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MALINGERING DISSOCIATIVE IDENTITY DISORDER: OBJECTIVE AND PROJECTIVE ASSESSMENT[1,2]

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Summary.—Verification of dissociative identity disorder presents challenges given the complex nature of the illness. This study addressed the concern that this disorder can be successfully malingered on objective and projective psychological tests. 50 undergraduate women were assigned to a Malingering or a Control condition, then completed the Rorschach Inkblot Test and the Dissociative Experiences Scale II. The Malingering group were asked to simulate dissociative identity disorder; controls received instructions to answer all materials honestly. Analysis indicated that malingerers were significantly more likely to endorse dissociative experiences on the Dissociative Experiences Scale II in the range common to patients with diagnosed dissociative identity disorder. However, on the Rorschach there were no significant differences between the two groups. Results suggest that the assessment of dissociative identity disorder requires a multifaceted approach with both objective and projective assessment tools. Research is needed to assess these issues in clinical populations.

Patients with Multiple Personality Disorder (MPD) present two or more distinct personalities or states which alternately control the individual's behavior (American Psychiatric Association, 1987). Renamed Dissociative Identity Disorder (American Psychiatric Association, 1994), two new criteria were added, an inability to recall important personal information (not forgetfulness) and the disorder is not substance induced. Because there is little difference diagnostically, these terms tend to be used interchangeably, often referring to the time a report was published.

Traditionally, the diagnosis of Dissociative Identity Disorder has been frequently missed, and the average length of time between a person's initial psychiatric contact and proper diagnosis has been approximately seven years (Coons, Bowman, & Milstein, 1988). More recently, inaccurate diagnosis has become a concern. A false positive diagnosis can occur when the individual has a dissociative disorder other than Dissociative Identity Disorder, has a nondissociative disorder, or is malingering or has a factitious disorder (Chu, 1991). While the differential between Dissociative Identity Disorder and other dissociative disorders is likely the most difficult to make, it has many symptoms in common with other nondissociative mental illnesses such as ma-

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jor depression, schizophrenia, alcohol abuse, and borderline personality disorder (Horevitz & Braun, 1984; Coons, 1988).

A further diagnostic concern relates to the simulation or intentional production of Dissociative Identity Disorder (Putnam, 1989); some individuals in forensic settings have been motivated to feign mental illness to avoid criminal charges (Abrams, 1983; Orne, Dinges, & Orne, 1984; Watkins, 1984). Evaluation of the defendant can be problematic, however, as lawyers and psychologists may subtly encourage the defendant to display dissociative symptoms (Orne, *et al.*, 1984).

Brick and Chu (1991) reported a case of simulation of Multiple Personality Disorder in a clinical setting. In their case, the patient was well informed as to the symptoms expected in individuals abused and with multiple personalities but presented details about the personalities that were uncommon, described events that had not occurred in her life, and admitted to the simulation when confronted. Further, iatrogenic creation of dissociative pathology, especially through hypnosis, has become a concern in clinical settings (Braun, 1984; Kluft, 1987).

Until recently, clinicians making diagnoses of dissociative disorders have relied almost exclusively upon clinical observations and interviews with patients. Unfortunately, reports of dissociative reactions are often historical and difficult to verify, and the presence of symptomatology may be limited to periods of extreme stress or anxiety (Coons, *et al.*, 1988; Putnam, 1989). Brick and Chu (1991) have provided suggestions to aid clinicians in distinguishing Multiple Personality Disorder from malingering and factitious disorders, e.g., increased attention to the history and presentation of individuals suspected of malingering, as well as observation over time. Coons and Milstein (1994) studied 112 patients who presented to a dissociative disorders clinic with symptoms indicative of Dissociative Identity Disorder. Of these, 10% had a factitious disorder or were malingering. When this group was compared to those diagnosed with Dissociative Identity Disorder, they were similar in many ways (including demographics, symptoms, EEGs, and MMPIs). The presence of symptoms specific to malingering or factitious disorder, e.g., hospital seeking behavior, lack of prior dissociation, hostile demeanor, inconsistencies in history, were, however, useful in differentiating the two groups.

In a review of the methods used to diagnose dissociative disorders, Allen and Smith (1993) discussed screening procedures, structured interviews, psychological testing, and hypnosis. They noted that hypnosis is "the only definitive way" (p. 338) to be certain of a Dissociative Identity Disorder diagnosis. However, it has also been argued that hypnosis does not allow quantifying dissociative experiences systematically (e.g., Bernstein & Putnam, 1986).

