
Rorschach Oral Dependency in Psychopaths, Sexual Homicide Perpetrators, and Nonviolent Pedophiles

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Rorschach Oral Dependency scores (Masling, Rabie, & Blondheim, 1967) were compared among nonsexually offending psychopaths (NSOPs, $n = 32$), sexual homicide perpetrators (SHPs, $n = 38$), and non-violent pedophiles (NVPs, $n = 39$) as initially reported by Gacono, Meloy, and Bridges (2000). The aggressive special scores of Gacono and Meloy (1994; Gacono, unpublished doctoral dissertation, 1998) were also scored and compared with ROD scores. Consistent with theory and predictions, NVPs were found to have significantly higher levels of oral dependency scores than NSOPs or SHPs. Additionally, there was a high degree of association between oral dependency and aggression in the SHP and NSOP groups. These Rorschach differences support the validity of the ROD as an implicit measure of dependency and add to the understanding of the dynamics that fuel sexually deviant violence. Copyright © 2004 John Wiley & Sons, Ltd.

The Rorschach Oral Dependency Scale (ROD; Masling et al., 1967) assesses elements of interpersonal dependency. For example, Shilkret and Masling (1981) found that ROD scores predict help-seeking behavior of participants in a research project. ROD scores are also positively and significantly correlated with cooperation and compliance with authority figures (Bornstein & Masling, 1985; Masling, O'Neill, & Jayne, 1981), self-reported levels of insecure attachment (Duberstein & Talbot, 1993), eating disorders (Bornstein & Greenberg, 1991), and behavioral difficulties in terminating inpatient psychiatric treatment (Greenberg & Bornstein, 1989). Summarizing 28 years of research with the ROD, Bornstein (1996) concluded that the ROD has construct validity and is a good measure of overt dependent behavior.

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The ROD is scored from the content of Rorschach material that is administered either in standard or group format (Bornstein, 1996). Each response is read and inspected for oral dependency content. Content may fall into one of 16 categories: food and drinks, food sources, food objects, food providers, passive food receivers, begging and praying, food organs, oral instruments, nurturers, gifts and gift-givers, good luck objects, oral activity, passivity and helplessness, pregnancy and reproductive organs, "baby talk" responses, and negations of oral dependent percepts. One point is assigned for each oral dependent response, and a percentage score is obtained by taking the number of oral dependent responses divided by the total number of responses provided. Although the ROD is not used to assign a diagnosis of dependent personality disorder, it has been found to correlate highly with other projective measures of dependency (Fowler, Hilsenroth, & Handler, 1996) and moderately with self-report measures of dependency (Bornstein, 1996, 1999; Bornstein, Rossner, Hill, & Stepanian, 1994; Hirschfeld *et al.*, 1977). ROD studies have demonstrated its robust psychometric properties (Bornstein, 1994, 1996, 1999) including adequate interrater reliability and test-retest consistency (Bornstein, Hilsenroth, Padawer, & Fowler, 2000; Bornstein, Rossner, & Hill, 1994; Juni & Semel, 1982). Given the nature of the Rorschach's ability to partially bypass volitional controls (Meloy, 1992; Gacono & Meloy, 1994), the ROD is ideally suited to assess interpersonal dependency in samples where self-presentation bias may be a concern, such as in a forensic population (Bannatyne, Gacono, & Greene, 1999; Gacono, Evans, & Viglione, 2002).

Although this measure has been used to assess non-pathological aspects of dependency (Bornstein, Riggs, Hill, & Calabrese, 1996; Bornstein, 1998a, 1998b) and the relationship of dependency to Axis I disorders (Bornstein & Greenberg, 1991; Greenberg & Bornstein, 1989; O'Neill & Bornstein, 1990, 1991), little research has been conducted with the ROD scale and Axis II disorders. Blais, Hilsenroth, Fowler, and Conboy (1999) found that DSM-IV (APA, 1994) dimensional ratings for borderline personality disorder significantly correlated with ROD ratings ($r = 0.43$). Comparing inpatient and outpatient borderlines, psychotic inpatients, and dependent, avoidant, narcissistic, and antisocial outpatients, Bornstein *et al.* (2000) found that inpatient borderlines had the highest ROD scores (mean = 0.265), followed by dependent and avoidant outpatients (mean = 0.204) and narcissistic outpatients (mean = 0.202). Antisocial outpatients (mean = 0.117) and borderline outpatients (mean = 0.109) produced lower mean scores than the all of these groups, including university-student nonclinical controls (mean = 0.162).

