Extending the Nomological Network of Sexual Objectification to Psychopathic and Allied

Personality Traits

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Abstract

Although the causes and correlates of sexual objectification almost certainly comprise a heterogeneous array of individual difference variables, little is known about sexual objectification perpetration's nomological network. We hypothesized that the broad personality construct of psychopathy would afford a fruitful framework for understanding and statistically predicting sexual objectification and investigated the implications of a host of psychopathic and psychopathy-related traits, including empathy, narcissism, impulsivity, and sadism, for interpersonal sexual objectification perpetration. We augmented an extant self-report instrument of behavioral sexual objectification, the Interpersonal Sexual Objectification Scale – Perpetrator Version (ISOS-P; Gervais, DiLillo, & McChargue, 2014), with attitudinal items. Two MTurk samples (Study 1: $N = 401$, 53% female, $M_{\text{age}} = 36$; Study 2: $N = 419$, 48% female, $M_{\text{age}} = 37$) were administered the augmented ISOS-P and a battery of well validated self-report instruments describing psychopathic and psychopathy-related traits. Dark personality traits were strongly associated with sexual objectification; sadism, low affective empathy, narcissism, disinhibition, and meanness emerged as the largest correlates. Further, our hypothesis that psychopathic traits would moderate (potentiate) the relation between ISOP attitudes and ISOP behaviors found support in both samples.

Keywords: psychopathy, sexual objectification, individual differences, ISOS-P, attitudes.

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Of the various modalities of aggressive sexual behavior, *interpersonal sexual objectification perpetration* (ISOP), which involves equating another person with his or her sexual attributes, is assuredly the most readily observable in everyday life (Pina, Gannon, & Saunders, 2009; Ward, 2016). Yet although a spate of recent studies have indicated that the behavioral sequelae of ISOP include myriad forms of sexual aggression (see Bevens & Loughnan, 2019; Morris, Goldenberg, & Boyd, 2018; Pacilli et al., 2017; Vasquez, Ball, Loughnan, & Pina, 2018) and the harms of being sexually objectified have long been a focus of scientific inquiry (e.g., Fredrikson, Roberts, Noll, Quinn, & Twenge, 1998), the attitudes and personality traits of individuals who tend to commit the pernicious “category mistake” (Haslam & Loughnan, 2014, p. 399) of viewing other people as sex objects remain largely opaque.

To that end, we speculated that the personality condition known as *psychopathy*, a broad constellation of personality traits, including superficial charm, grandiosity, dishonesty, impulsivity, unmotivated antisociality, interpersonal instrumentality, and socioemotional deficits, may be a fruitful framework for understanding and statistically predicting ISOP. Psychopathy is one of the most salient individual difference variables associated with sexual aggression, harassment, and violence in both forensic and community samples (Knight & Guay, 2018). Moreover, psychopathic traits and other putatively “dark” personality traits share many core conceptual features with objectification (e.g., treating others as a tool for one’s gratification, not respecting others’ autonomy and interpersonal boundaries, discounting others’ experiences and feelings; Langton, 2009). Hence, in the present studies, we sought to elaborate the nomological

network of ISOP with an explicit focus on psychopathic and allied personality traits. We also consider the potential role of gender in such relations.

Psychopathy and Psychopathy-related Traits: Implications for Sexual Objectification

Patrick and colleagues' (2009) widely adopted *triarchic model* parses psychopathy into three subdimensions—*boldness*, *disinhibition*, and *meanness*. Boldness comprises social potency, insensitivity to threat, and emotional resilience; disinhibition comprises impulsivity, interpersonal aggression, hostile attribution bias, and emotional dysregulation; and meanness comprises callousness, vindictiveness, and antagonism. The triarchic model largely traces its roots to an allied three-factor conceptualization, now typically assessed using the Psychopathic Personality Inventory-Revised (PPI-R; Lilienfeld et al., 2005), that comprises three higher-order dimensions: *Fearless Dominance* (PPI-R FD), akin to boldness; *Self-centered Impulsivity* (PPI-R SCI), which overlaps with disinhibition and, to a lesser extent, meanness; and *Coldheartedness* (PPI-R CH), which is somewhat related to meanness but emphasizes traits associated with passive socioemotional detachment (e.g., guiltlessness, low empathy, lovelessness) as opposed to active antagonism (e.g., instrumental aggression). In this way, psychopathy can be construed as a multidimensional constellation or even configuration of more basic personality components (e.g., Lilienfeld, Watts, Smith, Berg, & Latzman, 2015), as opposed to a unitary construct.

Owing to psychopathy's multidimensionality, psychopathy subdimensions often bear distinct relations with various forms of sexual aggression (Carre, Mueller, Schleicher, & Jones, 2018; Marcus & Norris, 2014). Triarchic dimensions are associated with a broad swath of traits and behaviors ostensibly adjacent to ISOP, including workplace sexual harassment¹ (Carre et al.,

¹Sexual harassment bears superficial similarities to ISOP behaviors. Still, harassment is conceptually and perhaps empirically distinct from objectification (Gervais & Eagan, 2017). ISOP (a) occurs when a person is dehumanized and reduced to his or her sexual attributes for use by others and (b) encompasses behaviors that are beyond the scope

2018; Zeigler-Hill, Besser, Morag & Campbell, 2016), sexual assault and coercion (Marcus & Norris, 2014), and sexual deviance recidivism (Olver & Wong, 2006; Serin, Mailloux, & Malcolm, 2001). Meanness features seem to be most strongly associated with violent sexual behaviors and harassment propensity but negatively related to the use of flattery, verbal pressure, and arguments to cajole others into sexual intercourse (Carre et al., 2018; Kosson, Kelly, & White, 1997), whereas disinhibition features tend to better predict broader sexual aggression, including violence, harassment propensity, and use of coercive tactics (Knight & Guay, 2018). Given these findings, psychopathy subdimensions probably diverge in their relations with ISOP, although the exact contours of these divergences are unknown.

