The Multidimensional Inventory of Dissociation (MID): A Comprehensive Measure of Pathological Dissociation

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The Multidimensional Inventory of Dissociation (MID): A Comprehensive Measure of Pathological Dissociation

Paul F. Dell, PhD

ABSTRACT. This article describes the development and validation of the Multidimensional Inventory of Dissociation (MID). The MID is a 218-item, self-administered, multiscale instrument that comprehensively assesses the phenomenological domain of pathological dissociation and diagnoses the dissociative disorders. The MID measures 14 major facets of pathological dissociation; it has 23 dissociation diagnostic scales that simultaneously operationalize (1) the subjective/phenomenological domain of pathological dissociation and (2) the hypothesized dissociative symptoms of dissociative identity disorder (Dell, 2001a). The MID was designed for clinical research and for diagnostic assessment of patients who present with a mixture of dissociative, posttraumatic, and borderline symptoms. The MID demonstrated internal reliability, temporal stability, convergent validity, discriminant validity, and construct validity. The MID also exhibited incremental validity over the Dissociative Experiences Scale (DES) by predicting an

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additional 18% of the variance in weighted abuse scores on the Traumatic Experiences Questionnaire (TEQ). Confirmatory factor analysis (CFA) did not support a one-factor model of the MID's clinical scales (i.e., the 14 facets and the 23 diagnostic symptoms). In contrast, however, CFA of the MID's factor scales (Dell & Lawson, 2005) has strongly supported a one-factor model. It was concluded that both the MID's 168 dissociation items and the construct of pathological dissociation have a second-order, unifactorial structure.

KEYWORDS. Dissociation, assessment, trauma, dissociative identity disorder

Six valid and reliable measures of dissociation have been used with some frequency. Four are brief, self-report screeners: the Dissociative Experiences Scale (DES; Bernstein & Putnam, 1986), the Questionnaire of Experiences of Dissociation (QED; Riley, 1988), the Dissociation-Questionnaire (DIS-Q; Vanderlinden, Van Dyck, Vandereycken, Vertommen, & Verkes, 1993), and the Somatoform Dissociation Questionnaire-20 (SDQ-20; Nijenhuis, Spinhoven, Van Dyck, Van der Hart, & Vanderlinden, 1996). Two are structured interviews: the Dissociative Disorders Interview Schedule (DDIS; Ross, Heber, Norton, Anderson, Anderson, & Barchet, 1989) and the Structured Clinical Interview for DSM-IV Dissociative Disorders-Revised (SCID-D-R; Steinberg, Rounsaville, & Cicchetti, 1990; Steinberg, 1994). Each of these six instruments has a specific, delimited task (i.e., screening or diagnosis of the dissociative disorders) that it accomplishes effectively; none provides comprehensive coverage of the domain of dissociation.[1]

THE MULTIDIMENSIONAL INVENTORY OF DISSOCIATION

The Multidimensional Inventory of Dissociation (MID) seeks to comprehensively cover the phenomenological domain of pathological dissociation.[2] The MID is one component of a conceptual triad: (1) the subjective/phenomenological model of pathological dissociation, (2) the prototype of dissociative psychopathology (i.e., DID), and (3) the MID.

The Conceptual Triad

I. The subjective/phenomenological model of pathological dissociation. From a subjective/phenomenological perspective, (1) the phenomena of pathological dissociation are recurrent, jarring intrusions into executive functioning and sense of self, and (2) every aspect of human experience is subject to dissociative invasion (Dell, 2006, in press).

II. Dissociative identity disorder: the prototype of dissociative psychopathology. The subjective/phenomenological domain of pathological dissociation implies that the symptom-domain of DID is *identical* to the phenomenological domain of pathological dissociation.

III. The MID: a self-report measure of pathological dissociation. The MID has six important characteristics: (1) Its items are based on a definition and a model of pathological dissociation; (2) it seeks to comprehensively cover the phenomenological domain of pathological dissociation; (3) it excludes so-called normal forms of dissociation (e.g., absorption, hypnotizability, fantasy proneness); (4) it has 5 validity scales that measure response sets; (5) it diagnoses the dissociative disorders; and (6) it is designed to evaluate patients whose symptoms lie at the interface of DID, PTSD, and borderline personality disorder (BPD).

The MID assesses PTSD solely on the basis of the MID's Flashbacks Scale; this scale measures the only symptom that is required for an ICD-10 diagnosis of PTSD: intrusive recollections (World Health Organization, 1992). The MID does not identify cases of BPD *per se.* Instead, the MID assesses certain response sets (i.e., attention-seeking, factitious behavior, a tendency to endorse bizarre symptoms) that are exhibited chiefly by a subset of especially problematic BPD patients.

Hypotheses

Hypothesis I. Pathological dissociation is a unifactorial construct.

1A: Internal consistency. When the MID's scales are treated as items, the Cronbach alpha coefficient of the MID will approach unity.

1B: Factor structure. Factor analysis of MID scale-scores will yield a unifactorial solution.

