

# Sadism and Psychopathy in Violent and Sexually Violent Offenders

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A nonrandom sample ( $N = 41$ ) of inmates from a maximum security prison were classified as either psychopathic or nonpsychopathic (using the Psychopathy Checklist-Revised (PCL-R)) and violent or sexually violent. Sadism was measured using the Millon Clinical Multiaxial Inventory-II (MCMI-II) Scale 6B, the Personality Disorder Examination (PDE) items for sadistic personality disorder, and the sexual sadism criteria of DSM-IV. Psychopaths were found to be significantly more sadistic than nonpsychopaths (MCMI-II and PDE). Overall power was relatively high. Sadism did not differentiate the violent and sexually violent groups. A diagnosis of sexual sadism was too infrequent ( $n = 3$ ) for meaningful statistical analysis. The trait measures of sadism and psychopathy measures (PCL-R, Factor 1 and Factor 2) significantly and positively correlated. Results provide further empirical validity for the theoretically proposed and clinically observed relationship between sadistic traits and psychopathic personality.

Sadism and psychopathy have often been theoretically and clinically associated,<sup>1</sup> but empirical measurement of the relationship, if any, between these constructs is virtually absent. Alluded to in a recent study of the sexually sadistic criminal,<sup>2</sup> but not specifically measured, a positive and significant correlation between these abnormalities of impulse and personality makes clinical and theoretical sense.

Meloy and Gacono<sup>3</sup> examined sado-masochism (SM) responses in the Ror-

schachs of samples of psychopathic and nonpsychopathic criminals using the Psychopathy Checklist-Revised (PCL-R)<sup>4</sup> to differentiate groups. Forty-one per cent of the psychopaths produced at least one SM response, significantly more ( $p < .05$ ) than the nonpsychopathic criminals. Meloy and Gacono posited that the SM response may be a specific and perhaps sensitive indicator of sadism—a deeply endogenous characteristic of psychopaths—although they did not directly measure its behavioral expression. Hart *et al.*<sup>5</sup> studied the association between psychopathy and aggressive/sadistic behavior in incarcerated males. These authors also found a significant and positive relationship between the diagnosis of psy-

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chopathy as measured by the PCL-R and items measuring aggressive/sadistic behavior on Scale 6B of the Millon Clinical Multiaxial Inventory-II (MCMI-II).<sup>6</sup> Gacano *et al.*<sup>7</sup> found that a sample of hospitalized insanity malingerers were significantly more psychopathic ( $p < .001$ ) and sexually sadistic ( $p < .025$ ) than a random comparison group of insanity acquittees.

These three studies prompted us to formulate a question for further research: are incarcerated male psychopaths who have been convicted of violent or sexually violent crimes significantly more sadistic than nonpsychopathic males who have committed similar crimes? We examined the level of sadism in incarcerated male psychopaths and nonpsychopaths, grouped according to crimes, by using different instruments that arguably measure sadism: Scale 6B of the MCMI-II (aggressive/sadistic personality); Personality Disorder Examination (PDE)<sup>8</sup> items measuring sadistic personality disorder; and the DSM-IV Axis I criteria for sexual sadism.<sup>9</sup>

## Methods

**Hypotheses** We hypothesized that: (1) incarcerated psychopaths (P) will produce significantly higher sadism scores than nonpsychopaths (NP) as measured by the MCMI-II Scale 6B, the PDE items for sadistic personality disorder, and the frequency of those classified as sexual sadists according to DSM-IV criteria, regardless of type of offense (violent or sexually violent); (2) individuals who committed sexually violent offenses (SV) will produce significantly higher sadism scores than individuals who committed

only violent (V) offenses on the same measures; (3) there will be an interaction between type of offense and level of psychopathy such that sexually violent psychopaths will produce significantly higher sadism scores than the violent psychopaths on the same measures; and (4) there will be a significant and positive correlation among all three measures of sadism.

A two-by-two analysis of variance was performed on each of the interval measures of sadism (MCMI-II and the PDE) to test hypotheses employing these measures. A chi-square analysis was used for the categorical measure, sexual sadism (DSM-IV criteria). The last hypothesis was tested using Pearson's  $r$  or a point biserial correlation as indicated. *Post hoc* tests were conducted for age, racial/ethnic, and educational differences. Significance was set at  $p = .05$ . A review of the data in this study found that ANOVA assumptions were not violated as measured by skewness values, kurtosis values, a Bartlett test of homogeneity of variance, and attention to controlling unrelated factors that could produce unwanted effects.

