

## THE AGGRESSION RESPONSE AND THE RORSCHACH

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We propose the addition of four aggressive indices for Rorschach scoring: aggressive content, aggressive potential, aggressive past, and sado-masochism scores. Interrater agreement is presented and ranges from 92-100%. Nomothetic comparisons are made between groups with higher base rates for violence with mixed results, although the sado-masochism frequency was significantly higher in severe psychopaths than in moderate psychopaths. Idiographic use of the aggression indices is emphasized, with a particular focus upon inferring the quality, intensity, and directionality of intrapsychic aggression in relation to self and object representations.

The ego's capacity for tolerating and channeling aggressive impulses serves a critical role in both abnormal and normal development (Freud, 1936). When aggression and envy overwhelm infant libidinal drive, impairment occurs in the developmental process of defense formation and subsequent part and whole object integrations (Jacobson, 1964). This is evident in severe personality disorders (Kernberg, 1984), such as the anti-social disorder where aggressive drives are a central component in the maintenance and restoration of the grandiose self-structure (Bursten, 1972; Meloy, 1988).

Rapaport, Gill, and Schafer (1946/1968) wrote that direct or implicit aggressive content in the Rorschach implied "a great tension of aggressions within the subject" (p. 460), but were careful not to draw any inferences regarding the significance of this response to the subject's behavioral aggression. Schafer (1954) emphasized the thematic analysis of the Rorschach aggressive content through libidinal drives and orientation to the object. Holt (1960) scored aggressive content in his primary process system along three points of an active-passive continuum: attacks, victims, and results.

The Rorschach measurement of aggression and its correlations to behavior have also been of interest to other researchers when embedded in destructive content (Finney, 1955; Rose & Bitter, 1980), white space (Carlson & Drehmer, 1984), color responses (Sommer & Sommer, 1958), hostile content (Towbin, 1959), hostile and anxious content (Gorlow, Zimet, & Fine, 1952), and aggressive drive and inhibitory controls (Rader, 1957). These findings, although demonstrating trends, were just as often equivocal as markers for behavioral aggression. The question of the relationship between the Rorschach aggression response and behaviors of aggression toward self or others also finds merit in the ongoing controversy concerning the relevancy of psychometrics to violence assessment (Monahan, 1981).

Exner (1986) eliminated variations of scoring of aggressive content in his Comprehensive System and circumscribed the aggressive movement score (Ag) to aggressive

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action that is only occurring in the present. In three subsequent studies Exner (1986) reported mixed results concerning the relationship of the Ag score to verbal and nonverbal measures of aggression in an experimental paradigm with inpatient groups (Kazaoka, Sloane, & Exner, 1978), in a naturalistic study of sixth-grade children (Exner, Kazaoka, & Morris, 1979), and a long-term "treatment effects" study of outpatients (Exner, 1986). Exner concluded that these studies appeared to support the notion that elevations in Ag signify an increased likelihood of aggressive behaviors.

We think that the elimination of other categories of aggression in the Comprehensive System, although solving the problem of interjudge reliability, has grossly reduced the usefulness of aggression responses to the Rorschach as a source of nomothetic comparison and idiographic understanding. This appears to be particularly true in samples of individuals with high base rates for physical violence, such as primary or severe psychopaths (Hare & McPherson, 1984), and patients with unusual psychodynamic object fixations in their choice of victim, such as violent erotomanics (Meloy, 1989).

We would like to introduce four additional scoring categories, in addition to the Comprehensive System Ag response, for aggression on the Rorschach. We think they hold promise for a deeper understanding of intrapsychic aggressive drives and object cathexis, and interpersonal violence and object attachment.

### AGGRESSIVE CATEGORIES

#### *Aggressive Movement (Ag)*

Any movement response in which the action is clearly aggressive and is occurring in the present (Exner, 1986). Example: (Card III) "It's two people pulling a crab apart."