In the present study, we selected a forensic population to study ROD scores. Specifically, we compared the ROD scores of nonsexually offending psychopaths (NSOPs), sexual homicide perpetrators (SHPs), and nonviolent pedophiles (NVPs) who were incarcerated or in a forensic psychiatric hospital. Previously, Gacono, Meloy, and Bridges (2000) had evaluated the Rorschachs of such individuals with Comprehensive System variables (Exner, 1993) and found that psychopaths were distinguished by their lack of interest and attachment to others (NSOPs, 100%, $T = 0$; mean for human content = 4.00; mean COP = 0.56) compared with SHPs and NVPs (SHPs, 39%, $T \geq 1$; mean for all human content = 6.39; COP = 1.37; NVPs, 49%, $T \geq 1$; mean for all human content = 8.05; COP = 1.18). However, they did not evaluate these protocols for ROD and the extended aggression scores (Gacono, unpublished doctoral dissertation, 1998; Gacono & Meloy, 1994).

Although dependency and aggression were not directly assessed by Gacono et al. (2000), their results suggested that psychopaths are the least likely of the three groups to experience dependency needs.

We evaluated the aforementioned groups for four reasons. First, to our knowledge, no published study has examined Rorschach Oral Dependency in pedophiles, sexual homicide perpetrators, or psychopaths, despite the importance of this construct to the theoretical underpinnings of each group. Second, we were interested in extending the growing body of research related to the ROD's validity as a measure of dependency. Third, these groups were ideal for examining the manner in which dependency needs and aggression drive derivatives are expressed (Gacono & Meloy, 1994; Gacono et al., 2000), given the links between interpersonal dependency and aggression in violent sexual behavior. Based upon a confluence of psychodynamic principles and previous research with these populations (Bridges, Wilson, & Gacono, 1998; Gacono & Meloy, 1994; Gacono et al., 2000), we predicted that the sexual homicide perpetrators would have significantly higher ROD scores than pedophiles, and that the lowest levels of oral dependency would be found among psychopaths (SHPs > NVPs > NSOPs). Finally, we were interested in the manner in which dependency and aggression might be associated in Rorschachs of these groups. SHPs and NVPs are believed to experience deep conflicts over their dependency needs and how to express them in the context of aggression they feel toward themselves (NVPs; Bridges et al., 1998) and others (SHPs; Gacono, 1997b; Gacono & Meloy, 1994; Meloy, 1992). In contrast, psychopaths have been found to have little need or interest in interpersonal relationships, while also expecting interpersonal relationships to be fraught with conflict and aggression (Gacono & Meloy, 1994; Gacono et al., 2000). In the present study, it was believed that, given the predominance of dependency and aggression in the real world behaviors of such individuals, aggression and dependency would be found together in sequence in participants' Rorschach protocols. We predicted that this mixture would be most frequently found in the sexual homicide perpetrators (high aggression toward others, high interpersonal dependency), followed by the pedophiles (moderate levels of aggression toward others, high interpersonal dependency) and non-sexually offending psychopaths (high aggression toward others, low interpersonal dependency). That is, SHPs > NVPs > NSOPs.

METHOD

Participants

Participants were comprised of three groups: NSOPs ($n = 32$), SHPs ($n = 38$), and NVPs ($n = 39$). Rorschachs were administered by advanced doctoral level clinical psychology interns or licensed clinical psychologists using Comprehensive System guidelines (Exner, 1974, 1986, 1993). The inclusion criteria for each group were as follows: (i) having a valid Rorschach protocol; (ii) for the NSOPs, a valid PCL-R score (≥ 30 ; Hare, 1991); (iii) for the NVPs, a DSM-IV (American Psychiatric Association, 1994) diagnosis of pedophilia; and (iv) for the SHPs, having committed a sexual homicide. All other data, including demographic information, were treated as dependent variables.