Hypothesis II. The dissociative symptoms of persons with a dissociative disorder are qualitatively different from those of persons who do not have a dissociative disorder (Waller, Putnam, & Carlson, 1996).

2A: Discriminant validity. MID scores will distinguish between groups of dissociative patients and groups of nondissociative individuals.

Hypothesis III. Pathological dissociation is strongly related to traumatization.

3A: MID scores will correlate significantly with measures of traumatization that assess the severity and subjective impact of the trauma.

3B: MID scores will correlate significantly with the symptoms of PTSD.

3C: MID scores will exhibit incremental validity over DES scores in predicting scores on a measure of traumatization.

DEVELOPMENT OF THE MID

MID items derived from eight sources of information: (1) the subjective/ phenomenological model of dissociation (Dell, in press); (2) the subjective/phenomenological domain of pathological dissociation (Dell, in press); (3) the 23 dissociative symptoms of DID (Dell, 2001a; see Table 1); (4) the distinction between partial dissociation and full dissociation (Dell, in press); (5) existing measures of dissociation: DES, Adolescent Dissociative Experiences Scale (A-DES; Armstrong, Putnam, Carlson, Libero, & Smith, 1997), DIS-Q, QED, Perceptual Alteration Scale (PAS; Sanders, 1986), SCID-D-R, DDIS, SDQ-20, and the Self-Injury Dissociation Questionnaire (Dell, 1997); (6) the dissociation literature; (7) the dissociative disorders literature; and (8) interviews of dissociative patients.

The initial item pool consisted of every item from the extant measures of dissociation (about 280 items). These items were then sorted into categories/scales that reflected 21 different components of human experience (i.e., conscious awareness, experiencing one's body, experiencing one's world, experiencing one's self, experiencing one's mind, experiencing agency, intentionality, thinking, believing, knowing, recognizing, remembering, feeling, wanting, speaking, acting, seeing, hearing, smelling, tasting, and touching). These 21 components of human experience were solely of the author's own devising. As the scales were being assembled, a tension emerged between two kinds of scales: (1) scales that reflected the *components of human experience;* and (2) scales that reflected *clinically meaningful symptoms of pathological dissociation.* Ultimately, the author chose to construct clinically

TABLE 1. Demographic Characteristics of the Participants in Two MID Validation Studies

Characteristic	Groups (Study 1)			
	Nonclinical	Mixed Psychiatric	DDNOS	DID
N	63	67	19	55
Age	49.0 (14.4)	44.3 (12.3)	39.5 (5.6)	41.1 (9.5)
Education	16.3 (3.1)	14.2 (3.1)	16.4 (4.7)	13.9 (2.7)
Gender (%)				
Male	26	31	11	15
Female	74	69	89	85
Race (%)				
Caucasian	97	98	95	98
African-American	3	2	5	2

Characteristic	Groups (Study 2)	
	Nondissociative	Dissociative
N	149	464
Age	40.4 (13.6)	39.3 (9.9)
Education	15.1 (13.6)	14.6 (3.0)
Gender (%)		
Male	30	23
Female	70	77
Race (%)		
Caucasian	86	92
African-American	9	4
Hispanic	3	3
Asian	1	0.2
Pacific Islander	1	2
Mixed	0	0.5
Setting (%)		
Outpatient	69	71
Inpatient	31	29

Notes. MID = Multidimensional Inventory of Dissociation; Nonclinical = nonclinical adults; Mixed Psychiatric = mixed psychiatric patients; DDNOS = dissociative disorder, not otherwise specified; DID = dissociative identity disorder; Nondissociative = patients with a MID score < 15; Dissociative = patients with a MID score ≥15.

meaningful scales because they would be more user-friendly. About 180 new dissociation items were written; they were designed to tap as many components of human experience as possible.

Item-writing eventuated in a pool of over 520 items. Items were then deleted from that pool if they were (1) overly similar or (2) judged not to reflect pathological dissociation. The initial version of the MID had 268 items (i.e., 208 dissociation items and 60 validity items). Two sets of dissociation scales were developed: (1) 23^3 scales that measured hypothesized dissociative symptoms of DID (Dell, 2001a), and (2) 10 facets that combined those 23 dissociative symptoms into broader scales that were more cognitively defined. These two sets of scales are alternate apportionments of the MID's dissociation items. There was no item-overlap among the 10 facet scales; there was a small amount of item-overlap among the 23 diagnostic scales.

The MID uses the same format as the A-DES (Armstrong et al., 1997)–a 0-10 Likert scale that is anchored by the words "never" and "always": "How often do you have the following experiences when you are ***not*** *under the influence of alcohol or drugs?* Please circle the number that best describes you. Circle a "0" if the experience never happens to you; circle a "10" if it is always happening to you. If it happens sometimes, but not all the time, circle a number between 1 and 9 that best describes how often it happens to you."

Like the DES and A-DES, the instructions to the MID do not specify a timeframe (e.g., "during the past seven days," or "during the previous month") because episodes of amnesia are often infrequent. If the MID employed a 7-day or 30-day timeframe, it would not be able to detect past episodes of amnesia that hold major diagnostic significance.