#### *Aggressive Content (AgC)*

Any content popularly perceived as predatory, dangerous, malevolent, injurious, or harmful: "Popular" responses in the Comprehensive System (Exner, 1986) are not scored as aggressive content. Example: (Card VI) "It's a gun;" second example: (Card IX) "It's a demon with claws" (this second percept would only receive one Ag Content score). We revised the originally published definition of Aggressive content (Gacono, 1988, 1990) to improve interjudge reliability. Two groups of individuals, undergraduate college students and mental health professionals, were asked to rate 280 objects listed in the Comprehensive System workbook (Exner, 1985) and identified in psychopathic protocols according to our Aggressive Content definition.

The 85 objects listed in Table 1 were identified by a majority of at least one of the survey groups as content popularly perceived as predatory, dangerous, malevolent, injurious, or harmful. The results may serve as a guide for scoring AgC and as markers for the extrapolation of other objects that should be scored AgC.

#### *Aggressive Potential (AgPot)*

Any response in which an aggressive act is getting ready to occur. Usually the act is imminent (Gacono, 1988, 1990). Example: (Card X) "Two little alien creatures . . . being threatened to have their catch taken away from them by crab-like creatures, real predators . . . they don't know these crab creatures are going to lop their heads off (laughs)." If the same two objects are involved in more than one act or potential act in a response, it should only be scored once. This category of aggression may implicate certain sadistic features in the subject and finds its corollary in the "sadism" response of Schafer (1954) and the "attack (sadistic aggression)" response of Holt (1960).

Table 1  
Rorschach Content Popularly Perceived as Aggressive as Rated by Undergraduate Students and Mental Health Professionals, Frequencies and Percentages

Content	Students' ratings (n = 31)		Ment. health prof. ratings (n = 32)	
	Freq.	%	Freq.	%
Arrow	21	68	25	78
Axe	20	67	29	71
Barracuda	24	77	17	53
Bat	15	48	17	53
Battleship	22	71	24	75
Beast	20	67	18	56
Blade	22	71	28	88
Black Widow Spider	27	87	32	100
Bomb	26	84	31	97
Bullet	29	93	30	94
Cage	18	58	11	34
Claws	23	74	26	81
Club	10	32	22	69
Cobra	25	81	31	97
Cockroach	17	55	12	38
Copperhead	22	71	26	81
Crocodile	14	45	24	75
Demon	29	93	26	81
Devil	27	87	30	94
Devil's Sign	23	74	26	81
Dive Bomber	15	48	28	88
Dracula	25	81	30	94
Dragon	22	71	20	63
Explosion	31	100	31	97
Fangs	22	71	31	97
Fire	19	61	25	78
Fist	13	42	23	72
Forest Fire	23	74	29	91
Frankenstein	18	58	27	84
Garrote	3	10	25	78
Goblins	17	55	17	53
Gun	25	81	27	84
Hammer	5	16	18	56
Hatchet	25	81	26	81
Hurricane	29	93	27	84
Jackal	12	39	16	50
Jellyfish	17	55	13	41
Killer Whale	14	45	25	78
King Kong	16	52	17	53
Knife	28	90	32	100
Lion	12	39	22	69
Missile	28	90	27	84
Medusa	24	77	21	66
Mummy	16	52	16	50
Monster	25	81	28	88
Mushroom Cloud (Explosion)	28	90	28	88
Needle	15	48	20	63
Noose	20	64	21	66
Nuclear Cloud	26	84	27	84
Nuclear Warhead	31	100	32	100
Panther	14	45	23	72

Table 1 (continued)  
Rorschach Content Popularly Perceived as Aggressive as Rated by Undergraduate Students and Mental Health Professionals, Frequencies and Percentages