**Subject Selection** One hundred files were randomly drawn and reviewed from a population of approximately 4,000 inmates at a maximum security state prison in southern California. Seventy-five of the records were considered complete enough to warrant an invitation to the inmate to participate in the study. Forty-nine inmates consented to participate, but eight subjects were subsequently dropped from the study due to either transfer to another prison before completion of the

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data collection or inappropriate and aggressive behavior toward the interviewer (S.H.). Subjects were classified as violent if they had never served time in prison for a sexual crime and had been convicted of murder, manslaughter, attempted murder, assault with a deadly weapon, corporal injury to a spouse, assault with a firearm, exhibiting a firearm, shooting at an inhabited dwelling, felony possession of a firearm, assault with a weapon, use of a firearm, or false imprisonment by violence. Subjects were classified as sexually violent if they had been convicted of one or more sexually violent crimes, including rape by force or fear, attempted rape, sodomy by force or fear, oral copulation by force or fear, anal or genital penetration with an object, rape in concert, oral copulation in concert, and possession of a firearm or deadly weapon in commission of certain sexual offenses.

Only subjects who had at least an eighth-grade reading level (determined by the California Achievement Test upon arrival at the prison), were not mentally retarded (DSM-IV criteria), and had no reported psychotic symptoms were included in the study. The inmates gave consent to allow a trained researcher to review their institutional files but were not informed of the study's precise nature until the end of the data gathering. No harm to subjects was anticipated.

*Instrumentation* Psychopathy was measured using the Psychopathy Checklist-Revised.<sup>4</sup> The PCL-R consists of 20 items scored by the interviewer on a three-point scale. Subjects were classified as psychopaths if their total score was  $\geq 30$ . Subjects were classified as nonpsychopaths if

their total score was  $< 24$ . The PCL-R has high internal consistency ( $\alpha = .87$  and mean interitem correlation (ICC) = .26), excellent inter-rater reliability (ICC = .91), and good construct validity for male inmates.<sup>4</sup> The PCL-R is composed of two factors: Factor 1 has been labeled "aggressive narcissism."<sup>1</sup> Factor 2 has been labeled "chronically unstable and antisocial lifestyle."<sup>4</sup> Both factors correlate .50 and about half of the items cluster on each factor.<sup>4</sup>

*Aggressive/sadistic personality and sadistic personality disorder* were measured using the MCMI-II Scale 6B<sup>6</sup> and the Personality Disorder Examination,<sup>8</sup> respectively. The MCMI-II comprises 22 clinical scales, and overall reliability and validity of this personality inventory can be described in terms of "classification efficiency." Millon<sup>6</sup> described Scale 6B using the following efficiency ratings: prevalence = 6%, sensitivity = 68%, specificity = 97%, positive predictive power = 58%, negative predictive power = 98%, and overall diagnostic power = 95%.

The PDE is a comprehensive structured interview designed to elicit information needed to diagnose personality disorders.<sup>10</sup> It has 388 items, scored on a three-point scale, that correlate with DSM-III-R personality disorder criteria.<sup>11</sup> Preliminary studies reported that the PDE was a reliable measure for diagnosing personality disorder,<sup>12</sup> but Reich<sup>11</sup> noted that further research was needed to assess its ability to distinguish between normal subjects and other psychiatric patients. Recent research has confirmed its reliability and strengthened its validity.<sup>13</sup>

The PDE can be scored using two methods. One approach uses a predeter-

mined statistical threshold based on the nature of the items and frequency data from preliminary trials.<sup>12</sup> An alternative method requires the examiner's judgment. Loranger *et al.*<sup>12</sup> noted that the statistical method probably increases interrater reliability, but this method imposes a somewhat arbitrary, predetermined threshold. On the other hand, reliance on clinical judgment more closely approximates the natural clinical situation, but it introduces a degree of subjectivity that may lower reliability. Both methods were applied in this study, using the subject's verbal response to questions as well as interview and collateral information from the prison files. Only eight questions pertaining to sadistic personality disorder from the PDE were asked (e.g., "Have you ever tried to control others or make them obey by being physically cruel or violent? If yes, give me some examples; if no, have people ever accused you of that?"). *Sexual sadism* was diagnosed using the threshold criteria from DSM-IV<sup>9</sup> and data from the subject's prison file and clinical interview.