Screening tests designed to detect dissociation have fared better. The

most well-known and most widely used objective self-report measure of dissociation is the Dissociative Experiences Scale (Bernstein & Putnam, 1986). The scale has good reliability and validity in measuring dissociative experiences in both nonpsychiatric and mentally ill samples (e.g., Carlson & Putnam, 1993; Carlson, Putnam, Ross, Torem, Coons, Dill, Loewenstein, & Braun, 1993). Furthermore, it reliably differentiates amongst individuals without any psychiatric history, those with nondissociative, and those with dissociative disorders (Ross, Norton, & Anderson, 1988; Carlson & Putnam, 1993).

While traditional test batteries have not been useful in detecting previously undiagnosed cases of Dissociative Identity Disorder (Allen & Smith, 1993), results have been somewhat more promising with projective techniques, such as the Rorschach Inkblot Test. The theoretical basis for use of projective measures is that in the absence of specific instruction or highly directive stimuli, people will have only their own internal resources available for managing the demands of the test. Thus, they will project their own internal psychological functioning onto the test stimuli (Rorschach, 1921; Exner, 1980). Research with the Rorschach has been directed toward identification of responses indicative of underlying pathology associated with Dissociative Identity Disorder (Wagner, Allison, & Wagner, 1983; Barach, 1986; Labott, Leavitt, Braun, & Sachs, 1992). Several different diagnostic systems for Dissociative Identity Disorder have been proposed for use with the Rorschach Test.

Wagner has proposed five diagnostic signs that are indicative of Multiple Personality Disorder (Wagner & Heise, 1974; Wagner, *et al.*, 1983), using Piotrowski's system of Rorschach administration and scoring (Piotrowski, 1957; DeCato, Ciocca, DelConte, & Piotrowski, 1984). They involve percept content related to movement and color responses, quantity of movement and color responses, and qualitative aspects of percepts such as a sense of oppression (Wagner, *et al.*, 1983).

Several studies have supported the presence of these signs when they are applied *post hoc* to Rorschach protocols of patients who are known to have Multiple Personality Disorder. Wagner and Heise (1974) found a large number of movement responses combined with labile color responses in Rorschach records of three patients with multiple personalities. Additional support for all five diagnostic signs is based upon Rorschach data obtained from the case study of a single patient (Wagner, *et al.*, 1983); a case study reported by Battle (1985) also found support for all five of Wagner's diagnostic signs. In contrast, Gilbertson and coauthors (Gilbertson, Torem, & Kemp, 1989) reported that of 18 patients who qualified for a DSM-III–R diagnosis of Multiple Personality Disorder (American Psychiatric Association, 1987), only one subject met all five of the Wagner criteria.

Barach (1986) has proposed alternate guidelines for diagnosing Multiple Personality Disorder with the Rorschach, arguing that protocols of multiple personalities will be characterized by Denial and Hiding responses. Such diagnostic indicators are thought to reflect the participation of hidden alternate personalities. Using Exner's Comprehensive System of Rorschach scoring and administration (Exner, 1974), Barach (1986) reported evidence in support of the usefulness of hiding and denial signs; however, subsequent research has not replicated these results (Gilbertson, *et al.*, 1989; Labott, *et al.*, 1992; Leavitt & Labott, 1998).

More recently, a third system designed to detect Dissociative Identity Disorder on the Rorschach was developed by Labott, *et al.* (1992), using Splitting and Dissociation responses as the diagnostic criteria. Splitting and Dissociation responses are theorized to represent the inner divisiveness of multiple personalities and the lack of an integrated sense of self, respectively. The authors found the presence of splitting and dissociative responses in the Rorschachs of patients with multiple personalities to be the most effective criteria (94% accurate) for differentiating between these participants and a psychiatric comparison group.

Young, Wagner, and Finn (1994) compared the efficacy of all three sets of criteria and found the Wagner signs to be most accurate of the three systems for diagnosing Multiple Personality Disorder in the known patients. However, the authors noted that the subjects with Multiple Personality Disorder in their outpatient sample may have differed in acuity of symptoms from Labott, *et al.*'s (1992) inpatient group. In addition, the experience of the individuals who made the Multiple Personality Disorder diagnoses was not mentioned, and the median number of responses in the protocols (Multiple Personality Disorder = 18, Control = 13) would be considered unreliable by some authors (e.g., Exner, 1993).

