish (Pineda et al., 2021), among other languages. Intercorrelations among the subscales (i.e., direct verbal, direct physical, and vicarious sadism) typically range from .55 to .65.

The VAST and CAST measures include diverse item content that expands the definition of sadism to include vicarious enjoyment of suffering. These multifaceted measures are, however, reliably positively associated with unidimensional measures of sadistic personality. All three CAST subscales overlap strongly with ASP sadism: In undergraduate samples, the correlations range from .40 to .60 for vicarious sadism; .72 to .74 for direct verbal sadism; and .66 to .85 for direct physical sadism (Plouffe et al., 2017, 2019). Correlations with SSIS scores are likewise strong and positive: ranging from .59 (vicarious) to .79 (direct physical; Buckels, 2018).

The physical, verbal, and vicarious sadism facets are also positively associated with measures of the Dark Triad, callousness, and trait aggression (e.g., Buckels et al., 2014, 2019; Gonzalez & Greitemeyer, 2018; Plouffe et al., 2017). The glue that binds them is the common core of all malevolent personality traits, which is alternatively described as callous exploitation (Heym et al., 2019; Jones & Figueredo, 2013; Paulhus, 2014), low honesty-humility (Book et al., 2016), or more recently, the *D* factor (Moshagen et al., 2018; Moshagen et al., 2020; Zettler et al., 2020). Like other dark personality traits, sadism falls in Quadrant II of the interpersonal circumplex (Wiggins, 1991). In other words, CAST scores are positively correlated with agency, and negatively correlated with communion (Buckels, 2018; cf. Dowgwillo & Pincus, 2017).

In some research, the empirical overlap between sadism and psychopathy is admittedly high enough to suggest redundancy (e.g., $r = .86$ between CAST and SD3 psychopathy; Jonason & Zeigler-Hill, 2018). That issue is partly a function of overlapping item content, particularly with respect to psychopathy and physically aggressive tendencies. The problem was addressed with the development of the revised psychopathy subscale of the Short Dark Tetrad (SD4; Paulhus et al., 2021). CAST associations with SD4 psychopathy are now in an acceptable range (typical $r = .50$; Buckels, 2021).

With respect to the broad domains of personality, the CAST is negatively associated with agreeableness, conscientiousness, and honesty-humility (Buckels, 2018; Erickson & Sagarin, 2021; Greitemeyer & Sagioglou, 2017; Johnson et al., 2019; Pfattheicher et al., 2021; Plouffe et al. 2017). Of the three subscales, vicarious sadism is less consistently linked to low agreeableness (Johnson et al., 2019; Plouffe et al., 2017). Relations with Big Five neuroticism and HEXACO emotionality are complex. In some research, there a weak positive correlation with neuroticism (Greitemeyer & Sagioglou, 2017; Sagioglou & Greitemeyer, 2016); in other research, there is no correlation (Buckels, 2018; Pfattheicher et al.,

2021). In contrast, correlations with HEXACO emotionality are negative in direction (Johnson et al., 2019; Pfattheicher et al., 2021), which is consistent with an overall lack of sentimentality among everyday sadists. Associations with extraversion and openness are negligible.

Sadistic individuals are callous and aggressive, but in line with our conception of everyday sadism, there is no clear evidence of poor adjustment in their personality profiles. There are two important qualifications of that statement. First, there is scattered evidence of a positive association between sadism and the frequency and intensity of negative states, such as negatively valenced emotions (Buckels et al., 2013; Bulut, 2020; Chester et al., 2019), boredom (Pfattheicher et al., 2021), and trophotropic symptoms (e.g., upset stomach, lump in the throat, and crying; Bulut, 2020). Second, scores on all three CAST subscales are positively associated with disordered aspects of personality among *women* (Russell et al., 2017; cf. Russell & King, 2017). While speculative, it is possible that gender moderates the relationship between sadism and personal adjustment, with a stronger link between sadistic tendencies and maladjustment in women, as compared with men. Our view is that, in general, sadism aligns with deficits in interpersonal functioning, not personal adjustment (Neumann et al., 2021; Paulhus et al., 2021). Nevertheless, sadistic individuals may harbor resentment from frequent episodes of interpersonal conflict and social rejection by others – which occurs readily upon first acquaintance (Rogers et al., 2018). Sadistic individuals are so accustomed to unpleasantness in daily life that they even report bitter taste preferences (Sagioglou & Greitemeyer, 2016).