Further, there is broad agreement in the literature that psychopathy measures are imbued with low Agreeableness (antagonism) and low Conscientiousness (impulsivity), and many authors assert that psychopathy largely reflects a combination or configuration of personality traits such as surgent extraversion, emotional stability, antagonism, emotional detachment, and impulsivity (Lilienfeld et al., 2015). Hence, the specificity of potential relations between psychopathic traits and ISOP is uncertain: other putatively “dark” or maladaptive traits, including narcissism, sadism, impulsivity, and (low) empathy, may be equally predictive of ISOP. Narcissism and sadism are established risk factors for sexual aggression (e.g., Mokros, Osterheider, Hucker, & Nitschke, 2011; Widman & McNulty, 2010) and may manifest as a “you’re an object for my pleasure”-like mentality marked by lessened concern with others’ sexual needs (Franz et al., 2018; Mouilso & Calhoun, 2012). Impulsogenic traits (Sharma, Markon, & Clark, 2014), including disinhibition and sensation seeking, are involved in myriad

of sexual harassment, such as covert evaluation of others’ sexual body parts. Sexual harassment entails behaviors that are not encompassed by ISOP, such as telling inappropriate sexual jokes, espousing gendered stereotypes, attempts at sexual coercion, and a willingness to capitalize on workplace power dynamics (Carre et al., 2018; Pryor, 1987).

externalizing behaviors that manifest in maladaptive sexual behavior (e.g., Dir, Coskunpinar, & Cyders, 2014). Further, a paucity of affective empathy (i.e., emotional resonance with or caring for the feelings of others; Shamay-Tsoory, Aharon-Peretz, & Perry, 2009) may lie at the heart of ISOP, which entails the treatment of others as objects whose affective experiences need not be considered (Langton, 2009). Lending greater credence to the question of specificity, many traits adjacent to psychopathy, including Machiavellianism (Zeigler-Hill et al., 2016), low honesty-humility, low agreeableness (Lee, Gizzarone, & Ashton, 2003), and low empathy (e.g., Stillman, Yamawaki, Ridge, White, & Copley, 2009) are implicated in sexual harassment propensity.

Conceptualization and Measurement of ISOP

In service of elucidating ISOP's largely unknown risk factors, Gervais, DiLillo, and McChargue (2014) developed the *Interpersonal Sexual Objectification Scale—Perpetrator Version* (ISOS-P), a self-report instrument designed to assess one's propensity towards behavioral manifestations of sexual objectification (e.g., leering gazes, unsolicited objectifying comments, groping, and catcalling). ISOS-P total scores have demonstrated promising convergent validity, manifesting associations with other-objectification, body surveillance, and sexual aggression (Gervais et al., 2018). Despite its merits, however, the ISOS-P does not assess attitudes related to sexual objectification. This omission is noteworthy as measures targeting ISOP attitudes may describe facets of sexual objectification to which behavioral questionnaires are largely insensitive. As an example, although the ISOS-P assesses how frequently one *treats* others as sexual objects, such behaviors may not invariably correspond with the degree to which one *views* others as sexual objects (Bloom, 2018). Attitudinal assessments of ISOP (e.g., “people are worth more than just their physical appearance”) may better capture the “sexual solipsism” that many consider part and parcel of ISOP (Langton, 2009).

Extending the ISOP construct to attitudes offers several further benefits. First, given that rape supportive attitudes are important predictors of sexual assault, ISOP attitudes may similarly predict ISOP behaviors (Suarez & Gadalla, 2010). Second, sexually aggressive attitudes are probably more normative than sexually aggressive behaviors, the latter of which may be marked by range restriction in non-incarcerated samples. Third, ISOP attitudes may interact with individual difference characteristics, including psychopathic traits, such that the two in concert confer the greatest risk for ISOP behaviors (Ajzen, 2001; see also Williams et al., 2009, who found that psychopathy potentiated relations between paraphilic interests and paraphilic behaviors). Studying ISOP attitudes and behaviors in tandem may allow researchers to examine the nature of their overlap, identify risk factors for attitude-behavior concordance, and elucidate the extent to which the two domains are associated with differing nomological networks.

Historically, the majority of research on both ISOP and psychopathy has drawn from exclusively male samples, in part because mean levels of both constructs are higher among men (Cale & Lilienfeld, 2002; Gervais, Saez, Riemer, & Klein, 2019). This gender disparity is especially wide in the ISOP literature, which primarily seeks to understand the objectification of women. Indeed, the concept of sexual objectification stems largely from feminist scholarship that frames ISOP as symptomatic of broader cultural processes rooted in misogyny (Frederickson & Roberts, 1997; Nussbaum, 1995). Given the growing evidence from large, often nationally representative samples, that (a) sexual aggression perpetration is comparable in prevalence across gender (Fedina, Holmes, & Backes, 2018; Stemple, Flores, & Meyer, 2016); (b) female sexual aggression mostly targets men (Cantor et al., 2015; Fedina, Holmes, & Backes, 2018); and (c) both women and men are targeted by objectification (e.g., Gervais, Vescio, & Allen, 2011), neglecting to study ISOP in women is no longer justifiable.

Further, psychopathy manifests differently across gender (e.g., Sellbom, Donnelly, Rock, Phillips, & Ben-Porath, 2017) and these differences in presentation may extend to ISOP. Although the broader literature remains mixed, a handful of recent investigations have demonstrated psychopathy by gender moderation for outcomes tied to sexual aggression, including sexual coercion (Hoffmann & Verona, 2018), physical intimate partner violence (Mager, Bresin, & Verona, 2014), and rape myth acceptance (Watts, Bowes, Latzman, & Lilienfeld, 2017).

Collapsing samples across gender and/or examining whether and to what degree gender moderates the expression of psychopathy in sexual objectification requires measurement instruments that assess the same latent constructs (i.e., measurement invariance) in men and women. Potentially problematically for our purposes, however, one recent study found that item loadings in a bifactor interpretation of the ISOS-P were not invariant across men and women (Gervais et al., 2018). Hence, we also examine the measurement and structural invariance of the ISOS-P across gender in the present work.

Hypotheses and Specific Aims

Given the reviewed evidence, we investigated the nature and correlates of sexual objectification in two mixed-gender community samples, with the overarching aim of examining the extent to which psychopathic personality and a broad swath of allied individual difference variables, including narcissism, impulsivity, empathy, sadism, and general personality bear implications for ISOP.

Aim 1: Broadening the ISOS-P to include attitudes. To facilitate our investigation of both ISOP behaviors and ISOP attitudes, we augmented the ISOS-P instrument with a relatively small number of items describing sexual objectification attitudes. We then investigated the factor

structure of the augmented ISOS-P (hereafter referred to as the *Interpersonal Sexual Objectification Scale—Perpetrator Version, Revised*; ISOS-PR) across both samples using confirmatory factor analysis (CFA)². After specifying this factor structure in the overall sample (collapsed across men and women), we also conducted formal tests of measurement invariance to clarify the extent to which the ISOS-PR assessed the same latent construct(s) across gender.