Leavitt and Labott (1998) compared the utility of the Wagner, Barach, and Labott markers of Dissociative Identity Disorder in women on inpatient units for dissociative disorders or for general inpatients. Labott's system performed the best and was able to correctly classify 92% of the sample as either Dissociative Identity Disorder or not Dissociative Identity Disorder. The Wagner and Barach systems correctly classified 84% and 82%, respectively. Scroppo, Drob, Weinberger, and Eagle (1998) used the Dissociative Experiences Scale, the Labott markers, and a variety of other measures in an attempt to distinguish outpatient controls from patients diagnosed with Dissociative Identity Disorder. They found that such individuals scored higher than controls on both the Dissociative Experiences Scale and the Labott markers. Therefore, while further studies are warranted, there is some support for the use of Rorschach markers of dissociation in the diagnosis of

Dissociative Identity Disorder. The extent to which these responses can be malingered on the Rorschach is unknown.

The purpose of the present study was to identify the extent to which the Dissociative Experiences Scale II (Carlson & Putnam, 1993), an objective dissociation scale, and the Rorschach Inkblot Test (Rorschach, 1921; Piotrowski, 1957; Exner, 1993), a projective assessment tool, are susceptible to malingering of Dissociative Identity Disorder. Thus far, no studies of malingering using the Dissociative Experiences Scale II have been reported, although this is an issue of concern in both clinical and forensic settings. The Rorschach has previously been used in studies on malingering of depression and schizophrenia, with mixed results (e.g., Seamons, Howell, Carlisle, & Roe, 1981; Kahn, Fox, & Rhode, 1988; Meisner, 1988). Further, the diagnostic signs of Wagner and co-authors (Wagner & Heise, 1974; Wagner, 1978; Wagner, *et al.*, 1983), Barach (1986), and Labott, *et al.* (1992) were evaluated to assess the possibility of malingering Dissociative Identity Disorder.

Method

Participants

Participants were 50 undergraduate women enrolled in an introductory psychology course at a midwestern state university. Prior to testing, participants were interviewed to obtain information on age, racial and ethnic origin, marital status, psychiatric history, and number of prior psychology courses.

Procedure

Each participant was tested individually. After giving their consent, participants were randomly assigned to either the malingering or the control condition. The experimenter was blind to each participant's condition. Each individual completed identical materials in the same sequence: the Rorschach Inkblot Test and then the Dissociative Experiences Scale II. (An audio recording was made during administration of the Rorschach test to facilitate accurate transcription of responses.)

All instructions were presented in written form to participants prior to beginning each test to keep the experimenter blind to the subjects' condition. Individuals assigned to the malingering group were instructed to answer both measures as if they were attempting to convince the tester that they were suffering from Dissociative Identity Disorder. Included in their instructions was a definition of Dissociative Identity Disorder and a description of common symptoms and associated features (Putnam, 1989; American Psychological Association, 1994). The statement was modeled after Cassissi and Workman's instructions (1991) for participants to malinger "significant psychological illness" (p. 54). Individuals assigned to the control condition

were provided with neutral instructions similar to those used by Cassissi and Workman (1991) for participants instructed to answer as honestly as possible.

After completion of both tests, participants were asked to describe verbally the instructions they had been given. Subjects in the malingering condition were also asked to describe the strategies they used to simulate Dissociative Identity Disorder. The entire procedure took about 90 minutes.

Measures and Materials

Rorschach Inkblot Test.—The Rorschach Inkblot Test (Rorschach, 1921) consists of a series of 10 cards on each of which is printed an ambiguous inkblot. The subject's task is to describe what objects are perceived in the blot (Free Association Phase) and then explain what features of the blot suggested the images reported (Inquiry Phase).

A number of different systems of Rorschach administration and interpretation are currently in use. The main Rorschach system used for investigating characteristics of Dissociative Identity Disorder is one that encourages a maximum number of responses—Piotrowski's (1957) Perceptanalytic system. Piotrowski (1957) suggested that during Inquiry, participants should be encouraged to elaborate upon their initial perceptions of the blot and to disclose previously withheld and newly occurring percepts as well. This procedure results in protocols longer than those obtained with some of the other systems of administration.

Rorschach protocols were scored for the standard Rorschach variables; a subset of 15 protocols was scored by a second trained rater so that reliability could be assessed. Both the experimenter (HW) and the second rater (an advanced graduate student in clinical psychology) were extensively trained in Rorschach scoring through coursework and prior experience. Rorschach protocols were also scored for Dissociative Identity Disorder diagnostic signs using the systems developed by Wagner, *et al.* (1983), Barach (1986), and Labott, *et al.* (1992). Ten protocols were scored by both the experimenter (HW) and a second rater (SL) to evaluate reliability.