Psychopaths

All individuals in this group were free of mental retardation, psychosis, or neurological impairment, and were incarcerated in medium- to maximum-security correctional or forensic facilities when tested. Psychopathic Rorschachs were obtained from a larger male antisocial personality disorder Rorschach sample ($n = 105$; see Gacono & Meloy, 1994). Forty-six of the 105 were psychopathic, with PCL-R scores ≥ 30 (Hare, 1991). Of the 46, 30 individuals, although violent, had no history of sexual violence or any sex offense. Two cases (violent but not sexually violent) were randomly chosen from the Gacono and Meloy (1994) female psychopathic antisocial personality disorder sample ($n = 24$) and added to the male psychopaths. These cases were added to match the number of females present in the SHP group. All individuals in this sample were administered the Rorschach between 1984 and 1996.

Sexual Homicide Perpetrators

Sexual homicide perpetrators were chosen from valid cases among the Gacono–Meloy (1994) sexual homicide sample. The sample was entirely male except for two individuals. All 38 Rorschachs were administered between 1986 and 1997 to individuals convicted of sexual homicide and incarcerated in various prisons and forensic hospitals in California, Florida, Illinois, Massachusetts, and the District of Columbia. Evidence that a sexual homicide had been committed and the production of a valid Rorschach protocol were the only inclusion criteria. Positive evidence of a sexual homicide was verified by independent record reviews by Carl B. Gacono, Ph.D., and J. Reid Meloy, Ph.D., and included an intentional killing and (i) physical evidence of sexual assault; (ii) sexual activity in close proximity to the victim, such as masturbation; or (iii) a legally admissible confession of sexual activity by the perpetrator during the homicide. In order to accurately represent the heterogeneity of this population, individuals were not excluded due to mental retardation, mental illness, neurological impairment, or gender to accurately represent the probable heterogeneity of this population. None, however, were mentally retarded ($IQ < 70$) or psychotic when tested and, although it was not formally assessed, organic impairment was not suggested from record review or clinical interviewing. Two-thirds of this sample met criteria for psychopathy, and most met criteria for antisocial personality disorder. Two of the 38 subjects were female.

Nonviolent Pedophiles

Nonviolent pedophiles were obtained randomly by Michael R. Bridges, Ph.D., from a larger sample that contained violent and nonviolent subjects ($n = 60$; see Bridges *et al.*, 1998). Rorschachs were administered between 1991 and 1996 to subjects incarcerated in a correctional facility awaiting sex offender treatment. All individuals were male and met the DSM-IV criteria (APA, 1994) for pedophilia, as determined by agreement by two experienced clinicians (an advanced clinical psychology graduate intern or licensed psychologist) from record review and interview. None

of the pedophiles were mentally retarded, psychotic, neurologically impaired, or evidenced a history of interpersonal violence. While individual PCL-R scores were not available for the 39 pedophiles, a review of their files indicated that no individuals met the criteria for antisocial personality disorder, and none would be psychopathic (i.e., PCL-R \geq 30).

Procedure

All protocols were those evaluated initially by Gacono et al. (2000). In this study, the protocols were scored for ROD content (Masling et al., 1967) and the aggressive content scores of Gacono and Meloy (1994; Gacono, unpublished doctoral dissertation), neither of which were scored or reported by Gacono et al. Scoring for ROD content is described above. In the present study, all ROD content was scored by the first author. All aggressive content scores are scored from content within both the Free Association and Inquiry and include (i) Aggressive Content (AgC), (ii) Aggressive Potential (AgPot), (iii) Aggressive Past (AgPast), or (iv) Sadomasochistic Aggression (SM). Examples of each category are as follows: (i) "A blood-hungry bat" (AgC); (ii) "A tiger about to attack a goat" (AgPot); (iii) "A missionary killed by an African tribesman" (AgPast); and (iv) "A bat who has been beaten and tortured" (examinee laughs; SM). These scores increase the examiner's ability to assess and code aggressive drive derivatives in psychopathic and non-psychopathic antisocial personality disordered individuals, beyond that of Exner's Aggression score (Gacono, 1997a). Each response is evaluated for all of the aforementioned categories. A given response may be scored for more than just one of these categories, and the results of each category are reported for each individual. In the present study, all aggressive content scores were scored by the second author.