Content	Students' ratings (n = 31)		Ment. health prof. ratings (n = 32)	
	Freq.	%	Freq.	%
Pick	11	36	16	50
Pincers	18	58	23	72
Rats	10	32	19	59
Rattlesnake	27	87	31	97
Rifle	23	74	32	100
Saw	16	52	14	44
Scorpion	26	84	30	94
Shark	26	84	28	88
Sharp Teeth	20	64	23	72
Shotgun	28	90	32	100
Sledgehammer	20	64	21	66
Snake	17	55	25	78
Spear	20	64	27	84
Spider	16	52	16	50
Spike	16	52	16	50
Sticker Bush	21	68	23	72
Syringe	15	48	21	66
Tarantula	24	77	32	100
Tiger	14	45	24	75
Tire Iron	5	16	19	59
Tomahawk	21	68	26	81
Tornado	27	87	26	81
Torpedo	27	87	30	94
Torch	16	52	18	56
Vampire	26	84	30	94
Vampire Bat	25	81	28	88
Venus Fly Trap	6	19	16	50
Volcano (erupting)	31	100	28	88
Volcano	21	68	24	75
Wasp	23	74	24	75
Water Moccasin	21	68	27	84
Wolf	13	42	21	66
Wolfman	19	61	27	84
Yellow Jacket	21	68	19	59

The above content was selected from a sample of 240 objects listed in the Exner Workbook (Exner, 1985) and 40 additional objects identified in Rorschachs of psychopathic individuals. The items in this table were viewed as aggressive by greater than 50% of at least one of the survey groups.

#### Aggressive Past (AgPast)

Any response in which an aggressive act has occurred or the object has been the target of aggression (Gacono, 1988, 1990). Example: (Card X) "Looks like a bug here, someone used a drill press on him, blood here." This category of aggression may implicate certain masochistic features and finds its corollary in the "masochism" response of Schafer (1954) and the "results of aggression" response of Holt (1960). It is often accompanied by a Morbid score in the Comprehensive System (Exner, 1986).

#### Sado-masochism (SM)

Any response in which devalued, aggressive, or morbid content is accompanied by pleasurable affect expressed by the subject (Gacono, 1988, 1990; Meloy, 1988). Example:

(Card VII) "A lady dancing and she got her head blown off (laughs)." The pleasurable affect is usually expressed through smiling or laughing, but the examiner should be careful not to misinterpret anxious behavior as pleasurable affect. A social desirability factor may also quickly inhibit the expression of pleasurable affect that accompanies this response. A marked lack of inhibition of the SM response, however, may signal the ego syntonic nature of the sado-masochistic impulse. The subject's identification with either the victim or the aggressor during the SM response on inquiry may also suggest the primacy of a sadistic or masochistic orientation to objects.

Occasionally, subjects will combine the various indices of aggression in one response. All indices should be scored. For example: (Card II) "A bear getting shot (Ag) . . . on one side this is the instant before he's shot (AgPot), this is the instant after (AgPast)."

#### INTERJUDGE RELIABILITY

Thirty Rorschach protocols of DSM-III-R Antisocial Personality Disordered (American Psychiatric Association, 1987) incarcerated adult males were randomly drawn from a larger subject pool ( $N = 60$ ). The aggression categories were independently scored by the two authors to determine interjudge reliability. The interjudge reliability of the SM score could not be determined due to the Rorschach examiner's need to observe the examinee to score this variable and the presence of only one examiner during the administration of these Rorschachs.

Table 2  
Agreement between Raters for Aggressive Scoring

Score	Times rated	Percent agreement
Aggressive Movement	13	92%
Aggressive Content	107	95%
Aggressive Past	24	96%
Aggressive Potential	3	100%

The interrater agreements for the Comprehensive System Ag category (Exner, 1986) and the three experimental aggressive scores are listed in Table 2. The Ag agreement was 92%, the Ag Content agreement was 95%, the Ag Potential agreement was 100%, and the Ag Past agreement was 96%.