STUDY 1: PSYCHOMETRIC PROPERTIES OF THE INITIAL VERSION OF THE MID

Overview

The objectives of Study 1 were to (1) reduce items, (2) assess internal consistency, (3) explore the factor structure, (4) assess convergent validity, and (5) explore construct validity.

Convergent validity was assessed with the most frequently used self-report measure of dissociation (i.e., DES; Carlson, 1997). The relationship between trauma exposure, traumatization, and MID scores was

assessed via the Traumatic Experiences Questionnaire (TEQ; Nijenhuis, Spinhoven, Van Dyck, & Vanderlinden, 1998).

Methods

Participants

The sample for Study 1 (N = 204) included 63 nonclinical adults, 67 mixed psychiatric outpatients, 19 outpatients with dissociative disorder not otherwise specified (DDNOS), and 55 DID outpatients. The DDNOS patients were all DDNOS Type 1b. The American Psychiatric Association defines patients with DDNOS Type 1b as having "Clinical presentations similar to Dissociative Identity Disorder . . . in which . . . amnesia for important personal information does not occur" (American Psychiatric Association, 2000, p. 532). Nonclinical participants were support staff or local church members. All diagnoses were clinical diagnoses.

Demographic data for the participants in the two MID validation studies are given in Table 1.

Materials

Multidimensional Inventory of Dissociation. The MID has two scoring systems: (1) mean scores and (2) severe dissociation scores. Mean scores assess the frequency of dissociative symptoms. MID items have a 0-10 rating metric and are multiplied by 10 in order to place MID scores on the same 0-100 metric as the DES. Thus, mean MID scores are exactly comparable to mean DES scores. The Severe Dissociation Scoring System assesses whether each dissociative symptom is present to a clinically-significant degree. Each item and scale on the MID has an empirically selected, pass/fail, cutoff score. The cutoff scores optimally discriminate between severely dissociative persons (i.e., DID or DDNOS-1b) and less dissociative persons. The cutoff scores enable the MID to diagnose the dissociative disorders.

Dissociative Experiences Scale-II (DES-II). The DES is a self-report questionnaire with 28 items that are rated on a 100 millimeter line anchored by "0" and "100" (Bernstein & Putnam, 1986). The present study used the otherwise identical and more user-friendly DES-II, which has an 11-point Likert scale (0-100). The Cronbach alpha coefficient of the DES is 0.96 (Van IJzendoorn & Schuengel, 1996). The convergent validity of the DES with other measures of dissociation across 26 studies was strong (r = 0.67; Cohen's d = 1.82; Van IJzendoorn &

Schuengel). DES scores easily distinguish dissociative diagnostic groups from others (Van IJzendoorn & Schuengel, 1996). Among clinical groups, the effect size of the relationship between the DES and DID was large (Cohen's $d = 1.05$). The DES has a four-week test-retest stability of 0.93 (Frischholz, Braun, Sachs, & Hopkins, 1990).

Traumatic Experiences Questionnaire (TEQ). The TEQ (Nijenhuis, van der Hart, & Kruger, 2002) is a self-report questionnaire that assesses exposure to 25 potentially traumatic life events, five of which are kinds of abuse (i.e., emotional neglect, emotional abuse, physical abuse, sexual harassment, and sexual abuse). In addition to quantifying the number of kinds of traumas that the person has encountered (from 0 to 25), the TEQ produces a weighted traumatization score for each of the five kinds of abuse (from 0 to 4). Weighted traumatization scores are based on occurrence, the duration of each kind of abuse, its subjective impact, and whether it was intrafamilial or extrafamilial. The TEQ produces separate weighted abuse/traumatization scores for each of three developmental eras (i.e., aged 0-6, 7-12, and 13-18). Cronbach alpha coefficients have ranged from 0.86 to 0.90. The minimally revised Traumatic Experiences Checklist (TEC) correlated 0.77 with the Stressful Life Events Screening Questionnaire (Goodman, Corcoran, Turner, Yuan, & Green, 1998), 0.43 with the DES, 0.57 with the SDQ-20, and 0.53 with the PTSD-self scoring test of Carlier, Van Uchelen, Lamberts, and Gersons (1996). It has a three to four-week test-retest reliability of 0.91 (Nijenhuis et al., 2002).

Procedure

Clinical participants were invited to participate by their therapists. Nonclinical subjects were invited to participate by the author. All participants were administered the MID; most were also administered the DES and TEQ. For various reasons, some psychotherapy patients could not complete all three measures. Questionnaires were completed at the therapist's office or at home. No data was collected about which participants completed the questionnaires at home vs. at the office. Because solicitations to participate in the research were not done in a controlled fashion, no data were collected about the patients who declined to participate.

Data Analysis

Cronbach alpha coefficients assessed the internal reliability of the MID and its scales. Pearson product-moment correlations assessed the

MID's convergent validity with the DES and criterion-related validity with the TEQ. Principal components analysis (PCA) with varimax rotation assessed the factor structure of the 11 facet scales and the 22^3 diagnostic scales. Hierarchical regression analysis assessed incremental validity in predicting trauma scores.