Aim 2: Investigating the implications of psychopathic traits for ISOP.

Aim 2a: Clarifying associations between psychopathic traits and ISOP. We predicted that the triarchic psychopathy subdimensions would be positively correlated with both ISOP attitudes and ISOP behaviors. We also expected that the triarchic subdimensions' relations with ISOP would differ in magnitude, especially when all three were entered as simultaneous predictors of ISOP in a multiple regression model. Specifically, we predicted that coldheartedness and meanness would bear the strongest associations with ISOP attitudes given that they entail callousness and instrumentality (Walsh, Swogger, & Kosson, 2009), and that disinhibition would bear the strongest associations with ISOP behaviors given that it entails poor behavioral control and externalizing psychopathology, broadly construed (Blonigen et al., 2005). Further, all three psychopathy subdimensions were anticipated to be positively and uniquely associated with ISOP behaviors after accounting for overlap among subdimensions. Given that boldness tends not to bear unique positive relations with sexual harassment (Carre et al., 2018) and rape myth acceptance (Watts, Bowes, Latzman, & Lilienfeld, 2017), only disinhibition, self-centered impulsivity, coldheartedness, and meanness were anticipated to be associated with ISOP attitudes after accounting for overlap.

²We did not advance specific predictions concerning the factor structure of the ISOS-PR other than that our factor analyses would yield distinguishable attitudinal and behavioral factors, opting instead to compare several models (full and reduced versions) that have been previously tested in the literature (e.g., Gervais et al., 2018), which are presented in supplementary materials (Tables S1-S7).

Aim 2b: Psychopathic traits as moderators of the attitude-behavior link. We predicted that ISOP attitudes would be moderately positively correlated with ISOP behaviors, but that all three triarchic subdimensions would potentiate the strength of this relation, such that individuals with elevated levels of psychopathic traits would be more likely to act on their ISOP attitudes (e.g., Williams et al., 2007).

Aim 3: Gender as a moderator of the psychopathy-ISOP link. Despite the decidedly mixed support for gender moderation in the psychopathy literature (e.g., Verona & Vitale, 2018), we provisionally predicted that psychopathic traits reflecting disinhibition and meanness would be especially associated with ISOP in women compared with men (cf. Hoffman & Verona, 2019). We reasoned that, as men are more prone to sexually objectify women than vice-versa, the relatively few women who do so presumably possess an especially strong diathesis toward psychopathic traits tied to objectification (e.g., because societal pressures against ISOP are stronger for women; Watts et al., 2017).

Aim 4: Investigating the broader correlates of ISOP. In line with our hypothesis that potential observed relations between psychopathic traits and ISOP will extend to conceptually relevant constructs, we predicted that lower levels of affective empathy, neuroticism, agreeableness, and conscientiousness, as well as higher levels of sadism, impulsivity, narcissism, disinhibition, and antagonism, would be associated with ISOP.

Study 1

Method

Participants. Participants (N = 401) were United States community members drawn from Amazon's Mechanical Turk (MTurk), an online crowdsourcing platform that typically yields psychometrically sound data (see Miller et al., 2017). Participants were predominantly

female (53.0%), had a mean age of 35.5 years ($SD_{age}=11.0$ years), and were most frequently Caucasian (71.8%), Asian American (11.0%), African American (7.2%), and Hispanic or Latinx (6.0%). The prevalence of missing data was less than 2% for each item. Little's (1988) MCAR test was not statistically significant, justifying our performing single imputation using the expectation-maximization algorithm to impute missing data for composite scores (Enders, 2001). All study methods and materials were approved by the university office of research ethics.

Measures. We augmented the ISOS-P with 7³ attitudinal items, resulting in a total of 21 items (see Table 1). Following procedures from Gervais, DiLillo, and McChargue (2014), behavioral items (ISOS-PR items 1-14) were constructed by adapting the Interpersonal Sexual Objectification Scale (ISOS; Kozee et al., 2007) to be gender-neutral and to target perpetration rather than victimization (within the past year); the wording of several behaviors items differs slightly across the ISOS-P and ISOS-PR (see Table S14 for a comparison of the two versions). Attitudinal items were constructed following a review of the empirical and theoretical literatures on ISOP, objectification, other-objectification, instrumentality, and coldheartedness. For purposes of adequate convergent and discriminant validity, we followed Loevinger's (1957) recommendation of an overinclusive item pool drawn from broad areas of content.

Psychopathy. Participants completed two widely-used psychopathy measures, the *Psychopathic Personality Inventory-Revised* and the *Triarchic Psychopathy Measure* (TriPM; Patrick, 2009). The former is 154-item self-report measure yielding three higher-order factors (subdimension α s ranged from .86 to .96), PPI-R Fearless Dominance (PPI-R FD), PPI-R Self-

³Two additional attitudinal items were administered and subsequently deemed not to be face valid as they appeared to assess broad interpersonal objectification, narcissism, and instrumentality, rather than ISOP *per se*. Sensitivity analyses revealed that removing these items did not change factor analytic results, and external validity analyses yielded quite similar results (change in r s < .04) across the two sets of items so we proceeded without the additional items.

centered Impulsivity (PPI-R SCI), and PPI-R Coldheartedness (PPI-R C). The latter is a 58-item self-report measure of psychopathic traits yielding scores on three dimensions, Boldness, Disinhibition, and Meanness (α s ranged from 0.87 to 0.94).

Other personality traits. Participants completed several widely-used measures of personality traits associated with various personality disorders, including the *UPPS-P Impulsive Behavior Scale* (UPPS-P; Lynam, Smith, Whiteside, & Cyders, 2006), the *Varieties of Sadistic Tendencies* (VAST) scale (Paulhus & Jones, 2015), the *Affective and Cognitive Measure of Empathy* (ACME; Vachon & Lynam, 2016), the *Personality Inventory for DSM 5 – Brief Form* (PID-5 BF; Krueger, Derringer, Markon, Watson, & Skodol, 2012), the *HEXACO Personality Inventory* (HEXACO; Lee & Ashton, 2004), the *Narcissistic Personality Inventory* (NPI; Raskin & Terry, 1988), and the *Psychological Entitlement Scale* (PES; Campbell, Bonacci, Shelton, Exline, & Bushman, 2004).