#### NOMOTHETIC APPLICATIONS

We then compared the various indices of aggression between two groups of antisocial personality disordered (American Psychiatric Association, 1987) incarcerated males, all serving time for various felonies in California institutions. The two groups were divided into moderate psychopaths and severe psychopaths, based upon scores from the Hare Psychopathy Checklist (Hare, 1980), a reliable and valid measure of psychopathy in criminal populations (Hare, McPherson, & Forth, 1988; Schroeder, Schroeder, & Hare, 1983). The reason for this comparison was to test the sensitivity of the various indices of aggression in distinguishing between groups with suggestively different histories of violence (Hare & Jutai, 1983; Hare et al., 1988). Hare and McPherson (1984) found in three studies that those individuals scoring  $> 30$  on the Hare Psychopathy Checklist (PCL) were more likely to have a conviction for a violent crime, were more likely to use a weapon, and were more likely to verbally abuse, threaten, and fight while in prison, when compared to those individuals scoring  $< 30$  on the PCL.

The 43 male offenders selected for this comparison were free of an Axis I diagnosis of functional psychosis or organic mental disorder as determined by a review of records

and a clinical interview. Subjects with an IQ  $< 80$  were excluded. All subjects were taken from a randomly selected population of Antisocial Personality Disordered (American Psychiatric Association, 1987) individuals incarcerated in a California state prison or county detention facility (Gacono, 1990).

The subjects were administered the Rorschach using the Comprehensive System rules (Exner, 1986). Intelligence estimates were taken from scores on the Shipley Institute of Living Scale (Shipley, 1940; Zachary, 1986) and the Wechsler Adult Intelligence Scale-Revised (Wechsler, 1981). PCL scores were independently rated by each researcher, based upon a clinical interview and records review. Interjudge reliability yielded a Spearman's Rho of .89. An average of the PCL scores for each rater produced the final PCL score.

Twenty-two individuals who scored  $> 30$  on the PCL ( $M = 33.15$ ) were assigned to the severe psychopathy group. Four were Black, 14 were Caucasian, and 4 were Hispanic. Average age was 30.4 years ( $SD = 7.05$ ), and average IQ was 103.6 ( $SD = 11.13$ ). Twenty-one individuals who scored  $< 30$  on the PCL ( $M = 23.93$ ) were assigned to the moderate psychopathy group. Seven were Black, 9 were Caucasian, and 5 were Hispanic. Average age was 26.6 years ( $SD = 6.11$ ), and average IQ was 100.5 ( $SD = 8.94$ ). There was no significant difference in age or IQ for the two groups.

The aggression indices were scored blind to the PCL rating. Data were statistically analyzed using chi-square for significant differences between frequencies for the SM response only, and Mann-Whitney U analysis for significant differences in mean scores for the other indices. Findings were considered significant if  $p < .05$ .

Table 3  
A Comparison of Means, Standard Deviations, and Frequencies for Aggressive Rorschach Scores in Severe and Moderate Psychopaths.

Category	Severe psychopathy ( $n = 22$ )				Moderate psychopathy ( $n = 21$ )			
	M	SD	Max.	Freq.	M	SD	Max.	Freq.
Aggressive Movement	.59	.85	3	9	.43	.68	2	7
Aggressive Content	3.95	2.55	9	21	3.10	2.10	8	10
Aggressive Past	1.00	1.15	4	13	1.00	1.34	5	11
Aggressive Potential	.41	.96	4	5	.14	.48	2	2
Sado-masochism	.52*	.68	2	9	.19*	.51	2	3
Total Aggression	6.57	4.27	16	22	4.90	3.41	14	21

No significant differences at  $p < .05$  when means compared using Mann-Whitney U Analysis. Chi-square for SM response found significant difference at  $< .05$  ( $\chi^2 = 3.64$ ). Frequencies equal the number of subjects who produced at least one response.

The results are presented in Table 3. No significant differences were found for any of the indices except SM. The severe psychopaths produced a significantly greater frequency (41%) of sado-masochistic responses than the moderate psychopaths (14%). Trends in the means of the aggression indices are apparent, however, except for aggressive past responses, which showed virtually no difference in means or frequencies between groups. All subjects from both groups produced at least one aggressive score, with aggressive content being most expectable. Fifty-nine percent of the severe psychopaths produced aggressive past responses, and 23% produced aggressive potential responses.