Dissociative Identity Disorder signs.—Wagner and colleagues (Wagner & Heise, 1974; Wagner, *et al.*, 1983) proposed five diagnostic signs that should be present in the Rorschach protocols of Multiple Personality Disorder patients: (1) a minimum of six movement responses, (2) two "qualitatively diverse human movement" responses, (3) at least one movement response involves oppression, (4) a minimum of three color responses with (CF + C) > FC, and (5) there is at least one positive and one negative color response (Wagner, *et al.*, 1983).

Barach's system (1986) requires the presence of at least two Denial + Hiding responses for a diagnosis of Dissociative Identity Disorder. Denial re-

sponses involve either the respondent's denial, during the Inquiry phase, of items they reported having seen in the earlier Free Association phase, or those answers for which the respondent has difficulty locating or describing blot features (Barach, 1986). Hiding responses are those referring to masks, items obscured by other blot features, or aspects of the blot unaware of other blot features (Barach, 1986).

Finally, Labott, *et al.* (1992) reported that Rorschach protocols of Dissociative Identity Disorder patients were best identified by the presence of at least one Splitting and one Dissociative response. Splitting responses are those referring to divisions of human and nonhuman figures, or splitting of abstract figures. Dissociative responses involve "viewing the world through a mist or fog so that people and objects look unclear, blurry, or far away" (Labott, *et al.*, 1992, p. 151).

Dissociative Experiences Scale II.—This (Carlson & Putnam, 1993) is a 28-item scale that assesses both normative and pathological levels of dissociation. Item content ranges from low-level 'everyday' dissociative experiences (such as daydreaming) to descriptions of more pathological dissociation (such as participating in events for which one has no memory). The Dissociative Experiences Scale II is identical to the original one of Bernstein and Putnam (1986) with respect to item content and instructions; the only modification is in the physical presentation of the response scale. Individuals are presented an experience and are asked to indicate the percentage of time each experience occurs in their daily lives using an 11-point rating scale (with 10% anchors from 0% to 100%). The Dissociative Experiences Scale II has produced scores comparable to those obtained with the original scale. A total score of at least 30 on the original scale reliably distinguishes between those individuals with and without Multiple Personality Disorder (Carlson, *et al.*, 1993). Several studies have documented that the Dissociative Experiences Scale has good test-retest (ranging from .79 to .96) and internal (.83 to .95) reliability (Carlson & Putnam, 1993). The scale also has adequate construct, convergent, and discriminant validity (Carlson & Putnam, 1993).

Results

Manipulation Check

At the end of the testing session, the participants were asked to describe the instructions they were told to follow in answering the items. All 25 of the subjects in the malingering group accurately reported that they had been asked to malinger Dissociative Identity Disorder. All 25 participants in the control group reported that they had been asked to complete both tests in an honest manner.

Malingering subjects had also been asked to describe the strategies they used to malinger Dissociative Identity Disorder on the Rorschach and the

Dissociative Experiences Scale II. Of the 25 subjects, 5 had difficulty describing specific strategies, but the remaining 20 were able to do so. The major strategies involved acting differently during different sections of the tests to indicate switching between alternate personalities, reporting both a dark and a bright side to things, being "forgetful," and answering in an illogical manner. Malingering subjects also noted that, specifically on the Dissociative Experiences Scale II, they endorsed items more frequently than they would have based on their own experience.

Demographic Variables

Using chi-squared analyses, the two groups (malingering and control) were compared on racial and ethnic background, marital status, past psychiatric history, and prior psychology courses. No significant differences between the two groups were obtained. Most subjects were Caucasian (84% per group) and single (84% overall). Most subjects (86% overall) had not received previous counseling, and 56% (groups combined) had completed no prior course work in psychology. A Student t test was performed to compare the two groups on age; the difference was not significant (Malingering group: $M = 20.1$, $SD = 3.3$; Control group: $M = 20.7$, $SD = 4.4$). Modal age in each group was 18 years.

Interrater Reliability

Rorschach variables.—Using Pearson product-moment correlation coefficients, interrater reliability values were computed for the major Rorschach determinants (locations, human movement, form, color) and content, i.e., animal, human, object, variables on 15 protocols scored by both the experimenter and a second rater. The Pearson r values obtained for these variables ranged from .66 to 1.00. Therefore, adequate consistency in scoring of the major Rorschach variables was obtained.

Dissociative Identity Disorder diagnostic signs.—A randomly selected set of 10 Rorschach protocols was independently scored by the experimenter (HW) and a second rater (SL). There was 100% agreement on the diagnosis of Dissociative Identity Disorder in all three systems.