The UPPS-P is a 58-item self-report measure of impulsogenic traits and comprises five subscales that ostensibly reflect pathways to different manifestations of impulsive behavior: Lack of Premeditation, Negative Urgency, Sensation Seeking, Lack of Perseverance, and Positive Urgency (see Berg, 2016). The VAST is a 13-item self-report measure of sadistic tendencies containing two subscales: Direct Sadism ($\alpha = 0.82$, e.g., “I enjoy hurting people.”) and Vicarious Sadism ($\alpha = 0.78$, e.g., “In video games, I like the realistic blood spurts.”). The ACME comprises three scales, Cognitive Empathy (CE), which aims to measure the ability to glean a conceptual, rather than affective, understanding of others’ emotional displays; Affective Resonance (AR); and Affective Dissonance (AD), which aims to measure discordant emotionality with others (α s ranged from 0.89 to 0.96). The PID-5 BF (Krueger et al., 2012) is a 25-item self-report measure of the domains in the DSM-5 (American Psychiatric Association,

2013) Alternative (Section 3) Model of Personality Disorders: Negative Affectivity, Detachment, Antagonism, Disinhibition, and Psychoticism (domain α s ranged from 0.85 to 0.89). The HEXACO (Lee & Ashton, 2004) is a 100-item measure of general personality that consists of 6 factors (the latter five of which correspond broadly to those in the five-factor model of personality): Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, and Openness to Experience (domain α s ranged from .77 to .83). The NPI (Raskin & Terry, 1988) is a 40-item self-report measure of narcissism from which three broad dimensions can be derived (Ackerman et al., 2011; Corry et al., 2008): Leadership/Authority (L/A; 10 items; $\alpha = 0.86$), Grandiose Exhibitionism (GE; 10 items; $\alpha = 0.81$), and Entitlement/Exploitativeness (E/E; 4 items; $\alpha = 0.68$). Finally, the PES is an 8-item self-report measure of narcissistic entitlement that yields a total score ($\alpha = 0.86$).

Measurement invariance. All measurement invariance analyses were conducted in Mplus version 7.2 (Muthén & Muthén, 2013). First, we examined metric invariance, which constrains factor loadings to equality across gender; this model was compared against a configural model, which specifies the same structural model in men and women with no other constraints imposed. Second, we examined scalar invariance, which constrains intercepts to equality across gender. Third, we examined strict invariance, which constrains residual (error) variances to equality across gender. We then examined structural invariance, which would inform the extent to which there are differences in latent variances, covariances, and means in ISOP factors across gender. To do so, we constrained factor variances, covariances, and means to equality in a sequential manner. For each additional constraint, changes in CFI of at most -.002 (Meade et al., 2008) and in RMSEA of at least +.015 (Chen, 2007) relative to the immediately preceding nested model were considered evidence of gender noninvariance.

Results and Discussion

Aim 1: Broadening the ISOS-P to include attitudes. Having examined a series of alternative models⁴ using confirmatory factor analysis (see Supplementary materials for all tested models' fit statistics, factor intercorrelations, and loadings, as well as a more detailed account of our factor analytic approach and decision-making process), we elected to move forward with a first-order two-factor oblique model (see Table 1), which generally fit the data well ($X^2 = 1165$, $df = 188$, $p < .001$; RMSEA = .11; CFI = .97; TLI = .97). This model comprised Behaviors and Attitudes that were highly correlated ($r = .78$, $p < .001$).

Gender invariance. We next tested the measurement and structural invariance of the two-factor first-order oblique model using multiple-group CFA. The two-factor first-order oblique model met metric (equated loadings), scalar (equated intercepts), and strict (equated residuals) invariance (See Table S11), suggesting that the ISOS-PR assesses the same latent construct across males and females. We could not equate latent factor variances across gender, precluding further tests of equating latent factor covariances and means. In this model, latent factor variances, particularly ISOP Behaviors, were larger for women, and latent factor means,

⁴Gervais and colleagues (2018) examined the internal structure of the ISOS-P. Their chosen factor structure was a bifactor model with three orthogonal specific factors, suggesting that the ISOS-P can be parsed into a general liability factor for ISOP as well as three behavioral subcomponents: Body Comments (BC); Body Gaze (BG); and Unwanted Explicit Sexual Advances (UESA). Total scores demonstrated promising convergent validity, although there was little reliable variance in the specific factors. . In Sample 1, we tested a similar bifactor model with orthogonal BC, BG, EUSA, and Attitudes factors, which fit the data moderately well ($X^2 = 1226.65$, $df = 207$, $p < .001$; RMSEA = .11; CFI = .97; TLI = .96; WRMR = 1.62). Still, the bifactor model was less than ideal for four reasons. First, we needed to impose several constraints on this model to avoid negative residual variances for two items (#s 2 & 13). Second, although the general factor was relatively well-represented by its indicators (mean $\lambda = .76$), the specific factors were generally not as well represented (mean $\lambda_{Attitudes} : .42$, $\lambda_{BE} : .41$, $\lambda_{BG} : .49$, $\lambda_{UESA} : .09$). Third, the specific factors' reliabilities were generally below the acceptable benchmark, and often concerningly low ($H_{Attitudes} : .69$, $H_{BE} : .27$, $H_{BG} : .53$, $H_{UESA} : .05$). Fourth, a growing body of literature demonstrates that model fit is biased in favor of detecting a bifactor model (e.g., Murray & Johnson, 2013) despite evidence that bifactor models with orthogonal specific factors tend to yield specific factors of decreased reliability (Bonifay, Lane, & Reise, 2017; Watts, Poore, & Waldman, 2019).

particularly ISOP Behaviors, were larger for men. The correlation between ISOP Attitudes and Behaviors was .74 for men and .85 for women.

Aim 2a: Relations between psychopathy and ISOP. Table 2 displays zero-order correlations and standardized Betas (β s) for all hypothesized relations. β s were derived from multiple regressions in which all subscales of either the PPI-R or TriPM were entered into the model simultaneously. By and large, psychopathy subdimensions were significantly and positively associated with ISOP attitudes and behaviors. Effect sizes for TriPM Meanness, TriPM Disinhibition, and PPI-R SCI were large in magnitude (r s ranged from .66 to .72); tests of dependent correlations revealed no significant differences both across these three subdimensions and across the ISOS-PR factors. TriPM Boldness and PPI-R FD manifested small and large positive relations with ISOS-PR Attitudes and Behaviors, respectively (r s ranged from .12 to .38); relations with ISOS-PR Behaviors were significantly more pronounced than those for ISOS-PR Attitudes (Steiger's Z s = -2.74 & -3.55, p s < .01). PPI-R C manifested moderate to large relations with ISOS-PR Attitudes and significantly smaller relations with ISOS-PR Behaviors (Steiger's Z = 7.94, p < .001).