Once ROD and aggression special scores had been computed, ROD scores were evaluated for the presence of aggressive content in the response immediately prior to, co-occurring with, or immediately after an oral dependent score. The total number of oral dependent-aggressive sequences for each individual was computed and evaluated across groups. Such computations were an empirical way by which to represent a sequential analysis of the pairing of aggression and dependency. Sequential analysis has long been understood as a mechanism by which to evaluate the processes with which an individual copes with, defends against, and recovers from conflicting psychological impulses, needs, and states (Peebles-Kleiger, 2002; Weiner, 2003). Given the nature of our clinical samples, we expected that stimuli from a given Rorschach card would generate dependent or aggressive impulses, and that the generation of such impulses would more than likely be associated with the other impulse. Utilizing sequence analysis guidelines, we anticipated that the two impulses would be in close proximity to each other in Rorschach responses. As stated earlier, we predicted that this mixture would be most frequently found in the sexual homicide perpetrators (high aggression toward others, high interpersonal dependency), followed by the pedophiles (moderate levels of aggression toward others, high interpersonal dependency) and non-sexually offending psychopaths (high aggression toward others, low interpersonal dependency). That is, SHPs > NVPs > NSOPs.

RESULTS

Demographics

Demographic data are presented by Gacono *et al.* (2000). However, it should be noted that Gacono *et al.* reported that pedophiles were both significantly older and better educated than psychopaths or sexual homicide perpetrators. Psychopaths and sexual homicide perpetrators contained male and female subjects, while pedophiles were all male.

Interrater agreement for the PCL-R scores and Rorschach variables are reported by Gacono *et al.* (2000). Interrater agreement was also computed for ROD and Aggression special scores. Twenty individuals' protocols were randomly selected for reliability analysis, which was conducted by the third author. The two raters agreed on 97% of the ROD scores. Kappa was computed to be 0.72. The interrater reliabilities for the Aggression special scores were also good. The two raters agreed on 97% of the Aggression Content scores ($\kappa = 0.97$), 99% of the Aggression Potential scores ($\kappa = 0.99$), 99% of the Aggression Past scores ($\kappa = 0.99$), and 99% of the Sadosomochism scores ($\kappa = 0.99$).

Analyses

Means, standard deviations, and frequencies of the selected Rorschach variables are presented in Tables 1 and 2 along with reports of effect sizes, as computed by the methodology suggested by Rosnow, Rosenthal, and Rubin (2000). For the measures of oral dependency and oral dependency coupled with aggression scores, the F values reported are focused contrast F values. It was hypothesized *a priori* that these variables' means would be ordered in the following direction: oral dependency, SHPs > NVPs > NSOPs, and oral dependency-aggression, SHPs > NSOPs > NVPs. There were significant main effects on one-way analyses of variance for the mean number of ROD responses ($F(1, 107) = 5.14, p = 0.013, r = 0.19$) and the ROD score expressed as a percentage of R ($F(1, 107) = 4.00, p = 0.024, r = 0.18$). Tukey *post hoc* analyses indicated the following pattern of significant differences in means: ROD mean (NVPs > NSOPs) and ROD score expressed as a percentage of R (NVPs, SHPs > NSOPs). Significant main effects were also found for the mean number of ROD responses that were associated with aggression special scores ($F(1, 107) = 4.93, p = 0.015, r = 0.21$) and ROD percentages that were associated with aggression content special scores ($F(1, 107) = 7.09, p = 0.004, r = 0.25$). Tukey *post hoc* analyses were conducted and the following results were obtained: mean number of RODs that included aggression special scores, SHPs > NVPs, NSOPs, and ROD percentages that included aggression special scores, SHPs > NVPs, NSOPs. These results are presented in Table 1.