**Procedures** The forty-one subjects were grouped according to the type of offense they had committed (violent versus sexually violent). Each subject was classified as either psychopathic or non-psychopathic by reviewing his prison file and conducting a clinical interview. Each file contained current medical, psychiatric, and psychological evaluations; medical records from previous hospitalizations; social history, including interviews with family members; and criminal his-

tory, including police reports for the current (controlling) offense(s). The structured clinical interview gathered data to complete the PCL-R, PDE items pertaining to sadistic personality disorder, and questions regarding sexual sadism criteria. Each subject then completed the MCMI-II test in an average of 40 minutes. The MCMI-II protocols were scored by National Computer Systems. Each interview was audiotaped.

Since the senior author conducted the clinical interview with each subject and was aware of the study's hypotheses, one independent rater blind to the study's hypotheses scored each subject for level of psychopathy (PCL-R), and a second independent rater scored each subject for sadistic personality disorder (PDE items) and presence or absence of sexual sadism (DSM-IV). They both listened to the audiotapes and reviewed records. Inter-rater reliability for the PCL-R was .97 and for the PDE sadistic personality disorder items was .90 ( $\kappa$  coefficients). Both the senior author and the second rater fully agreed on the presence or absence of a sexual sadism diagnosis in all subjects.

## Results

**Demographics** The average age of the subjects was 30.73 years ( $SD = 7.3$ ). Racial/ethnic makeup included 16 Caucasians, 16 African-Americans, and 9 Hispanics. The average level of education was 11.81 years ( $SD = 1.67$ ). No information was gathered on SES prior to imprisonment. *Post hoc* analysis found no significant differences among the four groups (P, NP, V, SV) for age, race/ethnicity, or education.

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**Psychopathy** The violent psychopaths ( $N = 10$ ) had a mean PCL-R of 33.99 ( $SD = 2.8$ ). The sexually violent psychopaths ( $N = 9$ ) had a mean PCL-R of 33.33 ( $SD = 2.11$ ). The violent nonpsychopaths ( $N = 12$ ) had a mean PCL-R of 16.25 ( $SD = 4.83$ ). The sexually violent nonpsychopaths ( $N = 10$ ) had a mean PCL-R of 15.85 ( $SD = 6.85$ ).

**Sadism** Psychopaths scored significantly higher on the MCMI-II Scale 6B than the nonpsychopaths, ( $P$ , mean = 83.60 ( $SD = 25.2$ ) versus NP, mean = 58.50 ( $SD = 25.7$ ),  $F(1,40) = 9.5$ ,  $p = .004$ ). The magnitude of this effect ( $\omega^2$ ) was .17 (83% due to error). Psychopaths also scored significantly higher on the PDE items for sadistic personality disorder, ( $P$ , mean = 8.45 ( $SD = 4.78$ ) versus NP, mean 2.84 ( $SD = 2.78$ ),  $F(1,40) = 22.19$ ,  $p = .0001$ ). The magnitude of this effect ( $\omega^2$ ) was .35 (65% due to error). Only three subjects met the criteria for sexual sadism; therefore, frequencies of sexual sadism across psychopathy revealed no differences ( $\chi^2 = .54$ ,  $p = .46$ ).

The second hypothesis, that is, that individuals committing sexually violent offenses would be more sadistic than those that committed only violent offenses, was not supported, although trends for both the MCMI-II and the PDE data were in the expected direction. The third hypothesis, that is, that there will be an interaction effect between type of offense and level of psychopathy, was also not supported for any of the three measures of sadism.

The fourth hypothesis predicting significant and positive correlations among the measures of sadism and psychopathy

was supported across all variables except for the diagnosis of sexual sadism (see Table 1). The MCMI-II Scale 6B positively correlated with PDE items (.64), PCL-R (.48), PCL-R Factor 1 (.45), and PCL-R Factor 2 (.46). The PDE items positively correlated with the PCL-R (.64), PCL-R Factor 1 (.64), and PCL-R Factor 2 (.57). The sexual sadism diagnoses ( $N = 3$ ) were nonsignificant. In Table 1 the family-wise (FW) Type 1 error rate for each column of correlations was held at  $\alpha_{FW} = .05$  by setting the testwise Type 1 error rate at  $\alpha_{FW} = .05/6 = p_{FW} = .008$ .

**Power Analysis** Because the number of subjects in this study was relatively small ( $N = 41$ ) and there were no differences between several groups, a power analysis<sup>14</sup> was conducted to determine the sensitivity of the independent variables, psychopathy and offense. The power analyses for level of psychopathy ( $P$  versus NP) related to the MCMI-II Scale 6B and to the PDE sadistic personality disorder items were .99 and .98, respectively. The power calculations for type of offense (V versus SV) related to the MCMI-II Scale 6B and the PDE were  $<.30$ . The power calculations for MCMI-II Scale 6B and PDE item interactions (offense  $\times$  psychopathy) were .60 and .90, respectively.