Furthermore, relations between TriPM Meanness and the ISOS-PR factors were significantly larger than those between PPI-R C and the ISOS-PR factors (Steiger's Z s ranged from 6.38 to 12.37, p s < .001). Given that theory depicts perpetrators of sexual objectification as coldhearted "sexual solipsists" (e.g., Langton, 2009), we followed up on this lattermost result and conducted exploratory analyses concerning differences across TriPM Meanness and PPI-R C. Simultaneous regressions in which TriPM Meanness and PPI-R C were entered together revealed that TriPM Meanness' partial associations with both ISOS-PR Attitudes and Behaviors remained robust and positive (β s were .71 and .66, respectively, p s < .001), whereas PPI-R C's

partial correlations were nonsignificant for Attitudes ($\beta = .00, p = .97$) and negative and significant for Behaviors ($\beta = -.16, p = .001$).

When the TriPM subscales were entered simultaneously as predictors of either Attitudes or Behaviors, relations for TriPM Meanness and TriPM Disinhibition became smaller but remained significant (β s ranged from .27 to .49), with those for TriPM Meanness being the larger in both cases, whereas relations for TriPM Boldness went largely unchanged. When PPI-R subscales were entered into the model simultaneously, unique relations for PPI-R SCI were large and significant, whereas those for PPI-R C and PPI-R FD were reduced (β s from -.05 to .23).

Aim 2b: Psychopathy as a moderator of the attitudes-behavior link. We conducted moderation analyses by entering the mean centered multiplicative (interaction) term for each psychopathy subdimension and ISOS-PR Attitudes following their main effects. Confidence intervals (95%) were generated using 5000 bootstrapped samples. Three of the six hypothesized interactions were significant, albeit with small effect sizes (average $\Delta R^2 = .004, ps < .05$; full results presented in Table S13); as predicted, ISOS-PR Attitudes, on the one hand, and TriPM Meanness, TriPM Disinhibition, and PPI-R SCI, on the other, interacted in a potentiating manner, such that individuals who hold ISOP attitudes and are high in psychopathy were more likely to engage in ISOP behaviors (see Figure S1).

Aim 3: Gender as a moderator of the psychopathy-ISOP link. Following similar analytic procedures, we examined the extent to which gender moderates the associations between psychopathic traits and ISOP. Six of the 12 hypothesized interactions were statistically significant, all in the predicted direction (average $\Delta R^2 = .036, ps < .05$; full results in Table S12), such that women exhibited stronger relations between (a) ISOS-PR Attitudes, on the one hand, and PPI-R FD ($r_{\text{women}} = .29, SE_r = .06; r_{\text{men}} = .11, SE_r = .07$) and TriPM Meanness ($r_{\text{women}} = .70,$

$SE_r = .05$; $r_{men} = .66$, $SE_r = .05$), on the other, and (b) ISOS-PR Behaviors, on the one hand, and PPI-R FD ($r_{women} = .42$, $SE_r = .06$; $r_{men} = .24$, $SE_r = .07$), PPI-R SCI ($r_{women} = .75$, $SE_r = .03$; $r_{men} = .63$, $SE_r = .05$), TriPM Meanness ($r_{women} = .72$, $SE_r = .04$; $r_{men} = .59$, $SE_r = .05$), and TriPM Disinhibition ($r_{women} = .74$, $SE_r = .04$; $r_{men} = .64$, $SE_r = .04$), on the other.

Aim 4: Specificity. There was a relative lack of specificity in the relations observed for most psychopathy subdimensions and ISOS-PR factors, such that most all other traits exhibited significant and moderate to large associations with ISOP (see Table 3). Moreover, numerous traits exhibited relations of similar magnitude to the psychopathy subdimensions. Given the large number of external criteria presented, we will describe the broad trends of these variables' relations with ISOS-PR Attitudes and Behaviors based on zero-order correlations.

The ISOS-PR exhibited moderate negative to small positive associations with ACME Cognitive Empathy and HEXACO Emotionality (r s ranged from $-.27$ to $-.12$); moderate to large negative associations with HEXACO Agreeableness and HEXACO Openness (r s ranged from $-.38$ to $-.22$); and large negative associations with ACME Affective Resonance, ACME Affective Dissonance, HEXACO Honesty-Humility, and HEXACO Conscientiousness (r s ranged from $-.76$ to $-.46$). ISOS-PR Attitudes and Behaviors also exhibited moderate to large positive associations with UPPS-P Lack of Perseverance, UPPS-P Lack of Premeditation, and PID-5 Negative Affectivity (r s ranged from $.19$ to $.43$); and large positive associations with the Psychological Entitlement Scale, VAST Direct Sadism, UPPS-P Negative and Positive Urgency, UPPS-P Sensation Seeking, PID-5 Disinhibition, PID-5 Psychoticism, PID-5 Detachment, and PID-5 Antagonism (r s ranged from $.45$ to $.75$). All told, these findings indicate that individuals who endorse and engage in sexually objectifying attitudes and behaviors are characterized by antagonism, callousness, sadism, entitlement, and impulsivity and that our findings are not

specific to psychopathy *per se*. Unlike psychopathy, there was only limited discrimination between ISOS-PR Attitudes and ISOS-PR Behaviors for the additional external criteria.

Study 2

Method

Participants. Participants were 419 MTurk community members (48% female; $M_{age} = 36.7$) from the United States and were mostly Caucasian (82.5%), Latinx (8.2%), African American (7.7%), and Asian American (4.6%). Missing data were accounted for using the expectation-maximization algorithm (Enders, 2001) for cases with greater than 95% of data present. Cases where less than 95% of data were present were excluded on a listwise basis. Workers who had participated in Study 1 were excluded to avoid overlap across samples.

Measures. As in the previous study, participants completed the ISOS-PR, TriPM, HEXACO, ACME, NPI, PES, and PID-5. We administered the *Psychopathic Personality Inventory-40* (PPI-40; Eisenbarth, Lilienfeld, & Yarkoni, 2014) in lieu of the PPI-R; the PPI-40 is a 40-item version of the PPI-R generated via genetic algorithm whose subscales demonstrate high convergent validity with those of the full PPI-R. Additionally, participants completed the *Hypersensitive Narcissism Scale* (HSNS; Hendin & Cheek, 2013), a 12-item self-report measure of vulnerable narcissism ($\alpha = .80$).