The aforementioned variables were also analysed with non-parametric tests, as these variables are low base rate variables that may violate the distribution assumptions implicit in parametric tests (i.e. ANOVA; see the work of Viglione (1995) for a discussion of this issue). The following significant results were obtained: number of RODs produced, $\chi^2 = 16.42, p < 0.001, r = 0.24$.

Table 1. Means, standard deviations, and frequencies for oral dependency and oral dependency-aggression variables

	Psychopaths	Pedophiles	Sexual hom. perp.	<i>p</i>	<i>r</i> ^{cs}
Variable	(<i>n</i> = 32)	(<i>n</i> = 39)	(<i>n</i> = 38)		
ROD number	3.48 (2.84) ^b	8.31 (6.94) ^a	6.32 (4.35)	0.013	0.19
	(0) 6%	5%	5%	< 0.001*	0.24
	(1) 23%	0%	8%		
	(2) 16%	5%	5%		
	(3) 19%	13%	8%		
	(4+) 36%	72%	73%		
ROD %	0.17 (.13) ^b	0.26 (0.15) ^a	0.25 (0.16) ^a	0.024	0.18
ROD number sequentially paired or co-occurring with Aggression special scores					
	1.63 (1.88) ^b	1.82 (1.52) ^b	3.13 (3.73) ^a	0.015	0.21
	(0) 34%	23%	29%	0.116*	
	(1) 25%	23%	8%		
	(2) 16%	23%	26%		
	(3+) 25%	31%	37%		
ROD % sequentially paired or co-occurring with Aggression special scores					
	0.08 (0.09) ^b	0.06 (0.05) ^b	0.14 (0.19) ^a	0.004	0.25
ROD sequentially paired or co-occurring with Aggression special scores/Total ROD					
	0.42	0.26 ^b	0.47 ^a	0.045	0.24

r^{cs} is the computation of effect size as suggested by Rosnow et al. (2000). Superscripts indicate that means differ significantly at *p* < 0.05 on the Tukey *post hoc* test. *indicates the *p* value when frequencies were evaluated with a χ^2 test.

Table 2. Means, standard deviations, and frequencies of aggression special scores

	Psychopaths	Pedophiles	Sexual hom. perp.	<i>p</i>
Variable	(<i>n</i> = 32)	(<i>n</i> = 39)	(<i>n</i> = 38)	
AgC	2.65 (1.92)	3.00 (2.08)	3.21 (2.41)	0.556
AgC %	0.137 (0.10)	0.116 (0.12)	0.128 (0.10)	0.679
	(0) 6%	10%	5%	0.555
	(1) 25%	5%	21%	
	(2) 29%	31%	24%	
	(3+) 40%	54%	50%	
AgPast	0.68 (1.05)	0.38 (0.67) ^b	1.05 (1.49) ^a	0.036
AgPast %	0.036 (0.06)	0.015 (0.03) ^b	0.048 (0.06) ^a	0.018
	(0) 55%	72%	45%	0.042
	(1) 35%	18%	32%	
	(2+) 10%	10%	23%	
AgPot	0.03 (0.18) ^b	0.21 (0.47) ^b	0.71 (1.14) ^a	0.001
AgPot %	0.00 (0.01) ^b	0.01 (0.02) ^b	0.036 (0.07) ^a	0.002
	(0) 97%	82%	58%	< 0.001
	(1) 3%	15%	26%	
	(2) 0%	3%	10%	
	(3) 0%	0%	6%	
SM	0.19 (0.40)	0.03 (0.16) ^b	0.45 (1.13) ^a	0.037
SM %	0.011 (0.02)	0.00 (0.01) ^b	0.01 (0.04) ^a	0.030
	(0) 81%	97%	76%	0.022
	(1) 19%	3%	16%	
	(2+) 0%	0%	8%	