Generally, power analysis measures the sensitivity of effects produced by the independent variables. Specifically, the analysis of power is the likelihood of the researcher finding differences between groups if actual differences are present. A power value of .80 is considered "high," a power value of .50 is considered "moderate," and a power value of .30 is con-

**Table 1**  
**Pearson Correlation and ( $r^2$ ): MCMI-II Scale 6B Base Rate Scores, PDE Scores, Sexual Sadism Scores, PCL-R Scores, and PCL-R Factor 1 and Factor 2 Scores**

	MCMI	PDE	SexSad	PCL-R	Fac 1	Fac 2
MCMI	1.0	.64* (.42)	.17 (.03)	.48* (.23)	.45* (.20)	.46* (.21)
PDE		1.0	.39 (.15)	.64* (.41)	.64* (.41)	.57* (.32)
SexSad			1.0	.12 (.01)	.05 (.00)	.11 (.01)
PCL-R				1.0	.95* (.90)	.94* (.88)
Fac 1					1.0	.82* (.67)
Fac 2						1.0

MCMI-II = Millon Clinical Multiaxial Inventory-II; PDE = Personality Disorder Examination; SexSad = sexual sadism; PCL-R = Revised Psychopathy Checklist; Fac 1 = PCL-R Factor 1; Fac 2 = PCL-R Factor 2. The familywise Type 1 error rate for each column of correlations was held at  $\alpha_{FW} = .05$  by setting the testwise Type 1 error rate at  $\alpha_{FW} = .05/6 = .008$ . \* $p_{FW} < .008$ .

sidered "low."<sup>14</sup> Although the number of subjects in our study is low, overall power is relatively high. Actual differences between our groups is a direct reflection of independent variables, and not random error, obviating the need for more subjects.

### Discussion

The term sadism, originating in the work of the 18th-century French novelist the Marquis de Sade, has been used to describe a variety of behaviors—from nonsexual physical or mental cruelty and domination to sexual torture before murder.<sup>15</sup> The medical history of sadism is rooted in sexual arousal,<sup>16, 17</sup> but its application was subsequently broadened, and sadism has gradually come to mean the experience of pleasure through the

infliction of physical or emotional pain on another. Theoretical literature on sadism varies and contains both disagreements and contradictions,<sup>18</sup> and like some other psychiatric conditions, its etiology remains unknown and treatment is virtually nonexistent. Meloy<sup>1</sup> found 70 citations to sadism in a computer search of the world's psychiatric literature (1965–1990), but only three papers reporting measurable treatment results: all uncontrolled single-case studies. We adopted Shapiro's<sup>19</sup> categorization of sexual sadism as a *subtype* of sadism in this particular study: the former involving sexual arousal, the latter characteristic a personality trait or psychodynamic that necessitates only pleasure. Our selection of dependent measures (MCMI-II, PDE, DSM-IV sexual sadism criteria) reflects this theoretical position.

The finding of significant differences of some magnitude between psychopaths and nonpsychopaths on two *trait* measures of sadism (MCMI-II Scale 6B and PDE items) in the theoretically predicted direction, and the significant correlations among these measures (see Table 1) has important theoretical and clinical implications. First, it provides empirical support for the theoretical premise that psychopaths relate to others on the basis of power and dominance rather than affection.<sup>1,3</sup> Many of the heavily weighted items on the MCMI-II Scale 6B make reference to damaged interpersonal relationships and control of others to regain feelings of personal adequacy.<sup>6</sup> The PDE items utilized were designed to measure the proposed Sadistic Personality Disorder in DSM-III-R:<sup>20</sup> "The essential feature of this disorder is a pervasive pattern of cruel, demeaning, and aggressive behavior directed toward other people . . . to establish dominance in interpersonal relationships (p. 369)." Contemporary psychoanalytic researchers have both clinically probed<sup>21,22</sup> and empirically measured<sup>23</sup> the salient defenses of devaluation, omnipotence, and omnipotent control in aggressive and psychopathic individuals. The virtual absence of a capacity for affectional bonding in psychopaths<sup>23</sup> is an important empirical counterpoint to this study; likewise their propensity to engage in predatory violence toward others,<sup>24</sup> perhaps related to a phylogenetically old "prey-predator" paradigm,<sup>25</sup> is also consistent with our results.