Other research supports the core callousness and pleasure from suffering that is central to all varieties of sadistic tendencies. CAST scores predict a tendency to experience pleasure from suffering and harm (Buckels et al., 2019; Lui et al., 2020; cf. Međedović, 2017), in both consensual (i.e., bondage and discipline, sadism and masochism [BDSM]) and nonconsensual contexts (Erickson & Sagarin, 2021). In normal samples, sadistic pleasure is enabled through psychological rationalization processes (Buckels et al., 2019); it is reduced when individuals take the perspective of suffering others (Lui et al., 2020). Yet CAST scores are negatively associated with dispositional perspective taking and empathic concern (Erickson & Sagarin, 2021), and are likewise negatively associated with trait emotional intelligence (Plouffe et al., 2017). Taken together, these patterns confirm the presence of impairments in empathy and emotion perception, even among subclinical sadists (cf. Bulut, 2020). Both provide a path to interpersonal maladjustment.

The appetitive motivation inherent in sadistic tendencies is also reflected in positive correlations with individual differences in the sensitivity of the behavioral activation system (BAS; Carver & White, 1994) – particularly BAS drive (Buckels, 2018). That component reflects an intense drive to pursue one's goals (e.g., “When I go after something, I use a ‘no holds barred’ approach”). By contrast, behavioral inhibition system (BIS) and prevention-focused motives are negatively associated with sadistic tendencies (Buckels, 2018; Jonason & Zeigler-Hill, 2018). Thus, personal safety and avoidance of pain is relatively less important to sadistic individuals, as compared with others.

Lastly, a growing body of research supports the predictive validity of this measure. In support of the Dark Tetrad model, CAST sadism often predicts behavioral and attitudinal criteria above and beyond overlap with measures of the Dark Triad traits. Table 19.1 summarizes this body of research.

Table 19.1. CAST predictive validity evidence

Criteria	Citation(s)
Online trolling	Buckels et al. (2014); Buckels et al. (2019); Paananen & Reichl (2019)
Bullying, cyberbullying, online disinhibition, and moral disengagement	Buckels (2018); Kurek et al. (2019); Min et al. (2019); Nocera et al., (2022)
Intimate partner cyberstalking	March et al. (2020)
Violent video gaming; pleasure from violent video games; and aggressive online gaming behavior ("griefing")	Gonzalez & Greitemeyer (2018); Greitemeyer (2015); Greitemeyer & Sagioglou (2017); Greitemeyer et al. (2019); Ladanyi & Doyle-Portillo (2017)
Fascination with weapons	Gonzalez & Greitemeyer (2018)
Tendency to inflict frustration on others	Emer & Poepsel (2021)
Negative first impressions	Rogers et al. (2018)
Workplace incivility and interpersonal deviance	Min et al. (2019)
Sexual coercion, sexual aggression, attempted/completed rape, and rape myth acceptance	Russell et al. (2017); Russell & King (2016, 2017); Klann (2017)
Social dominance orientation, hostile sexism, and benevolent sexism	Paananen & Reichl (2019)
Conspiracy theories and odd beliefs	Kay (2021)

Note. CAST = Comprehensive Assessment of Sadistic Tendencies.

Two findings are particularly notable, as they pertain to the predictive validity of the vicarious sadism construct. First, Min and colleagues (2019) found that (a) of the Dark Tetrad variables, sadism was the most important predictor of cyberbullying frequency (accounting for 61–64% of the variance in cyberbullying); (b) of all the available sadism measures (SSIS, ASP, and CAST), CAST scores explained the most variance in cyberbullying frequency; and (c) of the CAST's subscales, vicarious sadism was the most robust predictor of cyberbullying frequency. As discussed previously, vicarious sadism overlaps the least with SSIS and ASP sadism, yet it is most relevant to the prediction of this important behavioral criterion. A second finding of note is that vicarious sadism scores are positively correlated ($r=.22$) with reports of a completed rape in female samples (Russell et al., 2017); that correlation was only slightly lower than the one for physical sadism ($r=.25$). These patterns support the inclusion of vicarious sadism in the sadistic personality cluster. An appetite for sadistic entertainment may be indicative of aggressive urges writ large (cf. Međedović & Kovačević, 2020).