Group Differences

Dissociative Experiences Scale II.—Total Dissociative Experiences Scale II scores were compared for the two conditions, using a Student t test. Participants in the control group obtained a mean Dissociative Experiences Scale II score significantly lower ($M = 14.4$, $SD = 9.7$) than participants in the malingering group ($M = 51.3$, $SD = 25.1$; $t_{48} = 6.87$, $p < .0001$).

A Hotelling T^2 test was then conducted to compare the subjects in the two conditions on the 28 individual items of the Dissociative Experiences Scale II; this value was significant ($T^2 = 185.05$; $F_{28,21} = 2.89$, $p < .01$). Further-

more, follow-ups (using a Student *t* test) of the individual Dissociative Experiences Scale II items indicated that the malingering group endorsed *each* item at a significantly higher level compared with the control group; see Table 1. While Type 1 errors might be considered to be a potential problem, the comparisons are all significant at the .001 level; therefore, an overall adjustment of alpha, e.g., Bonferroni method, would not change the results. It is also important to note that individual item means in the control group ranged from 1.6 to 36.8; in the malingering group from 40.0 to 64.8; large standard deviations indicate that the responses across subjects varied greatly.

Rorschach.—A Student *t* test was performed to compare the malingering and control groups on Rorschach protocol length. The difference in the

TABLE 1
DISSOCIATIVE EXPERIENCES SCALE II ITEM† SCORES FOR MALINGERING VS CONTROL GROUPS (*ns* = 25)

Item	Malingering		Control		$t_{1,48}$
	M	*SD*	*M*	*SD*	
Don't remember driving	58.0	27.23	18.0	14.43	6.49
Don't hear what is said	64.8	20.23	36.8	17.96	5.17
Find self in strange place	51.6	29.53	7.2	17.20	6.49
In clothes don't recall putting on	48.8	30.86	4.8	10.29	7.01
Find things don't recall buying	43.2	33.38	8.0	13.23	4.90
Approached by strangers	55.6	32.28	16.0	18.71	5.31
Feel as if next to self	52.8	34.34	9.6	21.11	5.36
Don't recognize family	40.0	30.69	4.0	9.57	5.60
Don't recall important events	46.4	31.74	13.6	21.96	4.25
Accused of lying	58.0	35.82	11.6	14.05	6.03
Don't recognize self in mirror	41.2	31.53	2.8	10.21	5.79
Feel as if others not real	45.2	34.04	7.6	15.35	5.03
Body doesn't belong to self	46.4	31.74	5.2	10.05	6.19
Recall as if reliving event	49.6	33.35	20.8	21.00	3.65
Unsure if real or dream	55.2	33.31	21.2	21.26	4.30
Familiar place unfamiliar	48.4	32.10	12.4	22.23	4.61
Unaware of events around	57.2	27.31	30.1	27.90	3.47
Fantasy seems real	56.4	28.56	14.4	18.27	6.19
Ignore pain	41.6	27.64	18.0	18.48	3.55
Unaware of time passing	57.2	31.43	22.4	21.46	4.57
Talk to self	52.8	34.58	24.0	19.15	3.64
Act differently in situations	53.6	38.50	13.6	18.00	4.71
Do hard things easily	51.6	31.45	24.8	20.64	3.56
Unsure if did something	62.8	27.92	20.4	19.68	6.21
Don't recall doing things	55.2	35.01	13.6	16.30	5.39
Don't recall writing	52.8	38.13	13.2	23.40	4.43
Hear voices inside own head	50.4	40.87	8.4	14.63	4.84
See world through fog	40.8	35.81	1.6	3.74	5.44

*All $p < .001$. †Items paraphrased.

number of responses was not significant: Malingering Group: $M = 21.0$, $SD = 5.9$; Control Group: $M = 22.2$, $SD = 9.7$; therefore, no adjustments for protocol length were made in the following analyses.

Tables 2 and 3 show the number and percentage of subjects in the total sample meeting each individual criterion for each diagnostic system. In the Barach system, hiding responses occurred fairly frequently, in both Malingering and Control groups (44% overall), while denial responses were infrequent (2%). In the Labott system, both splitting (14%) and dissociative (10%) responses were infrequent. In the Wagner system, the movement criterion was met by 44/50 or 88% of the subjects, while the oppressive movement criterion was met more frequently by those in the Malingering ($n = 17$; 34% of the sample) than in the Control ($n = 9$; 18%) group. The positive and negative color criterion was also met by more individuals in the Malingering ($n = 11$; 22%) than Control ($n = 6$; 12%) condition, while diverse movement (8% of the sample) and color (10%) criteria were met infrequently.