Results and Discussion

Revision of the initial version of the MID. Almost all items correlated most highly with their parent scales, but it is notable that most items also correlated well with *all* scales (i.e., Pearson product-moment correlation ≥ 0.50). This was expected: all MIDs items assess the same construct: pathological dissociation. Some items were reassigned to a new facet scale (i.e., Self-Alteration); 89 items were deleted on the basis of item-total correlations < 0.45. All analyses below pertain to this revised version of the MID.

Internal reliability. The Cronbach alpha values of the 11 facets were excellent (i.e., $\alpha = 0.96$ to 0.97), but the Cronbach alpha values of the 22 diagnostic scales were only good to fair (i.e., four alpha values were below 0.80). When treated as an 11-item scale (i.e., the 11 facets), the MID had a Cronbach alpha value of 0.98. When treated as a 22-item scale (i.e., the 22 diagnostic scales), the MID had a Cronbach alpha value of 0.99. When treated as a 173-item scale (i.e., the 173 dissociation items) the MID had a Cronbach alpha value of 0.99. The latter alpha coefficients (i.e., 0.98, 0.99, and 0.99) support Hypothesis 1A–that strikingly different clinical phenomena will cluster together.

Structural validity. The number of participants (N = 204) was too low to factor analyze the MID's 173 dissociation *items.* A PCA with varimax rotation was conducted on the 11 *facet-scores*. A single factor was extracted (eigenvalue = 9.35) that accounted for 85% of the variance. The second largest factor had an eigenvalue of 0.42. The largest factor loading on the second factor was less than 0.44. Similarly, a PCA with varimax rotation was conducted on the 22 *diagnostic scale*-scores. A single factor was extracted (eigenvalue = 17.84) that accounted for 81% of the variance. The second largest factor had an eigenvalue of 0.83. The largest factor loading on the second factor was less than 0.40. This supports Hypothesis 1B–that MID scales have a unifactorial structure.

Convergent validity. The MID correlated 0.94 with the DES.

Construct validity. Mean DES scores, mean MID scores, and MID Severe Dissociation scores correlated strongly with TEQ scale scores (Table 2).

Incremental validity. Mean MID scores and the MID Severe Dissociation Scores each accounted for significantly more of the variance of weighted TEQ abuse scores than did the DES (Table 3). The most powerful predictor of overall abuse/traumatization scores was the Severe

TABLE 2. Correlations Between the MID, DES, and TEQ

TEQ Scale	DES	Mean MID	MID Severe Dissociation
Emotional neglect	0.30*	0.38**	0.41**
Emotional abuse	0.44**	0.49**	0.54**
Physical abuse	0.34**	0.47**	0.52**
Sexual harassment	0.30*	0.38**	0.44**
Sexual abuse	0.44**	0.54**	0.60**
TEQ composite score	0.47**	0.58**	0.63**

Notes. MID = Multidimensional Inventory of Dissociation; DES = Dissociative Experiences Scale; TEQ = Traumatic Experiences Questionnaire; MID severe dissociation = MID severe dissociation score; TEQ composite score = weighted combined score of the five abuse/neglect scales.
*$p < 0.01$., **$p < 0.001$.

TABLE 3. Summary of Hierarchical Regression Analysis for the DES and the MID Predicting the Weighted Combined Abuse Scores on the Traumatic Experiences Questionnaire

Measure of Dissociation	*B*	*SE B*	β
Step 1			
DES	0.45	0.09	0.47*
Step 2			
DES	−0.04	0.22	−0.04
MID mean score	0.52	0.22	0.55*
Step 3			
DES	−0.02	0.21	−0.02
MID mean score	−0.15	0.28	−0.16
MID severe dissociation score	0.30	0.08	0.75*

Notes. $N = 101$; DES = Dissociative Experiences Scale; MID = Multidimensional Inventory of Dissociation. $R^2 = 0.22$ for Step 1; $\Delta R^2 = 0.06$ for Step 2 ($p < 0.05$); $\Delta R^2 = 0.12$ for Step 3 ($p < 0.05$). *$p < 0.001$.

Dissociation Score. By itself, Severe Dissociation Scores accounted for 18% more variance than did the DES.

STUDY 2: PSYCHOMETRIC PROPERTIES OF THE FINAL VERSION OF THE MID

Overview

Study 2 sought to increase the clinical sensitivity and internal consistency of the 23 diagnostic scales, to validate the revised MID, and to further test the three hypotheses.

Methods

Further Revision of the MID

Twenty-eight new items were added to the diagnostic scales. The Passive Influence Facet was reconceptualized as a narrower Ego-Alien Experiences Facet. Two new facet scales were added: (1) a Self-States/Alters Scale (e.g., "Hearing a voice in your head and, at the same time, seeing an image of that "person" or voice."), and (2) an Ancillary Scale (i.e., diagnostically useful items that focus on amnesia and ego-alien dissociative experiences).