We acknowledge that some studies have failed to support the CAST's incremental validity in predicting outcomes above and beyond broadband Dark Triad measures (Jonason et al., 2017; Jonason & Zeigler-Hill, 2018; Karandikar et al., 2019; Ritchie et al., 2019). Yet, in some sense, these failures are reassuring. They suggest that the individual differences in sadism were already embedded in these traditional batteries of the dark domain.

When sadism is isolated from the Dark Triad, one would only expect unique predictive power for outcomes that are uniquely sadistic.

Further Scale Refinement: The CAST-12

Although used extensively in published research, publication of the CAST was held back to further evaluate its psychometric properties. Results from an item response theory (IRT) approach flagged the two reversed-scored items as potentially problematic (Amrhein, 2018). Indeed, our work on the SD4 (Paulhus et al., 2021) supported their removal. Thus, I now recommend a revised version, the CAST-12: a brief, 12-item multidimensional measure of sadism that contains three high-fidelity subscales. Although brief, the CAST-12 (see Box 19.1.) retains its three-factor structure; a three-factor model fit better than the alternative one-factor or two-factor (direct, vicarious) models (Buckels, 2021). The CAST-12 measure and supporting information may be downloaded at <https://erin-buckels.com/cast-12>.

With this winnowed measure in hand, our research team is gathering further evidence of the unique predictive validities of the three sadism facets. For instance, in one study (Buckels et al., 2018), we found that vicarious sadism was the most robust predictor of time spent viewing “nasty” cartoons, whereas verbal sadism was the most robust predictor of aggressive humor styles (Martin et al., 2003). As an ultrabrief multidimensional measure, the CAST-12 permits further investigation of these carefully dissected slices of everyday sadism, even when survey space is limited. Nonetheless, the overall sadistic personality is best captured by total scores on the CAST-12. The subscales are sufficiently intercorrelated such that “core” sadism can be represented by a single latent factor (Buckels, 2021; Buckels et al., 2018).

Box 19.1. CAST-12: items, instructions, and scoring

Instructions: Rate your level of agreement or disagreement with each statement using a 5-point scale: 1 = *Strongly disagree*, 2 = *Disagree*, 3 = *Neither agree nor disagree*, 4 = *Agree*, 5 = *Strongly agree*

1. I was purposely mean to some people in high school.
2. I enjoy making jokes at the expense of others.
3. I have purposely tricked someone and laughed when they looked foolish.
4. Perhaps I shouldn't have, but I never got tired of mocking certain classmates.
5. I love to watch YouTube clips of people fighting.
6. In video games, I like the realistic blood spurts.
7. I enjoy watching cage fighting (or MMA), where there is no escape.
8. I sometimes replay my favorite scenes from gory slasher films.
9. I enjoy physically hurting people.
10. I enjoy tormenting people.
11. I have the right to push certain people around.
12. I have dominated others using fear.

Note. CAST-12 total ($\alpha = .87$) = mean of items 1–12. Direct verbal sadism ($\alpha = .77$) = mean of items 1–4. Vicarious sadism ($\alpha = .80$) = mean of items 5–8. Direct physical sadism ($\alpha = .79$) = mean of items 9–12. Alphas were obtained using data collected from a sample of 1,134 undergraduate students.

Conclusion

The overriding theme of our research program was that cruel behavior is more common than most people realize. To facilitate empirical research, our sadism research group accepted the challenge of measuring individual differences in sadism via questionnaire. The history of our measures tells a story of increasing granularity. Our early research followed others in creating a single composite score. After hypothesizing a pleasure-seeking motivation for aggressive media consumption, our data confirmed a strong link between sadistic behavioral tendencies and entertainment preferences, but with sufficient evidence to separate the constructs into direct and vicarious components. That two-factor instrument was published under the title VAST (Paulhus & Jones, 2015). We then considered a third variant, verbal sadism, to capture pleasure from another form of cruelty that is arguably just as commonplace as physical or vicarious cruelty. Under the title CAST, that three-factor instrument has accumulated widespread research interest.