TABLE 2
FREQUENCY (*N* AND %) FOR EACH SIGN AND DIAGNOSIS FOR BARACH AND LABOTT DIAGNOSTIC SYSTEMS

Barach System					Labott System				
Criterion Met	Malingering		Control		Criterion Met	Malingering		Control	
	f	%	*f*	%		*f*	%	*f*	%
Hiding					Splitting				
Yes	10	20	12	24	Yes	4	8	3	6
No	15	30	13	26	No	21	42	22	44
Denial					Dissociation				
Yes	1	2	0	0	Yes	3	6	2	4
No	24	48	25	50	No	22	44	23	46
Barach Diagnosis					Labott Diagnosis				
Yes	0	0	0	0	Yes	1	2	0	0
No	25	50	25	50	No	24	48	25	50

Separate chi-squared tests were next used to test for significant differences between the Malingering and Control groups on the frequency of Dissociative Identity Disorder diagnoses using the diagnostic systems of Barach (1986), Labott, *et al.* (1992), and Wagner, *et al.* (1983). There were no significant differences between the malingering and control groups on the number of Dissociative Identity Disorder diagnoses obtained using any of the three systems; see Tables 2 and 3. In both the Wagner and the Labott systems, only one participant in the malingering group obtained a diagnosis (not the same subject in each system). No subjects were diagnosed in the Barach system. No control subjects were diagnosed in any of the three systems.

TABLE 3
FREQUENCY (*N* AND %) FOR EACH SIGN AND DIAGNOSIS FOR WAGNER DIAGNOSTIC SYSTEM

Wagner System									
Criterion Met	Malingering		Control		Criterion Met	Malingering		Control	
	f	%	*f*	%		*f*	%	*f*	%
Movement (FM + M + m)					Oppressive Movement				
Yes	21	42	23	46	Yes	17	34	9	18
No	4	8	2	4	No	8	16	16	32
Diverse Human Movement					Color (CF + C > FC)				
Yes	4	8	0	0	Yes	4	8	1	2
No	21	42	25	50	No	21	42	24	48
Positive and Negative Color					Wagner Diagnosis				
Yes	11	22	6	12	Yes	1	2	0	0
No	14	28	19	38	No	24	48	25	50

Therefore, it was rare for any participant to receive a diagnosis using any of the three diagnostic systems.

Analyses indicated there were no significant mean differences between the malingering and control groups on the major Rorschach variables. Specifically, Hotelling T^2 tests evaluating the major determinants, i.e., location, movement, form, color, shading, and the content variables, e.g., animal, human, object, were not significant.

DISCUSSION

The present results are based on the ability of participants in the experimental group to understand and execute the instructions to simulate Dissociative Identity Disorder. Without exception, malingerers understood what they were instructed to do and were able to develop strategies to express this understanding in their responses to both tests.

It was expected that Dissociative Experiences Scale II scores would be significantly higher for the group of malingering individuals than for the control group, as it would appear quite simple to endorse items that were clearly related to dissociative pathology. In fact, participants in the malingering group obtained significantly higher Dissociative Experiences Scale II scores than individuals in the control group, and their scores were well above the cutoff point of 30 which indicates significant pathology on the Dissociative Experiences Scale (Carlson & Putnam, 1993). The mean Dissociative Experiences Scale II score for the malingering group ($M = 51.3$) fell within the same range that has been reported for Multiple Personality Disorder patients completing the Dissociative Experiences Scale (Bernstein & Putnam, 1986; Ross, *et al.*, 1988; Carlson & Putnam, 1993; Carlson, *et al.*, 1993). It appears that even a relatively unsophisticated attempt at malingering will elevate scores on this objective scale of dissociation. The mean Dissociative Experiences Scale II score for the control group in the current study

($M = 14.4$) is consistent with Bernstein and Putnam's (1986) normative data on college students. The ease with which naïve students could produce scores comparable to those of individuals diagnosed with Dissociative Identity Disorder is of concern for both research and clinical endeavors.

An additional focus of the present study was to assess whether individuals in the malingering group would meet the criteria proposed by Wagner, *et al.* (1983), Barach (1986), or Labott, *et al.* (1992) for a diagnosis of Dissociative Identity Disorder. The results indicated, however, that the instructions produced no evidence of malingering in any of the three Rorschach scoring systems. One conclusion that could be drawn is that the type of malingering done by these students did not produce diagnoses of Dissociative Identity Disorder. What remains unclear is which system is most useful at locating Dissociative Identity Disorder pathology when it truly is present. While prior research attempting to illustrate the usefulness of all three sets of diagnostic signs is far from uniform, correct classification has been achieved with at least two of the systems, Wagner: 91% ($n = 11$; Young, *et al.*, 1994) and Labott: 94% ($n = 16$; Labott, *et al.*, 1992). It might be helpful for researchers to integrate the diagnostic sets into a comprehensive system for assessing Dissociative Identity Disorder using the Rorschach. This could improve the validity of the diagnosis of Dissociative Identity Disorder and might also address differences in acuteness of symptoms among patients, as some of the earlier discrepant results may be attributable to different populations of patients.