Participants

Seventy-six percent (N = 464) of the 614 participants were dissociative (i.e., had received a dissociative diagnosis from their therapists and/or a mean MID score of 15 or greater); 24% (N = 149) were not dissociative (i.e., were not diagnosed as dissociative by their therapist and obtained a MID score of less than 15).[4] Ninety-seven percent of the sample (N = 596) were therapy patients. Outpatients came from the US and Canada; inpatients came from California (N = 101), Texas (N = 65), Massachusetts (N = 7), Canada (N = 9), and Australia (N = 10).

The details of demographic data are provided in Table 1.

Materials

MID. This version of the MID had 259 items, 14 facet scales, 23 diagnostic scales, and 5 validity scales.

DES-II

Structured Clinical Interview for DSM-IV Dissociative Disorders-Revised (SCID-D-R). The SCID-D-R (Steinberg et al., 1990; Steinberg, 1994) is a semi-structured interview that rates five dissociative symptoms (i.e., amnesia, depersonalization, derealization, identity confusion, and identity alteration) and diagnoses the DSM-IV dissociative disorders and has good-to-excellent reliability for (1) the presence or absence of a dissociative disorder ($\kappa = 0.96$), (2) the type of dissociative disorder ($\kappa = 0.70$), and (3) the five dissociative symptoms ($\kappa = 0.70$ to 0.84). SCID-D-R scores correlated 0.78 with the DES (Boon & Draijer, 1993).

Dissociation Questionnaire (DIS-Q): The DIS-Q is a 63-item, self-report instrument with a five-point Likert format (Vanderlinden et al., 1993). Its four scales (i.e., identity confusion and fragmentation, loss of control, amnesia, absorption) have good internal consistency (i.e., 0.96, total scale, 0.94, 0.93, 0.88, and 0.67) and a three-to-four-week test-retest stability of (i.e., .94, total scale, 0.92, 0.92, 0.93, and 0.75). It discriminated dissociative patients from normal adults and other psychiatric patients. The DIS-Q correlated 0.85 with the DES.

Somatoform Dissociation Questionnaire-20 (SDQ-20). The SDQ-20 (Nijenhuis et al., 1996) is a 20-item, 5-point Likert scale instrument that measures somatoform manifestations of dissociation. The SDQ-20 has excellent internal consistency (Cronbach $\alpha = 0.95$); strong convergent validity with the DIS-Q ($r = 0.76$) and DES ($r = 0.85$; Nijenhuis et al., 1996, 1999); and construct validity as measured by its correlation with reported trauma (Nijenhuis et al., 1998).

Post-Traumatic Stress Diagnostic Scale (PDS). The PDS is a 49-item self-report measure of PTSD (Foa, 1995). The internal consistency of its 17 symptoms of PTSD was 0.92. The 10-to-22-day test-retest stability of its Symptom Severity Score was 0.83; its corresponding diagnostic stability was 0.74. The PDS had a kappa of 0.59 with PTSD diagnoses made by the Structured Clinical Interview for DSM-III-R Disorders (SCID; Spitzer, Williams, Gibbon, & First, 1992).

Detailed Assessment of Post-Traumatic States (DAPS). The DAPS is a 104-item self-report test of post-traumatic symptoms; it as two validity scales (Briere, 2001). Most of its 13 clinical scales had good internal consistency (0.80 to 0.96), but four scales had alpha coefficients of 0.52 to 0.72. Its diagnostic efficiency was 0.87 (Sensitivity = 0.88; Specificity = 0.86; kappa = 0.73) when compared to the Clinician Administered PTSD Scale (CAPS; Blake et al., 1995).

Procedures

All participants completed the MID and two or more other tests: DES, DIS-Q, SDQ-20, SCID-D-R, PDS, and DAPS. Clinical participants were recruited by their therapists who were members of an Internet dissociation discussion list. Nonclinical participants were support staff and church members who were invited to participate by the author. Thirty-four patients took the MID twice. Subsets of the 614 participants completed the DES ($N = 198$), DIS-Q ($N = 17$), SDQ-20 ($N = 39$), SCID-D-R ($N = 98$), PDS ($N = 40$), and DAPS ($N = 61$). No participant completed all seven instruments. Questionnaires were completed at the therapist's office or at home. No data was collected about which participants completed the questionnaires at home vs. at the office.

Data Analysis

Cronbach alpha values assessed internal reliability. A one-way ANOVA assessed the MID's ability to discriminate among diagnostic groups. A 2×4 ANOVA assessed uniformity of scores on the demographic variables across the diagnostic groups. The Scheffé test assessed *post hoc* comparisons. Pearson product-moment correlations assessed (1) test-retest stability, (2) the convergent validity between the MID and the DES, SDQ-20, DIS-Q, and SCID-D-R, and (3) the MID's relationship with PTSD symptom-clusters. Confirmatory factor analysis (CFA) evaluated one-factor models of (1) the 14 facets, and (2) the 23 diagnostic scales. Lagrange Multiplier (LM) Tests analyzed the covariances of key residuals in the two models.