The version presented here – CAST-12 – shows sufficient psychometric properties to warrant its use by other researchers. Its construct validity has been supported in terms of structural, concurrent, and predictive validity. These results are nevertheless preliminary, and a broader research program is now underway.

References

- Amrhein, R.L. (2018). *A psychometric investigation of the Comprehensive Assessment of Sadistic Tendencies (CAST): Evidence from factor analysis and item response theory* [Master's thesis, University of Illinois at Urbana-Champaign]. <http://hdl.handle.net/2142/101098>
- Anderson, A.E., & Marcus, D.K. (2019). A bifactor model of meanness, coldheartedness, callousness, and sadism. *Personality and Individual Differences, 137*, 192–197. <https://doi.org/10.1016/j.paid.2018.09.006>
- Book, A., Visser, B.A., Blais, J., Hosker-Field, A., Methot-Jones, T., Gauthier, N.Y., Volk, A., Holden, R.R., & D'Agata, M.T. (2016). Unpacking more “evil”: What is at the core of the dark tetrad? *Personality and Individual Differences, 90*, 269–272. <https://doi.org/10.1016/j.paid.2015.11.009>
- Buckels, E.E. (2018). *The psychology of everyday sadism* [Doctoral dissertation, University of British Columbia]. <https://doi.org/10.14288/1.0369056>
- Buckels, E.E. (2021). *Development and validation of the Comprehensive Assessment of Sadistic Tendencies (CAST)* [Unpublished manuscript]. University of Winnipeg.
- Buckels, E.E., Jones, D.N., & Paulhus, D.L. (2013). Behavioral confirmation of everyday sadism. *Psychological Science, 24*, 2201–2209. <https://doi.org/10.1177/0956797613490749>
- Buckels, E.E., Kerelluke, T., & Trapnell, P.D. (2018). *Sadistic humor* [Unpublished raw data]. University of Winnipeg.
- Buckels, E.E., Trapnell, P.D., Andjelovic, T., & Paulhus, D.L. (2019). Internet trolling and everyday sadism: Parallel effects on pain perception and moral judgment. *Journal of Personality, 87*, 328–340. <https://doi.org/10.1111/jopy.12393>
- Buckels, E.E., Trapnell, P.D., & Paulhus, D.L. (2014). Trolls just want to have fun. *Personality and Individual Differences, 67*, 97–102. <https://doi.org/10.1016/j.paid.2014.01.016>
- Bulut, T. (2020). *Emotional processes as the basis of distinguishing sadism and psychopathy* [Doctoral dissertation, University of Belgrade]. <https://doi.org/10.13140/RG.2.2.26626.61124>
- Carver, C.S., & White, T.L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS scales. *Journal of Personality and Social Psychology, 67*, 319–333. <https://doi.org/10.1037/0022-3514.67.2.319>