Second, our findings concerning the MCMI-II Scale 6B and the PCL-R repli-

cate the results set forth by Hart *et al.*,<sup>5</sup> who found a correlation of .36 between the two measures, and also a correlation of .28 between Factor 1 (aggressive narcissism) of the PCL-R and Scale 6B. Our higher correlations (.48 and .45, respectively) are likely due to a more concentrated psychopathic and violent sample of men. Hart *et al.*<sup>5</sup> selected subjects from a medium security institution who committed "mostly violent crimes" (p. 321). Furthermore, the Scale 6B base rate scores for our psychopathic groups suggest that the disorder is prominent (>85) or present (>75) according to Millon.<sup>6</sup> This is not the case for the nonpsychopathic subjects for whom base rates averaged 58. These data predict that sadism or sadistic traits would have particular clinical salience in a patient whose PCL-R scores elevated into the severe or primary psychopathy range ( $\geq 30$ ).

The current study's findings are also consistent with the Rorschach findings of Meloy and Gacono<sup>3</sup> reported earlier. These authors defined the SM percept as "any response in which devalued, aggressive, or morbid content is accompanied by pleasurable affect" (p. 107) and found that nearly half of their psychopathic sample produced at least one such response. Measurement of sadism at a more overt level (self-report, behavior) and a more unconscious, covert level (projective testing) positively fuels the notion that personality can be measured convergently at various "levels"<sup>25</sup> to expand construct validity.

One could criticize our study, however, as a useless exercise in tautology. In other words, sadism and psychopathy essen-

tially mean the same thing; therefore, any attempt to measure the constructs empirically will result in positive and significant findings. We think this argument is fallacious but do agree that sadism is a trait of psychopathy, the latter term capturing a much broader and more complex "constellation of deviant traits and behaviors" (see Ref. 4, p. 2), first clinically described by Cleckley.<sup>27</sup>

Only one item (number 8) of the PCL-R, "callous/lack of empathy," explicitly uses reports of callous and sadistic treatment of others in its scoring. This item loads on Factor 1 of the instrument and correlates .61 with the total score. This item likely contributes to the significant correlation between Factor 1 and the MCMI-II (.45) and PDE (.64), but it would not account for the likewise significant correlations between Factor 2 and the MCMI-II (.46) and PDE (.57). Our study suggests that sadism as a trait or psychodynamic may be a relatively important component of psychopathy that has heretofore been underestimated as a motivation for antisocial behavior.

The nonsignificant difference between violent and sexually violent offenders may be a true finding or reflect a lack of independence between groups. The differentiation would likely have been more precise if any charge of a sexual crime in the history of the "violent" subject dropped him from the group; we only used a prison sentence for a sexual crime to exclude subjects from this group. Likewise, the sexually violent subjects could have been limited to two or more sexual crimes. These more rigorous definitions might have produced significant differ-

ences. If this is a true finding, however, it lends credence to the belief that sexualization of violence is merely opportunistic and situational among most violent offenders, unrelated to the severity of their endogenous sadism.

The nonsignificant relationship between a sexual sadism diagnosis and the independent variables (see Table 1) is likely due to the small number of subjects meeting criteria. Although two out of three identified sexual sadists were also psychopaths, data were insufficient to generate empirical relationships. Current research suggests, however, that such an association is likely.<sup>1, 2, 7, 24, 28, 29</sup> In retrospect, data gathering for sexual sadism was insufficient in this research design. Questions only focused on DSM-IV criteria for sexual sadism, and should have been more precise regarding each subject's sexual and masturbatory fantasies.<sup>30-32</sup> Paucity of data may also have been caused by subject selection and subject censorship with a female interviewer (SH).

### Summary and Conclusions

Our study demonstrates a significant and positive relationship of some magnitude between sadism and psychopathy as measured by clinical interview, psychological testing, and behavioral history. It replicates the findings of Hart *et al.*<sup>5</sup> and provides validity for other preliminary investigations of sadistic traits and psychopathic personality. It fails to demonstrate a relationship between sexual sadism and psychopathy, likely due to a paucity of data. It also fails to show a difference on all measures of sadism when subjects



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were classified as violent or sexually violent. We emphasize the theoretical notion that psychopaths relate to others on the basis of power and dominance, rather than affection,<sup>25</sup> as evidenced by behaviors that may range from cruel and demeaning words to torture and homicide. We hope that further researchers will explore the contribution of sadism as a trait or psychodynamic to the construct *psychopathy*, design better methodology for the study of sexual sadism, and shed theoretical light on this most troublesome of human impulses. As Ovid wrote, "Pleasure is sweetest when 'tis paid for by another's pain." (*The Art of Love*, A.D. 8).

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