When compared to nonpatient adults, however, both the severe and moderate psychopaths produced less aggressive movement scores. Fifty percent of the nonpatient sample (Exner, 1986) produced at least one aggressive movement response ( $M = .72$ ), while only 41% of the severe psychopaths and 33% of the moderate psychopaths produced one aggressive movement response ( $M = .59$  and  $.43$ , respectively).

## IDIOPHIC UNDERSTANDING

Varieties of aggressive responding to the Rorschach also provide a rich source of hypotheses concerning the quality, intensity, and directionality of aggressive drive derivatives toward certain self and object representations. We would like to illustrate these psychodynamics through a case from our subject pool.

Subject HD is a 32-year-old Caucasian male incarcerated for the rape and murder of a stranger adult female when he was 27. Clinical interview and psychological testing reveal a severe, or primary psychopathic character organized at a borderline level of personality organization. Test indices include a Hare Psychopathy Checklist Score of 34 (Hare, 1980), an MMPI high point pair of 4 (T = 86) and 5 (T = 82), and a WAIS equivalent score (Shipley) of 110.

HD produced a 13-response Rorschach protocol. Counting of the aggressive scores indicated 1 Aggressive response (Exner, 1986), 5 Aggressive Content responses, 4 Aggressive Potential responses, 4 Aggressive Past responses, and 2 Sado-masochism responses. Examples of scoring the various indices include:

Card III: A woman that's had an abortion and she is having difficulty dealing with regrets afterwards (laughs) [score SM and AgPast]. This is great. Inquiry: As if suddenly they looked in the mirror and saw themselves. They realize it takes two to tango. (?) The red bloody figures. The little bloody fetus. I don't get anything at all from the red in the middle.

Card IV: Your basic ten-story childhood nightmare monster. It gives the illusion of great height and size [score Ag Content]. Inquiry: Brought back childhood nightmares. They're about to get trampled [score Ag Potential]. Nothing they can do about it, it's so high.

Card X: I have a busy one here. Ever hear of Frank Stella? I think he did this. Two little alien creatures who have caught a larger creature for game [AgPast]. Who are being threatened to have their catch taken away from them by crab like creatures [AgPot], real predators [AgC]. On the hunting trip. I feel like a voyeur. Crab creatures offered them, not knowing their buddy had ate it [AgPast]. They don't know these crab creatures are going to lop their heads off [AgPot]. (laughs) [Score SM]. That's a Rorschach original.

The subject's final response highlights the degree to which the sadomasochistic expression of his aggressive drive oscillates between self and object representations and the past and the future. Identifications shift between "little creatures" and "real predators," and aggression shifts between an imminent act and one that has just occurred. Yet present aggression is absent in this detached and narcissistically enhanced response. Real-world behavior for this individual revealed physical fights and weapons use beginning at age 10, multiple suicide attempts beginning at age 12, prosecution for lewd and lascivious behavior with a 13-year-old nephew, a self-reported "date rape" at age 23, and the rape-homicide at age 27. There was also a period of rehearsal fantasy in which he ruminated about murdering a stranger female for 2 weeks prior to the instant offense.

Prentky et al. (1989) found support for the hypothesis of rehearsal fantasy as an internal drive mechanism for repetitive acts of sexual homicide. Meloy (1988) theorized that the Rorschach  $Ma < Mp$  ratio (Exner, 1986) may be a psychostructural indicator for such fantasy abuse in sexual psychopaths, applying the "Snow White" phenomenon identified by Exner (1986) to this antisocial form of rehearsal fantasy. HD had a  $Ma:Mp$  ratio of 1:2, providing some idiographic validation for this hypothesis, and further elaborating the nature of his intrapsychic aggression.

Another idiographic use of the Rorschach aggression indices is based upon the experimental work of Flynn and his colleagues (Flynn, 1967; Flynn & Bandler, 1975) and Meloy's (1988) psychobiological model of human violence as either *affective* or *predatory*.