- Chabrol, H., Van Leeuwen, N., Rodgers, R., & Séjourné, N. (2009). Contributions of psychopathic, narcissistic, Machiavellian, and sadistic personality traits to juvenile delinquency. *Personality and Individual Differences, 47*, 734–739. <https://doi.org/10.1016/j.paid.2009.06.020>
- Chester, D.S., DeWall, C.N., & Enjaian, B. (2019). Sadism and aggressive behavior: Inflicting pain to feel pleasure. *Personality and Social Psychology Bulletin, 45*, 1252–1268. <https://doi.org/10.1177/0146167218816327>
- Davies, J., & Hand, N. (2003, March). *Sadistic interest: An exploratory study* [Paper presentation]. Division of Forensic Psychology Annual Conference, Cambridge, England.
- Dinić, B.M., Bulut Allred, T., Petrović, B., & Wertag, A. (2020). A test of three sadism measures: Short Sadistic Impulse Scale, Varieties of Sadistic Tendencies, and Assessment of Sadistic Personality. *Journal of Individual Differences, 41*, 219–227. <https://doi.org/10.1027/1614-0001/a000319>
- Dowgwillo, E.A., & Pincus, A.L. (2017). Differentiating dark triad traits within and across interpersonal circumplex surfaces. *Assessment, 24*, 24–44. <https://doi.org/10.1177/1073191116643161>
- Emer, D.R., & Poepsel, D.L. (2021). Under the radar: Everyday sadism predicts both passive-aggressive harms and beneficial actions after accounting for prosocial tendencies. *Personality and Individual Differences, 168*, 110321. <https://doi.org/10.1016/j.paid.2020.110321>
- Erickson, J.M., & Sagarin, B.J. (2021). The prosocial sadist? A comparison of BDSM sadism and everyday sadism. *Personality and Individual Differences, 176*, 110723. <https://doi.org/10.1016/j.paid.2021.110723>
- Gonzalez, J.M., & Greitemeyer, T. (2018). The relationship between everyday sadism, violent video game play, and fascination with weapons. *Personality and Individual Differences, 124*, 51–53. <https://doi.org/10.1016/j.paid.2017.11.045>
- Greitemeyer, T. (2015). Everyday sadism predicts violent video game preferences. *Personality and Individual Differences, 75*, 19–23. <https://doi.org/10.1016/j.paid.2014.10.049>
- Greitemeyer, T., & Sagioglou, C. (2017). The longitudinal relationship between everyday sadism and the amount of violent video game play. *Personality and Individual Differences, 104*, 238–242. <https://doi.org/10.1016/j.paid.2016.08.021>
- Greitemeyer, T., Weiß, N., & Heuberger, T. (2019). Are everyday sadists specifically attracted to violent video games and do they emotionally benefit from playing those games? *Aggressive Behavior, 45*, 206–213. <https://doi.org/10.1002/ab.21810>
- Heym, N., Firth, J., Kibowski, F., Sumich, A., Egan, V., & Bloxson, C.A. J. (2019). Empathy at the heart of darkness: Empathy deficits that bind the dark Triad and those that mediate indirect relational aggression. *Frontiers in Psychiatry, 10*, 95–95. <https://doi.org/10.3389/fpsy.2019.00095>
- Johnson, L., Plouffe, R., & Saklofske, D. (2019). Subclinical sadism and the Dark Triad: Should there be a Dark Tetrad? *Journal of Individual Differences, 40*, 127–133. <https://doi.org/10.1027/1614-0001/a000284>
- Jonason, P.K., & Zeigler-Hill, V. (2018). The fundamental social motives that characterize dark personality traits. *Personality and Individual Differences, 132*, 98–107. <https://doi.org/10.1016/j.paid.2018.05.031>
- Jonason, P.K., Zeigler-Hill, V., & Okan, C. (2017). Good v. evil: Predicting sinning with dark personality traits and moral foundations. *Personality and Individual Differences, 104*, 180–185.
- Jones, D.N., & Figueredo, A.J. (2013). The core of darkness: Uncovering the heart of the dark triad. *European Journal of Personality, 27*, 521–531. <https://doi.org/10.1002/per.1893>
- Karandikar, S., Kapoor, H., Fernandes, S., & Jonason, P.K. (2019). Predicting moral decision-making with dark personalities and moral values. *Personality and Individual Differences, 140*, 70–75. <https://doi.org/10.1016/j.paid.2018.03.048>
- Kay, C.S. (2021). Actors of the most fiendish character: Explaining the associations between the Dark Tetrad and conspiracist ideation. *Personality and Individual Differences, 171*, 110543. <https://doi.org/10.1016/j.paid.2020.110543>
- Klann, M. (2017). *The dark tetrad and its relations with maladaptive personality traits and sexual tactics* [Doctoral dissertation, Southern Illinois University at Edwardsville]. <https://search.proquest.com/openview/d771f9e6e2d2f92d17dbbd4ab737440a/>