All aggressive content scores were evaluated with an omnibus ANOVA. The following significant effects were found: AgPast, $F(2, 107) = 3.43$, $p = 0.036$; AgPast as a percentage of R , $F(2, 106) = 4.18$, $p = 0.018$; AgPot, $F(2, 106) = 8.38$, $p = 0.001$; AgPot as a percentage of R , $F(2, 106) = 6.42$, $p = 0.002$; SM, $F(2, 106) = 3.41$, $p = 0.037$; and SM as a percentage of R , $F(2, 106) = 3.64$, $p = 0.030$. Tukey *post hoc* analyses were conducted, and the following results were obtained: AgPast, SHPs > NVPs; AgPot, SHPs > NSOPs, NVPs; and SM, SHPs > NVPs. A similar pattern of *post hoc* results was obtained when these analyses were conducted on these variables while controlling for R . These results are presented in Table 2. The aforementioned variables were also analysed with non-parametric tests, as these variables are low base rate variables that may violate the distribution assumptions implicit in parametric tests (i.e. ANOVA; see the work of Viglione (1995) for a discussion of this issue). Furthermore, we were interested in assessing the difference in frequencies among the three groups. The following results were obtained: AgPast, $\chi^2 = 6.35$, $p = 0.042$; AgPot, $\chi^2 = 16.22$, $p < 0.001$; and SM, $\chi^2 = 7.63$, $p = 0.022$.

To further explore the relationship between dependency and aggression in this sample, Pearson correlations were computed between ROD scores and each of the Gacono–Meyo (1994) aggression scores. The percentage of RODs produced during Free Association was significantly and positively correlated with AgPot as a percentage of R ($r = 0.23$, $p = 0.02$, two tailed) and SM as a percentage of R ($r = 0.19$, $p = 0.05$, two tailed). The percentage of RODs produced in the entire protocol was significantly and positively correlated with AgPot as a percentage of R ($r = 0.26$, $p < 0.01$) and SM as a percentage of R ($r = 0.22$, $p = 0.02$).

DISCUSSION

The results of our findings add to the growing body of literature supporting the utility of the ROD in understanding dependency and aggression. Two of our groups were sexually deviant (SHPs, NVPs), and two had histories of aggression (NSOPs, SHPs). Consistent with the idea that dependency or interpersonal strivings fuel their behavior, ROD scores were elevated in our sexually deviant groups (SHPs, NVPs). The frequent pairing of dependency and aggression in SHPs (almost 50% of ROD scores were accompanied by aggression) offers a Rorschach marker that differentiates the real world behaviors of the SHP (sexually violent) and NVP (sexually nonviolent). These findings will be discussed in greater detail.

Psychopaths appear to lack interpersonal relatedness. Given the low frequency of ROD scores, the absence of Texture responses in their records, and the low frequency of COP (Gacono *et al.*, 2000), psychopaths have very little “need” for others, except related to narcissistic enhancement (elevated reflections; Gacono *et al.*, 2000). Additionally, dependency, when infrequently expressed, was often associated with aggression, a finding consistent with the high frequencies of Kwawer’s (1980) violent symbiosis responses previously reported in psychopaths (Gacono & Meyo, 1994). It appears that whatever levels of dependency remain in the psychopath act as an irritant rather than a source of affectional relatedness (see Gacono & Meyo, 1991, for a discussion of negated and spoiled T responses).

In contrast, pedophiles seem to have greater interest in interpersonal relatedness, as they had the highest levels of oral dependency. As noted previously, pedophiles tend to feel damaged and experience low self-esteem and dysphoria (Bridges et al., 1998; Gacono et al., 2000). Their acting out may be triggered by such feelings and fueled by the dependency identified by the ROD. Consistent with their history of "nonviolence," our findings suggest that pedophiles' dependency needs are the least associated with aggressive impulses of the three groups.