Affective violence is an emotionally motivated behavior in reaction to an imminent threat. Predatory violence is an emotionless behavior that is planned and purposeful. Both forms of violence have distinctive biochemical and neuroanatomical pathways (Eichelman, Elliott, & Barchas, 1981). We would expect that Rorschach corollaries of such modes of violence could be distinguished by both the aggressive scoring and the determinants. The articulation of predatory aggression in a Rorschach response would usually contain an Aggressive Potential in the absence of a color or shading dominated determinant. The articulation of affective aggression would usually not contain Aggressive Potential, but would include chromatic color or shading dominated determinants. Both forms of aggression, and these idiographic subtleties, are illustrated in responses to Card III and Card IV above. Card III, the affective aggression response, would be determinant scored  $Mp.CFo$  without an aggressive potential. Card IV, the predatory aggression response, would be determinant scored  $FDo$  with one aggressive potential. Severely psychopathic individuals are both psychobiologically and psychodynamically predisposed to predatory aggression (Meloy, 1988), and we have anecdotally found a greater likelihood of predatory responses in psychopathic Rorschach protocols than in other populations.

In criminal forensic settings, individuals may also verbalize or infer certain weapons as aggressive content. BC, a 45-year-old female incarcerated for the shooting and decapitation of an ex-boyfriend, gave the following response to Card VI:

A file of fish already to put in a frying pan. (Inquiry) I'm not seeing the tail with Indian feathers. Just the file of fish (?) Side by side. It's been deboned (laughs), sorry I shouldn't have said that term. He'll be ready to go into the frying pan or perhaps is already in the pan. (?) I knew you were going to hit me on that. No spine, no substance, no form, a blob. A piece of fish to be cooked. Or perhaps a fudgesicle that's been allowed to set in the sun and melt.

When we reviewed her crime, we discovered that she had used a "deboning" knife to decapitate her victim. This remarkable response suggests a temporally stable, and highly cathected, object representation of her weapon and act that was evoked during the mediation and ideation phases of the Rorschach response process (Exner, 1986) 7 years after the homicide.

## DISCUSSION

Various Rorschach indices of aggression appear less promising for the nomothetic comparison of different groups than for the idiographic understanding of the quality, intensity, and directionality of aggressive impulses for a particular individual.

Our findings of no significant differences between moderate and severe psychopaths on the aggressive scores, however, should be accepted with caution. Although samples of severe psychopaths have significantly greater histories of violence (Hare & McPherson, 1984) than moderate psychopaths, we had insufficient data to determine whether our two groups of offenders were significantly different in real-world violent behavior. Therefore, our results may only parallel an actual insignificant difference in violence. Hare and McPherson (1984) were able to correctly classify 76.2% of their violent subjects through a direct discriminant analysis using the Psychopathy Checklist, with 22% false negatives and 30% false positives. Although the PCL is a highly useful behavioral trait instrument to infer a violent history, it should not be used alone as an independent measure of violence risk in criminal populations. We would likewise suggest that the mean or frequency of the various aggression responses not be used as a discriminating variable in the assessment of violence risk, especially in populations with low base rates for violence, until further research has been done.

The lesser mean amount of Aggressive movement (Exner, 1986) responses in psychopaths when compared to normals is not surprising because Meloy (1988) warned

that the face validity of the Ag response may prompt the psychopath to disregard, and not verbalize, his Ag associations to the Rorschach. The ego syntonic nature of aggression and violence in psychopaths may incline them to recognize more easily social or clinical situations in which aggressive responding should not occur, leading them to censor their responses (Exner, 1986).

The psychopath's perception of aggression in an ambiguous stimulus situation like the Rorschach process also may not lead to a cognitively mediated associational link to aggression. Instead, it may be motorically channelled in a more alloplastic fashion without any fantasy elaboration. This would be more in keeping with the primitive defensive operations of the severe psychopath (Meloy, 1988).