Results and Discussion

Aim 1: Broadening the ISOS-P to include attitudes. The first-order oblique ISOS-PR model (see Table 1) with Attitudes and Behaviors factors ($r = .76$) fit the data as well as it did in Study 1 ($\chi^2 = 1018$, $df = 188$, $p < .001$; CFI = 0.96; TLI = 0.95; RMSEA = 0.10, $p < .001$). As in Study 1, full measurement invariance and partial structural invariance was achieved across gender

(see Table S11). In this model, women reported significantly lower levels of ISOP Attitudes and Behaviors, with the gender difference for the latter being more pronounced.

Aim 2a: Relations between psychopathy and ISOP. As presented in Table 2, psychopathy subdimensions' relations with ISOS-PR Attitudes and Behaviors factors were largely consistent with those reported in Study 1, although TriPM Disinhibition, TriPM Meanness, and PPI-40 SCI were slightly less strongly associated with ISOS-PR Attitudes and Behaviors than in Study 1 (r s ranged from .48 to .65). PPI-40 FD's relation with ISOS-PR Behaviors was also weaker than in Study 1. When the TriPM dimensions were entered as simultaneous predictors of ISOS-PR factors, TriPM Disinhibition became considerably less strongly related to ISOS-PR Attitudes, whereas the relations for TriPM Boldness and TriPM Meanness were largely unchanged. Moreover, TriPM Meanness was more strongly related to the ISOS-PR factors than was PPI-R C (Steiger's Z s were 3.42 to 7.08, $ps < .001$). When TriPM Meanness and PPI-40 C were entered simultaneously as predictors of ISOS-PR Attitudes and Behaviors, relations for TriPM Meanness became only slightly smaller, whereas those for PPI-40 C became considerably smaller. There was again a notable lack of specificity in relations between psychopathy subdimensions, on the one hand, and ISOS-PR Attitudes and Behaviors, on the other, with the lone exception of PPI-40 C, which was again more strongly related to Attitudes than Behaviors (Steiger's $Z = 3.83$, $p < .001$).

Aim 2b: Psychopathy as a moderator of the attitudes-behavior link. Following the procedures outlined in Study 1, we examined the degree to which psychopathic traits potentiate the relation between attitudinal and behavioral ISOP. Five of the six hypothesized interactions were statistically significant. All psychopathy facets but TriPM Boldness interacted with ISOS-

PR Attitudes in a potentiating manner (average $\Delta R^2 = .007$, $ps < .05$), such that relations between attitudinal and behavioral ISOP were more pronounced at higher levels of psychopathic traits.

Aim 3: Gender as a moderator of the psychopathy-ISOP link. Four of the 12 hypothesized psychopathy-gender interactions were statistically significant (average $\Delta R^2 = .018$, $ps < .05$). Boldness measures were better predictors of ISOS-PR Behaviors in women than men (PPI-40 FD/TriPM Boldness: $r_{\text{women}} = .30/.23$, $SE_{rs} = .08$; $r_{\text{men}} = .12/.01$, $SE_{rs} = .08$). Disinhibition measures, in contrast, were better predictors of ISOS-PR Attitudes in men than women (PPI-40 SCI/TriPM Disinhibition: $r_{\text{women}} = .41/.30$, $SE_{rs} = .06$; $r_{\text{men}} = .72/.65$, $SE_r = .04/.05$). Nevertheless, of these four significant interactions, only one—FD and ISOS-PR Behaviors—directly replicated the findings from Study 1.

Aim 3: Specificity. As presented in Table 3, ISOS-PR Attitudes and Behaviors exhibited small negative relations with HEXACO Agreeableness; moderate to large negative relations with HEXACO Conscientiousness and HEXACO Openness (rs ranged from $-.13$ to $-.46$); and large negative relations with HEXACO Honesty-humility. ISOS-PR Attitudes and Behaviors also exhibited moderate to large positive relations with NPI Leadership/Authority, NPI Grandiose Exhibitionism, and HSNS Hypersensitive Narcissism (rs ranged from $.25$ to $.44$) and large positive relations with Psychological Entitlement, NPI Entitlement/Exploitativeness, PID-5 Psychoticism, PID-5 Antagonism, and PID-5 Disinhibition (rs ranged from $.36$ to $.63$). Further, a handful of correlational differences emerged across attitudinal and behavioral objectification: ISOP Attitudes better predicted low affective empathy, low agreeableness, low openness, and psychological entitlement, whereas ISOP behaviors better-predicted callous-unemotionality, antagonism, and negative emotionality (Steiger's Zs from $|3.84|$ to $|5.22|$, $ps < .001$).

General Discussion

The present studies sought to examine the personality correlates of and potential risk factors for ISOP attitudes and behaviors, two heretofore underexamined yet contemporaneously prominent constructs that are rooted in perceptions of others as reducible to the sum of their sexual body parts and attributes. The current investigation is the first, to our knowledge, to elucidate the personality correlates of ISOP. To facilitate this aim, we extended the content coverage of the ISOS-P (Gervais et al., 2014) beyond behaviors to attitudes. We then examined the implications of psychopathic traits and a broad spectrum of allied individual difference variables, on the one hand, for said behaviors and attitudes, on the other. In extending the ISOS-P, we identified a parsimonious two correlated factors model with separate Attitudes and Behaviors factors, which fit the data reasonably well. Unlike previous iterations of the ISOS-P (i.e., Gervais et al., 2018), the revised version achieved full measurement invariance across gender in both samples, indicating that the same latent construct was assessed in men and women. Further, ISOP attitudes and behaviors demonstrated divergent relations with several emotional detachment variables (e.g., coldheartedness, callousness, deficits in affective empathy), perhaps suggesting that ISOS-PR Attitudes reflects perceptual ISOP with better fidelity than ISOS-PR Behaviors.

Results provided compelling support for our expectation that dark personality traits and ISOP would be highly associated; disinhibition and meanness, on the one hand, were exceedingly statistically similar to ISOP behaviors (and to a lesser extent ISOP attitudes), on the other. Although the relations between coldheartedness and boldness and ISOP were smaller in comparison, their effect sizes still generally fell within the moderate to large range, per Gignac and Szodorai's (2016) interpretive benchmarks. These results, taken together, suggest that psychopathic individuals are far more likely than others to engage in sexual objectification.