- Kurek, A., Jose, P.E., & Stuart, J. (2019). 'I did it for the lulz': How the dark personality predicts online disinhibition and aggressive online behavior in adolescence. *Computers in Human Behavior*, *98*, 31–40. <https://doi.org/10.1016/j.chb.2019.03.027>
- Ladanyi, J., & Doyle-Portillo, S. (2017). The development and validation of the Grief Play Scale (GPS) in MMORPGs. *Personality and Individual Differences*, *114*, 125–133. <https://doi.org/10.1016/j.paid.2017.03.062>
- Lui, L.F., Sassenrath, C., & Pfattheicher, S. (2020). When is your pain my gain? The use of perspective taking by everyday sadists. *Personality and Individual Differences*, *167*, 110213. <https://doi.org/10.1016/j.paid.2020.110213>
- March, E., Litten, V., Sullivan, D.H., & Ward, L. (2020). Somebody that I (used to) know: Gender and dimensions of dark personality traits as predictors of intimate partner cyberstalking. *Personality and Individual Differences*, *163*, 110084. <https://doi.org/10.1016/j.paid.2020.110084>
- Martin, R.A., Puhlik-Doris, P., Larsen, G., Gray, J., & Weir, K. (2003). Individual differences in uses of humor and their relation to psychological well-being: Development of the humor styles questionnaire. *Journal of Research in Personality*, *37*, 48–75. [https://doi.org/10.1016/S0092-6566\(02\)00534-2](https://doi.org/10.1016/S0092-6566(02)00534-2)
- Mededović, J. (2017). Aberrations in emotional processing of violence-dependent stimuli are the core features of sadism. *Motivation and Emotion*, *41*, 273–283. <https://doi.org/10.1007/s11031-016-9596-0>
- Mededović, J., & Kovačević, U. (2020). Sadism as a key dark trait in the link between football fandom and criminal attitudes. *Journal of Individual Differences*, *42*, 9–18. <https://doi.org/10.1027/1614-0001/a000325>
- Mededović, J., & Petrović, B. (2015). Structural properties and location in the personality space. *Journal of Individual Differences*, *36*, 228–236. <https://doi.org/10.1027/1614-0001/a000179>
- Min, H., Pavisic, I., Howald, N., Highhouse, S., & Zickar, M.J. (2019). A systematic comparison of three sadism measures and their ability to explain workplace mistreatment over and above the dark triad. *Journal of Research in Personality*, *82*, 103862. <https://doi.org/10.1016/j.jrp.2019.103862>
- Moshagen, M., Hilbig, B.E., & Zettler, I. (2018). The dark core of personality. *Psychological Review*, *125*, 656–688. <https://doi.org/10.1037/rev0000111>
- Moshagen, M., Zettler, I., & Hilbig, B.E. (2020). Measuring the dark core of personality. *Psychological Assessment*, *32*, 182–196. <https://doi.org/10.1037/pas0000778>
- Neumann, C.S., Jones, D.N., & Paulhus, D.L. (2021). Examining the Short Dark Tetrad (SD4) across models, correlates, and gender. *Assessment*. Advance online publication. <https://doi.org/10.1177/1073191120986624>
- Nocera, T.R., Dahlen, E.R., Mohn, R.S., Leuty, M.E., & Batastini, A.B. (2022). Dark personality traits and anger in cyber aggression perpetration: Is moral disengagement to blame? *Psychology of Popular Media*, *11*(1), 24–34. <https://doi.org/10.1037/ppm0000295>
- O'Meara, A., Davies, J., & Hammond, S. (2011). The psychometric properties and utility of the Short Sadistic Impulse Scale (SSIS). *Psychological Assessment*, *23*, 523–531. <https://doi.org/10.1037/a0022400>
- Paananen, A., & Reichl, A.J. (2019). Gendertrolls just want to have fun, too. *Personality and Individual Differences*, *141*, 152–156. <https://doi.org/10.1016/j.paid.2019.01.011>
- Paulhus, D.L. (2014). Toward a taxonomy of dark personalities. *Current Directions in Psychological Science*, *23*, 421–426. <https://doi.org/10.1177/0963721414547737>
- Paulhus, D.L., Buckels, E.E., Trapnell, P.D., & Jones, D.N. (2021). Screening for dark personalities. *European Journal of Psychological Assessment*, *37*(3), 208–222. <https://doi.org/10.1027/1015-5759/a000602>
- Paulhus, D.L., & Jones, D.N. (2015). Measures of dark personalities. In G.J. Boyle, D.H. Saklofske, & G. Matthews (Eds.), *Measures of personality and social psychological constructs* (pp. 562–594). Academic Press. <https://doi.org/10.1016/B978-0-12-386915-9.00020-6>
- Paulhus, D.L., Jones, D.N., Buckels, E.E., Klonsky, E.D., & Dutton, D.G. (2011). *Sadistic personality and its correlates in community samples* [Unpublished manuscript]. University of British Columbia.
- Paulhus, D.L., & Williams, K. (2002). The Dark Triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*, *36*, 556–568. [https://doi.org/10.1016/S0092-6566\(02\)00505-6](https://doi.org/10.1016/S0092-6566(02)00505-6)