Results and Discussion

Construction of the final version of the MID. Based on 500 datasets, 41 items were deleted from the MID. This item-pruning was not guided by a specific value of the item-total correlations with parent scales (e.g., all items with an item-total <0.50), but by the goal of creating 12-item facets. Deleted items had item-total correlations of 0.67 and lower. The final version of the MID has 218 items: 168 dissociation items and 50 validity items. The 14 facet scales and the 5 validity scales have no overlapping items. The 23 diagnostic scales have a small degree of item-overlap; eight items were used in more than one of the diagnostic scales. Because an additional 114 MID datasets were collected, the analyses below are based on an N of 614.

Reading level. The MID has a Flesch-Kincaid Grade Level of 7.1.

Internal reliability. The Cronbach alpha values of the 14 facets ranged from 0.91 to 0.96 with one outlier of 0.86 (i.e., Somatoform Symptoms); the Cronbach alpha values of the 23 diagnostic scales ranged from 0.84 to 0.96 (Table 4). When treated as a 14-item scale (i.e., the 14 facets), the MID had a Cronbach alpha value of 0.98. When treated as a 23-item scale (i.e., the 23 diagnostic scales), the MID had a Cronbach alpha value of 0.99. When treated as a 168-item scale (i.e., the 168 dissociation items), the MID had a Cronbach alpha value of 0.99.

Temporal stability. The MID's 4 to-8-week test-retest validity was remarkably strong: 0.89 to 0.97 for the facet scales, 0.82 to 0.97 for the diagnostic scales, and 0.97 for the overall mean MID score (Table 5). The test-retest interval varied slightly across subjects (i.e., a four-week interval for some, a five-week interval for others, etc.), but it seems unlikely that these variations would make much difference.

Structural Validity

The number of participants ($N = 614$) was insufficient to factor analyze the 168 dissociation items. Consequently, CFAs were conducted on scale-scores, not item scores.

Evaluating the one-factor model of the 14 facets. A maximum likelihood CFA evaluated a one-factor model of the 14 facets. This model had a Comparative Fit Index (CFI) of 0.87 and a Root Mean Square Error of Approximation (RMSEA) of 0.18. An LM Test was conducted to analyze the covariances in the model. Based on the LM Test, four theoretically consistent (and clinically consistent) covariances were added, one at a time, to the one-factor model. The final model generated a Comparative Fit Index (CFI) of 0.93 and a Root Mean-Square Error of Approximation (RMSEA) of 0.14 (Table 5), which indicate a poor fit with the data.

Evaluating the one-factor model of the 23 diagnostic scales. A maximum likelihood CFA tested a one-factor model of the 23 diagnostic scales. This model had a CFI of 0.79 and a RMSEA of 0.18. Addition of ten theoretically consistent (and clinically consistent) covariances to the model generated a CFI of 0.90 and a RMSEA of 0.13, which indicate a poor fit with the data.

Convergent Validity

Mean MID scores correlated strongly with the DES ($r = 0.90$), DIS-Q ($r = 0.83$), SCID-D-R ($r = 0.78$), and SDQ-20 ($r = 0.75$). The MID's

TABLE 4. Internal Consistency and Temporal Stability of the MID

MID Scale	No. of Items	Alpha Value	Test-Retest
Mean MID score	168	0.99	0.97
Severe Dissociation Score	168	0.99	0.96
MID (14 facet scales)	14	0.98	n/a
MID (23 diagnostic scales)	23	0.99	n/a
Dissociation facet scales			
Memory problems	12	0.94	0.95
Depersonalization	12	0.93	0.93
Derealization	12	0.94	0.95
Posttraumatic flashbacks	12	0.96	0.94
Somatoform symptoms	12	0.86	0.90
Trance	12	0.94	0.95
Identity confusion	12	0.95	0.96
Voices	12	0.96	0.91
Ego-alien experiences	12	0.94	0.93
Self-alteration	12	0.94	0.97
Self-states and alters	12	0.96	0.97
Discontinuity of time	12	0.96	0.96
Finding evidence of one's actions	12	0.95	0.89
Ancillary	12	0.91	0.94
Partially dissociated intrusions			
Child voices	3	0.87	0.91
Voices/internal struggle	9	0.94	0.92
Persecutory voices	5	0.93	0.89
Speech insertion	3	0.87	0.94
Thought insertion	5	0.89	0.90
Intrusive emotions	7	0.93	0.92
Intrusive impulses	3	0.86	0.85
Intrusive actions	9	0.93	0.97
Temporary loss of knowledge	5	0.87	0.89
Experiences of self-alteration	12	0.94	0.97
Puzzlement about oneself	8	0.93	0.95
Fully dissociated intrusions			
Time loss	4	0.90	0.94
"Coming to"	4	0.88	0.94
Fugues	5	0.91	0.92
Being told of disremembered actions	4	0.84	0.91
Findings objects–can't account for	4	0.91	0.82
Finding evidence of recent actions	5	0.88	0.83

Note. Test-retest interval = 4-8 weeks.