Further, our anticipation that “dark” traits in psychopathy’s nomological network would afford a fruitful framework for understanding and statistically predicting ISOP also found clear support (see also Watts, Waldman, Smith, Poore, & Lilienfeld, 2015). Several key non-psychopathy variables manifested associations with ISOP attitudes and behaviors with effect sizes that were of comparable magnitude to meanness and disinhibition, including direct sadism, low affective empathy, psychological entitlement, antagonism, psychoticism, certain impulsogenic traits, low conscientiousness, and low honesty-humility. Low openness, low agreeableness, grandiose and vulnerable narcissism, detachment, and cognitive empathy manifested sizeable, if smaller, associations with ISOP attitudes and behavior.

Attitudes supportive of sexual aggression are far more widespread than sexual aggression itself and identifying predictors for ISOP attitude-behavior concordance may, therefore, be of practical utility (e.g., Flood & Pease, 2009). To that end, Studies 1 and 2 yielded qualified support for our hypothesis that various psychopathic traits would potentiate the relation between ISOP attitudes and ISOP behaviors. In both samples, meanness, disinhibition, and self-centered impulsivity predicted ISOP attitude-behavior concordance. This underscores the possibility that psychopathic traits increase the likelihood of ISOP attitudes, which are likely relatively commonplace, accompanying ISOP behaviors, which are presumably less commonplace. At the same time, these effects were relatively small in magnitude, and as such are potentially more theoretically rather than practically important.

Findings for gender moderation were more mixed and modest by comparison. Given that prescriptive norms for ISOP almost certainly differ for men and women, we anticipated that psychopathic traits would be stronger predictors of ISOP in women than in men. Only one set of findings that replicated across Studies 1 and 2 were consistent with this hypothesis. Specifically,

Fearless Dominance was more strongly associated with ISOP Behaviors in women compared with men (see also Watts et al., 2017). Other, more mixed findings did not replicate across studies. In either Study 1 or Study 2 (but not both), fearless dominance, boldness, and meanness were indeed stronger predictors of ISOP attitudes in women. Similarly, in either Study 1 or Study 2 (but not both), self-centered impulsivity, meanness, and boldness were stronger predictors of ISOP behaviors in women. Yet contrary to our hypothesis, in Study 2, self-centered impulsivity and disinhibition were stronger predictors of ISOP attitudes in men. Given these conceptually contradictory findings and our failure to replicate many findings, these results, excepting those for fearless dominance and ISOP Behaviors, should be interpreted with caution.

We unexpectedly found that when either the TriPM or PPI-R dimensions were entered simultaneously into a multiple regression, TriPM Disinhibition and PPI-R Self-centered Impulsivity, respectively, were the most strongly associated with ISOS-PR Behaviors, whereas TriPM Meanness, but not PPI-R Coldheartedness, were the most strongly associated with ISOS-PR Attitudes. Differences in content coverage of active antagonism and entitlement, which are subsumed by meanness but not coldheartedness, may underlie this disparity. More specifically, given both the interpersonal nature of ISOP and theory that has described personality disorders as conditions of malignant interpersonal dysfunction (Lilienfeld et al., 2019; Wilson, Stroud, & Durbin, 2017), we venture that ISOP behaviors may be partial expressions of hostile interpersonal dominance (Lang, 2010; see also Bloom, 2018) rather than a sense of disbelief concerning victims' autonomy and personhood. It would follow that most perpetrators of sexual objectification are "sexual sadists" rather than "sexual solipsists."

Limitations and Future Directions

Although there is reason to doubt that method variance across self-report measures invariably leads to outsized measurement error or inflated correlations (e.g., Spector, 2006), our reliance on self-report measures raises the specter of mono-method bias. Future research should incorporate other indicators of personality and ISOP, such as informant reports, which may avoid issues of social desirability; eye-tracking paradigms (e.g., Gervais, Holland, & Dodd, 2013), which may allow researchers to parse objectifying behaviors (e.g., leering gazes) from more severe forms of sexual aggression; as well as diary-based measures and ecological momentary assessment, which would allow for the tracking of observed or reported sexual objectification behaviors in real-time. Employing these methods would also allow for further construct validation tests of the ISOS-PR. To delineate the boundary conditions of our findings, future work should also examine their generalizability to other samples and settings (e.g., low and high SES, professional environments). Indeed, although recent media reports of sexual objectification and misconduct have focused on celebrities, athletes, politicians, and other well-known individuals, malignant forms of sexual objectification are likely to extend to all sectors of society. Here, for instance, we demonstrate that interpersonal sexual objectification can be reliably and validly assessed among US community members. Relatedly, with the rise of popular movements such as #MeToo (<https://metoomvmt.org/>), the social and practical costs of perpetrating objectifying behaviors may be rapidly expanding, leading to a concomitant separation between the prevalence of ISOP attitudes and ISOP behaviors. As such, psychopathic traits may become increasingly predictive of attitude-behavior concordance with shifting social norms. Research conducted in cultures that carry strong norms against ISOP (e.g., those with religious prohibitions against ISOP, see Loughnan et al., 2015) may shed further light on potential causal mechanisms by which psychopathic traits facilitate sexual objectification.

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Table 1. *Factor loadings and standard errors for the ISOS-PR.*

	Study 1				Study 2			
	BEH		ATT		BEH		ATT	
	λ	SE	λ	SE	λ	SE	λ	SE
1. Whistled at someone while he or she was walking down the street?	.89	.02	-	-	.92	.02	-	-
2. Stared at someone else's body while talking to him or her?	.84	.02	-	-	.78	.02	-	-
3. Overtly evaluated someone else's physical appearance?	.78	.02	-	-	.57	.04	-	-
4. Stared at others' bodies?	.81	.02	-	-	.78	.03	-	-
5. Leered at others' bodies?	.85	.02	-	-	.78	.03	-	-
6. Made a rude sexual remark about someone's body?	.92	.01	-	-	.88	.02	-	-
7. Touched or fondled someone without his or her consent?	.95	.02	-	-	.90	.03	-	-
8. Made suggestive comments or touched others without their consent at school, work, etc.?	.96	.01	-	-	.91	.03	-	-
9. Honked at someone while he or she was walking down the street?	.87	.02	-	-	.93	.02	-	-
10. Made inappropriate sexual comments about someone's physical appearance?	.94	.01	-	-	.91	.02	-	-
11. Stared at someone's body instead of listening to what he or she was saying?	.86	.02	-	-	.88	.02	-	-
12. Made sexual comments or innuendos when noticing someone's body?	.92	.01	-	-	.90	.01	-	-
13. Grabbed or pinched someone else's body without his or her consent?	.97	.01	-	-	.96	.02	-	-
14. Made degrading sexual gestures towards others?	.96	.01	-	-	.94	.02	-	-
15. There is nothing wrong with whistling at someone walking down the street.	-	-	.75	.03	-	-	.84	.03
16. I would never touch someone's body without asking first.	-	-	-.50	.04	-	-	-.67	.04
17. If I make a comment about someone's body, he/she should take that as a compliment.	-	-	.65	.04	-	-	.57	.04
18. People are worth more than just their physical appearance.	-	-	-.46	.05	-	-	-.67	.04
19. People who get offended at catcalls are just too uptight.	-	-	.89	.02	-	-	.81	.03
20. The value of most people can be judged by just looking at them.	-	-	.87	.03	-	-	.72	.04
21. People who wear revealing clothes are asking to be stared at.	-	-	.60	.04	-	-	.58	.04
Factor Intercorrelations	.78 (.02)				.76 (.03)			