The results of the present study clearly indicate the need for caution during clinical assessment of Dissociative Identity Disorder. Although the Dissociative Experiences Scale and Dissociative Experiences Scale II were developed for research, they are useful assessment tools in the clinical setting because of their high reliability and validity in distinguishing various groups. However, individuals motivated to over-report dissociative symptoms are able to do so easily on such objective scales. Use of the Dissociative Experiences Scale II or another objective scale in conjunction with a structured interview and a projective assessment such as the Rorschach Inkblot Test will permit a more sensitive and comprehensive evaluation of Dissociative Identity Disorder. Refinement of the diagnostic signs for the Rorschach may provide a vehicle for accurately distinguishing individuals with bonafide Dissociative Identity Disorder from those malingering. Increased sensitivity to symptoms of malingering or factitious disorder, e.g., behavioral observation, hospitalization seeking behavior, is also likely to facilitate accurate diagnosis (see Brick & Chu, 1991; Coons & Milstein, 1994).

Overall, participants in the malingering group were able to mimic some aspects of dissociative pathology, in particular when given an explicit task to complete, i.e., the Dissociative Experiences Scale II, but they were unable to

produce responses to the Rorschach Test that were indicative of Dissociative Identity Disorder. However, one limitation of this study is that it did not incorporate clinical Dissociative Identity Disorder or malingering samples into its design. As volunteers playing a part, students simulating dissociation in this study likely differ from people who malinger clinically. It is unclear whether what people do when they are asked to simulate is the same as what people do when they feign spontaneously. These results must be interpreted with caution, and further research is required to evaluate these issues in a clinical population.

REFERENCES

ABRAMS, S. (1983) The multiple personality: a legal defense. *American Journal of Clinical Hypnosis*, 25, 225-231.

ALLEN, J. G., & SMITH, W. H. (1993) Diagnosing dissociative disorders. *Bulletin of the Menninger Clinic*, 57, 329-343.

AMERICAN PSYCHIATRIC ASSOCIATION. (1987) *Diagnostic and statistical manual of mental disorders*. (3rd ed., Rev.) Washington, DC: Author.

AMERICAN PSYCHIATRIC ASSOCIATION. (1994) *Diagnostic and statistical manual of mental disorders*. (4th ed.) Washington, DC: Author.

BARACH, P. (1986) Rorschach signs of MPD in multiple personality disorder and non-multiple personality disorder in victims of sexual abuse. Paper presented at the Third International Conference on Multiple Personality/Dissociative States, Chicago, IL.

BATTLE, A. O. (1985) Rorschach evaluation of two personalities in a patient. *British Journal of Projective Psychology*, 30, 11-23.

BERNSTEIN, E. M., & PUTNAM, F. W. (1986) Development, reliability, and validity of a dissociation scale. *Journal of Nervous and Mental Disease*, 174, 727-733.

BRAUN, B. G. (1984) Hypnosis creates multiple personality: myth or reality? *International Journal of Clinical and Experimental Hypnosis*, 32, 191-197.

BRICK, S. S., & CHU, J. A. (1991) The simulation of multiple personalities: a case report. *Psychotherapy*, 28, 267-272.

CARLSON, E. B., & PUTNAM, F. W. (1993) An update on the Dissociative Experiences Scale. *Dissociation*, 6, 16-27.

CARLSON, E. B., PUTNAM, F. W., ROSS, C. A., TOREM, M., COONS, P., DILL, D., LOEWENSTEIN, R. J., & BRAUN, B. G. (1993) Validity of the Dissociative Experiences Scale in screening for multiple personality disorder: a multicenter study. *American Journal of Psychiatry*, 148, 1548-1551.

CASSISSI, J. E., & WORKMAN, D. E. (1991) The detection of malingering and deception with a short form of the MMPI–2 based on the L, F, and K scales. *Journal of Clinical Psychology*, 48, 54-58.

CHU, J. A. (1991) On the misdiagnosis of multiple personality disorder. *Dissociation*, 4, 200-204.

COONS, P. M. (1988) The differential diagnosis of multiple personality: a comprehensive review. *Psychiatric Clinics of North America*, 7, 51-67.