TABLE 5. Confirmatory Factor Analysis: Test of the One-Factor Model of the MID's 14 Facets of Pathological Dissociation

Facets	Path Coefficient	Residual	R^2
Self-alteration experiences	0.96	0.28	0.92
Ancillary	0.95	0.31	0.90
Ego-alien experiences	0.94	0.33	0.89
Depersonalization	0.90	0.45	0.80
Derealization	0.90	0.46	0.79
Identity confusion	0.89	0.46	0.79
Discontinuities of time	0.89	0.46	0.79
Unrecalled evidence of one's actions	0.88	0.48	0.77
Voices	0.88	0.48	0.77
Trance	0.87	0.50	0.75
Self-states/alters	0.87	0.50	0.75
Somatoform symptoms	0.83	0.57	0.68
Memory problems	0.80	0.59	0.65
Flashbacks	0.78	0.62	0.61
	Correlations Among Independent Variables		
Discontinuities of time + Unrecalled evidence of one's actions	0.65		
Derealization + Depersonalization	0.52		
Self-states/alters + Voices	0.44		
Ego-alien experiences + Identity confusion	0.39		

$X^2 = 994$; $df = 73$; $X^2/df = 13.62$.
NFI (normal fit index) = 0.93.
CFI (comparative fit index) = 0.93.
RMSEA (root mean-square error of approximation) = 0.14.
Notes. $N = 614$; MID = Multidimensional Inventory of Dissociation.

correlations with these measures of dissociation (Tables 6 and 7) provide some perspective on what each instrument measures: (1) the DES correlated most highly with the MID's Self-Alteration facet ($r = 0.87$); (2) the SDQ-20 correlated most highly with the MID's Somatoform Symptoms facet ($r = 0.86$); (3) the DIS-Q correlated most highly with the MID's Flashbacks facet ($r = 0.85$); and (4) the SCID-D-R Total Score correlated most highly with the MID's Identity Confusion facet ($r = 0.78$).

TABLE 6. Pearson Product-Moment Correlations Between the MID and Three Other Measures of Dissociation

Scale	DES	SDQ-20	DIS-Q	Mean MID	MID Severe Dissociation
DES[a]	1.00	0.84	0.94	0.90	0.84
SDQ-20[b]	0.84	1.00	—	0.75	0.67
DIS-Q[c]	0.94	—	1.00	0.83	0.76
Memory problems	0.74	0.55	0.73	0.81	0.76
Depersonalization	0.84	0.76	0.79	0.93	0.89
Derealization	0.83	0.74	0.73	0.92	0.86
Flashbacks	0.75	0.67	0.85	0.82	0.78
Somatoform	0.79	0.86	0.57	0.86	0.80
Trance	0.83	0.69	0.79	0.91	0.84
Identity confusion	0.75	0.52	0.79	0.87	0.84
Voices	0.80	0.66	0.76	0.90	0.86
Ego-alien experiences	0.85	0.64	0.78	0.95	0.90
Self-alteration experiences	0.87	0.64	0.72	0.96	0.90
Self-states and alters	0.80	0.58	0.79	0.89	0.85
Discontinuities of time	0.83	0.70	0.72	0.92	0.83
Finding evidence of actions	0.81	0.70	0.68	0.89	0.80
Ancillary	0.85	0.81	0.74	0.94	0.88

Notes. All probability values were less than .004. DES = Dissociative Experiences Scale; SDQ- 20 = Somatoform Dissociation Questionnaire-20; DIS-Q = Dissociation Questionnaire.
[a]Sample size for DES × SDQ-20 correlation was 35; sample size for DES × DIS-Q correlation was 16; sample size for DES × MID correlations was 198.
[b]Sample size for SDQ-20 × DES correlation was 35; sample size for SDQ-20 × MID correlations was 39.
[c]Sample size for DIS-Q × DES correlation was 16; sample size for DIS-Q × MID correlations was 17.

Discriminant Validity

The MID distinguished among several SCID-D-R diagnostic groups (Table 8).

Age, Gender, and Education

Mean MID scores correlated nonsignificantly with age ($r = -0.06$; $p = 0.12$), but significantly with education ($r = -0.09$; $p = 0.02$) and gender (point biserial $r = 0.22$; $p < 0.001$, with females having higher scores).

TABLE 7. Pearson Product-Moment Correlations of the SCID-D-R with the Multidimensional Inventory of Dissociation (MID) and the DES

Scale	SCID-D-R[a] Total	Amnesia	Deperson-alization	Dereal-ization	Identity Confusion	Identity Alteration
DES[b]	0.75	0.59	0.63	0.71	0.65	0.72
Mean MID score	0.78	0.64	0.63	0.74	0.66	0.73
Severe dissociation	0.84	0.71	0.70	0.78	0.71	0.80
Memory problems	0.72	**0.74**	0.57	0.62	0.57	0.67
Depersonalization	0.76	0.63	0.66	0.71	0.66	0.69
Derealization	0.70	0.56	0.56	**0.72**	0.60	0.63
Flashbacks	0.54	0.44	0.45	0.55	0.43	0.53
Somatoform	0.56	0.46	0.46	0.57	0.46	0.51
Trance	0.66	0.54	0.52	0.61	0.58	0.65
Identity confusion	**0.78**	0.64	**0.68**	0.68	**0.71**	0.72
Voices	0.71	0.57	0.53	**0.72**	0.62	0.67
Ego-alien experiences	0.74	0.60	0.60	0.71	0.65	0.71
Self-alteration experiences	0.73	0.58	0.57	0.71	0.64	0.69
Self-states and alters	0.77	0.61	0.61	0.70	0.69	**0.75**
Discontinuities of time	0.67	0.58	0.53	0.63	0.57	0.64
Finding evidence of actions	0.64	0.55	0.51	0.60	0.53	0.62
Ancillary	0.63	0.45	0.36	0.67	0.43	0.56