The significantly greater frequency of sado-masochistic (SM) responses in the severe psychopaths supports our thinking that this index may hold promise for the projective understanding of this troublesome human characteristic. Both psychodiagnostic and psychodynamic formulations suggest a link between sadism and antisocial character (American Psychiatric Association, 1987; Meloy, 1988; Shapiro, 1981). Although probably not sensitive to the predominance of sadomasochism in personality, the SM index may be quite specific to this deeply endogenous characteristic.

The idiographic usefulness of the various indices of aggression in understanding the subtle motivational and object relational meanings of intrapsychic aggression has been suggested. As we alluded to earlier and illustrated in the responses of subject HD, the Aggressive Potential (AgPot) and the Aggressive Past (AgPast) may represent both an active-passive continuum of aggression, as noted by Holt (1960), and a predominant sadistic (AgPot) or masochistic (AgPast) position in relation to early developmental and later adult objects. The AgPot, Ag, and AgPast responses also denote a temporal sequence that may implicate certain instinctual tensions or aims (Fenichel, 1953).

The structural ratio  $Ma < Mp$  and its suggestive association with rehearsal fantasy in sexual homicide (Prentky et al., 1989) is a testable hypothesis for future research. It also may be linked to the Rorschach representation of predatory aggression (Aggressive Potential without chromatic color or shading dominated determinants) since, by definition, it is a wishful, planned, purposeful, and emotionless form of aggression. Affective aggression, however, is most likely to be perceived in the Rorschach given its real-world prevalence (Meloy, 1988) and the plethora of aggressive indices, shading responses, and chromatic color responses through which it could be verbalized.

Aggressive content may represent an unusual and highly cathected individual weapon and act in certain forensic cases, as illustrated by subject BC, but more commonly may indicate an identification with aggressive objects in general. It may also implicate certain oral ("devouring mouths"), anal ("exploding bombs"), or phallic ("cutting knives") psychosexual zones or modes (Erikson, 1950; Schafer, 1954).

The various indices of Aggressive responses to the Rorschach appear to be a rich source for understanding the structure and dynamics of an individual's intrapsychic aggression. Links to real-world behavior are suggestive, especially with individual cases, but have not been nomothetically demonstrated with any certainty. Our additional scoring categories should provide hypotheses for additional research concerning that "darkling plain, swept with confused alarms of struggle and flight, where ignorant armies clash by night" (Arnold, 1822-1888).

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### HUMAN FIGURE DRAWINGS: VALIDITY IN ASSESSING INTELLECTUAL LEVEL AND ACADEMIC ACHIEVEMENT

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In a sample of 216 child and adolescent psychiatric inpatients, significant but low correlations were found between Goodenough-Harris (GH) drawing scores and both Full Scale IQs and academic achievement. The percentage of subjects correctly classified in appropriate IQ categories ranged from 35 to 44%; the percentage of misclassified subjects ranged from 56 to 65%. Consideration of visual-motor integration, using the Bender-Gestalt, did not improve the accuracy of G-H scores in predicting IQ scores in this sample. These results indicate that human figure drawings should not be substituted for other well-established intelligence and achievement tests nor used as an additional measure of these constructs when one is evaluating psychiatric patients.

Human figure drawings have been evaluated widely for their usefulness as predictors of intelligence and academic achievement (e.g., Scott, 1981). The Goodenough-Harris (G-H) scoring system in particular was developed to evaluate empirically qualitative aspects of human figure drawings in order to assess developmental maturity (Harris, 1963). This system includes a total of 144 items (73 items for the male drawing and 71 items for the female drawing) for scoring detail, position, and proportion of both a male and female drawing. Clinicians and researchers have found the G-H system attractive because it is efficient, widely applicable, and apparently unbiased. However, its actual ability to predict those constructs for which it was developed has not been established firmly.

Scott's (1981) review article on human figure drawings reported on results of several studies that determined the mean correlation between G-H male drawings and individual tests of intelligence to be about .49. The G-H woman point scale has not been investigated