COONS, P. M., BOWMAN, E. S., & MILSTEIN, V. (1988) Multiple personality disorder: a clinical investigation of 50 cases. *Journal of Nervous and Mental Disease*, 176, 519-527.

COONS, P. M., & MILSTEIN, V. (1994) Factitious or malingered multiple personality disorder: eleven cases. *Dissociation*, 7, 81-85.

DECATO, C. M., CIOCCA, J. V., DELCONTE, G., & PIOTROWSKI, Z. A. (1984) *Rorschach scoring: a workbook for the Perceptanalytic system*. New York: Brunner/Mazel.

EXNER, J. E., JR. (1974) *The Rorschach: a comprehensive system*. Vol. 1. New York: Wiley.

EXNER, J. E., JR. (1980) But it's only an inkblot. *Journal of Personality Assessment*, 44, 563-577.

EXNER, J. E., JR. (1993) *The Rorschach: a comprehensive system*. Vol. 1. (3rd ed.) New York: Wiley.

GILBERTSON, A., TOREM, M., & KEMP, K. (1989) The validity of proposed Rorschach signs in the diagnosis of multiple personality disorder. Paper presented at the Sixth International Conference on Multiple Personality/Dissociative States, Chicago, IL.

HOREVITZ, R. P., & BRAUN, B. G. (1984) Are multiple personalities borderline? *Psychiatric Clinics of North America*, 7, 69-87.

KAHN, M. W., FOX, H., & RHODE, R. (1988) Detecting faking on the Rorschach: computer versus expert clinical judgement. *Journal of Personality Assessment*, 52, 516-523.

KLUFT, R. P. (1987) The simulation and dissimulation of multiple personality disorder. *American Journal of Clinical Hypnosis*, 30, 104-118.

LABOTT, S. M., LEAVITT, F., BRAUN, B. G., & SACHS, R. G. (1992) Rorschach indicators of multiple personality disorder. *Perceptual and Motor Skills*, 75, 147-158.

LEAVITT, F., & LABOTT, S. M. (1998) Rorschach indicators of dissociative identity disorders: clinical utility and theoretical implications. *Journal of Clinical Psychology*, 54, 803-810.

MEISNER, S. (1988) Susceptibility of Rorschach distress correlates to malingering. *Journal of Personality Assessment*, 52, 564-571.

ORNE, M. T., DINGES, D. F., & ORNE, E. C. (1984) On the differential diagnosis of multiple personality in the forensic context. *The International Journal of Clinical Hypnosis*, 32, 118-169.

PIOTROWSKI, Z. A. (1957) *Perceptanalysis*. New York: Macmillan.

PUTNAM, F. W. (1989) *Diagnosis and treatment of multiple personality disorder*. New York: Guilford.

RORSCHACH, H. (1921) *Psychodiagnostik*. (Hans Huber, Transl., 1942) Bern: Bircher.

ROSS, C. A., NORTON, G. R., & ANDERSON, G. (1988) The Dissociative Experiences Scale: a replication study. *Dissociation*, 1, 21-22.

SCROPPO, J. C., DROB, S. L., WEINBERGER, J. L., & EAGLE, P. (1998) Identifying dissociative identity disorder: a self-report and projective study. *Journal of Abnormal Psychology*, 107, 272-284.

SEAMONS, D. T., HOWELL, R. J., CARLISLE, A. L., & ROE, A. V. (1981) Rorschach simulation of mental illness and normality by psychotic and nonpsychotic legal offenders. *Journal of Personality Assessment*, 45, 130-135.

WAGNER, E. E. (1978) A theoretical explanation of the dissociative reaction and a confirmatory case presentation. *Journal of Personality Assessment*, 42, 312-316.

WAGNER, E. E., ALLISON, R., & WAGNER, C. (1983) Diagnosing multiple personalities with the Rorschach: a confirmation. *Journal of Personality Assessment*, 47, 143-149.

WAGNER, E. E., & HEISE, M. R. (1974) A comparison of Rorschach records of three multiple personalities. *Journal of Personality Assessment*, 38, 308-331.

WATKINS, J. G. (1984) The Bianchi (L. A. Hillside Strangler) case: sociopath or multiple personality. *International Journal of Clinical and Experimental Hypnosis*, 32, 67-101.

YOUNG, G. R., WAGNER, E. E., & FINN, R. F. (1994) A comparison of three Rorschach diagnostic systems and use of the Hand Test for detecting multiple personality disorder in outpatients. *Journal of Personality Assessment*, 62, 485-497.

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