- Pfattheicher, S., Lazarević, L. B., Westgate, E. C., & Schindler, S. (2021). On the relation of boredom and sadistic aggression. *Journal of Personality and Social Psychology, 121*(3), 573–600. <https://doi.org/10.1037/pspi0000335>
- Pineda, D., Piqueras, J. A., Galán, M., & Martínez-Martínez, A. (2021). Everyday sadism: Psychometric properties of three Spanish versions for assessing the construct. *Current Psychology*. Advance online publication. <https://doi.org/10.1007/s12144-021-01434-y>
- Plouffe, R. A., Saklofske, D. H., & Smith, M. M. (2017). The Assessment of Sadistic Personality: Preliminary psychometric evidence for a new measure. *Personality and Individual Differences, 104*, 166–171. <https://doi.org/10.1016/j.paid.2016.07.043>
- Plouffe, R. A., Smith, M. M., & Saklofske, D. H. (2019). A psychometric investigation of the Assessment of Sadistic Personality. *Personality and Individual Differences, 140*, 57–60. <https://doi.org/10.1016/j.paid.2018.01.002>
- Ritchie, M. B., Blais, J., & Forth, A. E. (2019). “Evil” intentions: Examining the relationship between the Dark Tetrad and victim selection based on nonverbal gait cues. *Personality and Individual Differences, 138*, 126–132. <https://doi.org/10.1016/j.paid.2018.09.013>
- Rogers, K. H., Le, M. T., Buckels, E. E., Kim, M., & Biesanz, J. C. (2018). Dispositional malevolence and impression formation: Dark Tetrad associations with accuracy and positivity in first impressions. *Journal of Personality, 86*, 1050–1064. <https://doi.org/10.1111/jopy.12374>
- Russell, T. D., Doan, C. M., & King, A. R. (2017). Sexually violent women: The PID-5, everyday sadism, and adversarial sexual attitudes predict female sexual aggression and coercion against male victims. *Personality and Individual Differences, 111*, 242–249. <https://doi.org/10.1016/j.paid.2017.02.019>
- Russell, T. D., & King, A. R. (2016). Anxious, hostile, and sadistic: Maternal attachment and everyday sadism predict hostile masculine beliefs and male sexual violence. *Personality and Individual Differences, 99*, 340–345. <https://doi.org/10.1016/j.paid.2016.05.029>
- Russell, T. D., & King, A. R. (2017). Mean girls: PID-5 personality traits and everyday sadism predict hostile femininity. *Personality and Individual Differences, 104*, 252–257. <https://doi.org/10.1016/j.paid.2016.08.020>
- Sagioglou, C., & Greitemeyer, T. (2016). Individual differences in bitter taste preferences are associated with antisocial personality traits. *Appetite, 96*, 299–308. <https://doi.org/10.1016/j.appet.2015.09.031>
- Themelidis, L., & Davies, J. (2021). Creating evil: Can sadism be induced? *Personality and Individual Differences, 168*, 110358. <https://doi.org/10.1016/j.paid.2020.110358>
- Voggeser, B. J., & Göritz, A. S. (2020). CAST auf Deutsch: Übersetzung und Validierung des Comprehensive Assessment of Sadistic Tendencies [CAST in German: Translation and validation of the Comprehensive Assessment of Sadistic Tendencies]. *Diagnostica, 66*(3), 1–12. <https://doi.org/10.1026/0012-1924/a000249>
- Wiggins, J. S. (1991). Agency and communion as conceptual coordinates for the understanding and measurement of interpersonal behavior. In W. M. Grove & D. Cicchetti (Eds.), *Thinking clearly about psychology: Vol. 2. Personality and psychopathology* (pp. 89–113). University of Minnesota Press.
- Zettler, I., Moshagen, M., & Hilbig, B. E. (2020). Stability and change: The dark factor of personality shapes dark traits. *Social Psychological and Personality Science, 12*(6), 974–983. <https://doi.org/10.1177/1948550620953288>