Note. Factor loadings are bolded if $p < .001$. BEH = Behaviors; ATT = Attitudes. Behaviors items are adapted from Gervais, DiLillo, and McChargue (2014) and began with the phrase "How often have you [item]." Behaviors items were answered on a 1-5, Never/Always Likert scale; Attitudes items were answered on a 1-5, Agree/Disagree Likert scale;

Table 2. *Individual and simultaneous regressions of psychopathy variables on the ISOS-PR.*

	Study 1				Study 2			
	Attitudes		Behaviors		Attitudes		Behaviors	
	<i>r</i>	β	<i>r</i>	β	<i>r</i>	β	<i>r</i>	β
PPI Fearless Dominance	.27 (.04)	.10 (.04)	.38 (.04)	.23 (.04)	.24 (.06)	.15 (.05)	.28 (.06)	.17 (.05)
PPI Self-centered Impulsivity	.66 (.03)	.55 (.04)	.72 (.02)	.66 (.03)	.59 (.04)	.44 (.05)	.65 (.04)	.57 (.05)
PPI Coldheartedness	.38 (.04)	.10 (.04)	.19 (.05)	-.05 (.04)	.42 (.04)	.22 (.05)	.30 (.05)	.07 (.05)
TriPM Boldness	.12 (.05)	.10 (.04)	.18 (.05)	.23 (.04)	.17 (.06)	.15 (.06)	.17 (.06)	.17 (.05)
TriPM Disinhibition	.67 (.03)	.32 (.08)	.70 (.03)	.27 (.06)	.48 (.04)	.18 (.07)	.59 (.03)	.36 (.07)
TriPM Meanness	.70 (.03)	.35 (.08)	.69 (.03)	.49 (.06)	.55 (.04)	.41 (.07)	.60 (.03)	.33 (.07)

Note. Coefficients are bolded if $p < .001$ and italicized if $p < .01$. Standard errors are denoted in parentheses.

PPI=Psychopathic Personality Inventory - Revised (in Study 1) and PPI-40 (in Study 2); TriPM=Triarchic Psychopathy Measure.

Table 3. *Zero-order correlations between criterion variables and the ISOS-PR.*

	Study 1		Study 2	
	Attitudes	Behaviors	Attitudes	Behaviors
<u>Study 1</u>				
UPPS-P (Low) Perseverance	.23 (.05)	.24 (.05)	-	-
UPPS-P Premeditation	.30 (.04)	.21 (.04)	-	-
UPPS-P Negative Urgency	.57 (.04)	.63 (.03)	-	-
UPPS-P Sensation Seeking	.48 (.04)	.55 (.04)	-	-
UPSS Positive Urgency	.61 (.04)	.66 (.03)	-	-
VAST Direct	.58 (.03)	.65 (.03)	-	-
VAST Vicarious	-.21 (.04)	-.10 (.05)	-	-
<u>Study 2</u>				
HSNS Hypersensitive Narc.	-	-	.33 (.05)	.35 (.05)
<u>Studies 1 & 2</u>				
ACME Affective Resonance	-.59 (.03)	-.54 (.03)	-.53 (.03)	-.46 (.04)
ACME Affective Dissonance	.70 (.03)	.66 (.03)	.57 (.04)	.59 (.04)
ACME Cognitive Empathy	-.24 (.04)	-.21 (.05)	-.23 (.05)	-.19 (.05)
HEXACO Honesty-humility	-.51 (.04)	-.46 (.04)	-.42 (.04)	-.42 (.05)
HEXACO Emotionality	-.17 (.05)	-.12 (.06)	-.13 (.05)	-.15 (.06)
HEXACO Extraversion	-.07 (.05)	.02 (.06)	.13 (.05)	.12 (.06)
HEXACO Agreeableness	-.31 (.05)	-.27 (.05)	-.25 (.05)	-.14 (.06)
HEXACO Conscientiousness	-.52 (.04)	-.51 (.03)	-.38 (.04)	-.46 (.04)
HEXACO Openness	-.36 (.04)	-.29 (.04)	-.32 (.04)	-.13 (.06)
NPI Leadership Authority	.32 (.04)	.39 (.03)	.33 (.05)	.32 (.05)
NPI Grandiose Exhibitionism	.40 (.05)	.44 (.04)	.40 (.05)	.44 (.05)
NPI Entitle./Exploit.	.50 (.04)	.54 (.03)	.41 (.04)	.40 (.05)
Psychological Entitlement	.73 (.03)	.68 (.03)	.49 (.04)	.36 (.05)
PID-5 Detachment	.44 (.04)	.47 (.04)	.19 (.05)	.31 (.05)
PID-5 Psychoticism	.54 (.04)	.61 (.04)	.40 (.05)	.49 (.04)
PID-5 Negative Affectivity	.29 (.04)	.42 (.04)	.15 (.05)	.26 (.05)
PID-5 Antagonism	.64 (.04)	.67 (.03)	.57 (.04)	.62 (.03)
PID-5 Disinhibition	.61 (.04)	.66 (.03)	.49 (.04)	.58 (.03)

Note. Coefficients are bolded if $p < .001$ and italicized if $p < .01$. Standard errors are denoted in parentheses.

VAST=Varieties of Sadistic Tendencies; ACME = Affective and Cognitive Measure of Empathy; NPI=Narcissistic Personality Inventory; PID-5=Personality Inventory for DSM-5—Brief Form; HSNS=Hypersensitive Narcissism Scale.