Sexual homicide perpetrators were found to have relatively high levels of oral dependency, which was consistent with their relatively high levels of Texture and Food responses (Gacono et al., 2000). Yet, much of their dependency was associated with aggressive content. Furthermore, SHPs had the highest levels of the aggressive special scores of Gacono and Meloy (1994) on three of the four categories (AgPast, AgPot, and SM), suggesting that they are highly preoccupied with aggressive impulses, including the dangerous mix of sadomasochistic ideation. Gacono et al. (2000) found that SHPs have high levels of dysphoria, interpersonal yearning, cognitive distortion, and obsession, coupled with an inability to disengage from the environment (low Lambdas). Thus, when complex ideation coupled with sexual arousal meets a certain threshold, sexual homicide perpetrators act from their internal fusion of sexual, dependent, and aggressive impulses collectively. Consistent with the use of projective identification, SHPs project their oral needs into their victims and then react with rage, disgust, and violence in attempt to eradicate these needs (see Gacono & Meloy, 1988). This group's high levels of thought disturbance ($X - \% = 26$; $X + \% = 0.47$; $WSUM6 = 23.00$; see Gacono et al., 2000) provides a template for the cognitive and perceptual distortions that allow such behavior. These findings are best reflected in one SHP's Rorschach response, "a lonely bird of prey out looking for a relationship."

The present findings have important implications in understanding and assessing these groups of patients. First, our results demonstrate the utility of projective assessment in detecting implicit needs and motives that may not otherwise be acknowledged (McClelland, Koestner, & Weinberger, 1989). Bannatyne et al. (1999) and Gacono et al. (2002) state that the Rorschach is especially helpful in assessing forensic patients who tend to misrepresent themselves in traditional self-report measures. Since dependency is often unacknowledged by SHPs, NVPs, and NSOPs, and because dependent and aggressive impulses are often associated within these individuals, it appears that the ROD is a meaningful tool by which to further elucidate the psychopathology of these individuals beyond traditional self-report measures.

Second, effects obtained in this study provide meaningful information about individuals incarcerated for sexual and/or aggressive deviance. Although the present effect sizes are generally considered to be small (Cohen, 1988), the practical and clinical significance of these findings is notable. "Practical significance" indicates not only the magnitude of the difference between group means, but also its meaning for the question being asked (Kirk, 1996). "Clinical significance" refers to the phenomenon of whether the method applied to a reference group has any positive or real effect (Kazdin, 1999). From the perspective of practical significance, the present study set out to determine whether there is a detectable difference in levels of Rorschach oral dependency among the three groups. As this study may have been the first of its kind, the findings suggest that, indeed, there is a detectable difference

in the levels of interpersonal dependency in these groups. From the perspective of clinical significance, the present findings demonstrate that incarcerated individuals with criminal histories can be meaningfully differentiated by their levels of dependency and aggression. Such differences may affect the way that inmates interact with each other, with forensic officials, and with mental health professionals who are faced with the task of evaluating them. Thus, despite the positive correlations that exist between oral dependency and aggressive potential and sadomasochistic content for the entire sample, analyses of group differences indicate that SHPs and NSOPs are much more likely to associate dependency and aggressive impulses, while NVPs are not.

In an exploratory set of analyses, aggressive content scores (Gacono & Meloy, 1994) were evaluated. Since no research has been conducted on this scoring system with these groups, it was uncertain what differences might exist. All three groups had aggressive content (AgC), past aggression (AgPast), and potential aggression (AgPot) mean scores higher than has been reported in nonclinical samples (Gacono & Meloy, 1994). Among the groups, SHPs had significantly higher means of AgPast, AgPot, and SM than NVPs and significantly higher AgPot means than NSOPs. Consistent with Gacono *et al.* (2002), it appears that SHPs are preoccupied with aggression and its expression against others.

The present findings are limited in that they may only apply to NSOPs, NVPs, and SHPs who are incarcerated. It may be that, when such individuals are not within the restrictive environment of a prison, their levels of dependency and aggression would differ. Likewise, it is uncertain whether the association of dependency and aggression would be found in individuals who commit lesser crimes, or who have other serious psychopathology (e.g., schizophrenia or severe personality disorders). Nonetheless, given the similarities among members of each group with respect to their crime, cognitive functioning, and state of incarceration, the present findings meaningfully demonstrate how implicit assessment of dependency and aggression allows clinicians and researchers to better understand the intrapsychic dynamics that fuel their deviant behavior. Thus, the Rorschach Oral Dependency scale continues to remain a meaningful tool for clinicians to better understand personality dynamics and corresponding behavioral disorders.

ACKNOWLEDGEMENT

Special thanks are extended to Ariel Graham for her assistance in data entry.

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