Notes. **Bolded** values indicate the strongest correlation with a MID scale in each column. SCID-D-R = Structured Clinical Interview for DSM-IV Dissociative Disorders-Revised; DES = Dissociative Experiences Scale; Severe dissociation = Severe dissociation score.
[a]Sample size for SCID-D-R data was 98.
[b]Sample size for DES data was 198, but sample size for correlations between the DES and the SCID-D-R was 84.

A 2 × 4 factorial ANOVA compared mean MID scores for the two genders across four MID-derived diagnostic categories (i.e., DID, DDNOS, mildly dissociative,[5] and nondissociative); the gender effect was not significant, $F(1, 512) = 0.83$, $p = 0.36$. Means for the MID-derived diagnostic groups were as follows: DID (Male = 46.4, *SD* = 16.9; Female = 50.4, SD = 18.3), DDNOS (Male = 22.0, *SD* = 6.9; Female = 24.8, *SD* = 8.6); mildly dissociative (Male = 8.3, *SD* = 2.4; Female = 8.0, *SD* = 3.3), nondissociative (Male = 3.1, *SD* = 2.3; Female = 2.9, *SD* = 2.2).

TABLE 8. MID Scores of Persons Assessed with the SCID-D-R

Diagnostic Group	*N*	Mean SCID-D-R	*SD*	Mean MID	*SD*	Severe Dissociation	*SD*
DID	47	19.00_c	1.25	49.24_c	20.49	122.15_c	34.27
DDNOS	19	15.00_b	2.87	27.86_b	15.53	75.05_b	34.06
No diagnosis	25	6.33_a	2.08	6.38_a	5.92	19.00_a	19.68

Notes. Means in the same column that do not share subscripts differ at $p < 0.001$ in the Scheffé comparison. MID = Multidimensional Inventory of Dissociation; SCID-D-R = Structured Clinical Interview for DSM-IV Dissociative Disorders; DID = Dissociative Identity Disorder; DDNOS = Dissociative Disorder, Not Otherwise Specified; No diagnosis = No dissociative diagnosis.

Construct Validity

MID scores correlated significantly with the three symptom-clusters of PTSD on the PDS and DAPS: Intrusion (*r*s = 0.64 and 0.57), Avoidance (*r*s = 0.72 and 0.61), and Hyperarousal (*r*s = 0.61 and 0.57). Mean MID scores correlated more highly with Avoidance than with Intrusion or Hyperarousal (Table 9). This pattern held true for 12 of the MID's 14 facet scales. Only the Flashbacks facet and the Somatoform Symptoms facet did not correlate most highly with Avoidance; Flashbacks and Somatoform Symptoms correlated most highly with Intrusion. These exceptions are understandable because (1) flashbacks are post-traumatic intrusive symptoms and (2) somatoform symptoms, too, are often post-traumatic intrusive symptoms (e.g., body memory, etc.; Van der Hart, Bolt, & Van der Kolk, 2005; Van der Kolk & Fisler, 1995).

GENERAL DISCUSSION

The MID is a valid and psychometrically robust, multiscale measure of pathological dissociation that correlates strongly with other measures of dissociation. The convergent validity of the MID has been replicated in Israel (where the Hebrew translation of the MID correlated 0.91 with the Hebrew DES and 0.89 with the Hebrew SCID-D-R; Somer & Dell, 2005) and in Germany (where the German translation of the MID correlated 0.93 with the German DES and 0.85 with the German SCID-D-R; Gast, Rodewald, Dehner-Rau, Kowalewsky, Engl, Reddemann, &

TABLE 9. The Relationship Between Dissociation and the Symptom-Clusters of PTSD

Scale	Intrusion		Avoidance		Hyperarousal		Total	
	PDS	DAPS	PDS	DAPS	PDS	DAPS	PDS	DAPS
DES[a]	0.58	0.47	0.67	0.47	0.61	0.50	0.68	0.52
Mean MID[b]	0.64	0.57	0.72	0.61	0.61	0.57	0.72	0.61
Severe dissociation	0.62	0.58	0.73	0.62	0.59	0.59	0.72	0.62
Memory problems	0.51	0.37	0.68	0.51	0.58	0.44	0.66	0.46
Depersonalization	0.52	0.50	0.63	0.54	0.51	0.53	0.61	0.55
Derealization	0.59	0.58	0.70	0.59	0.59	0.57	0.70	0.61
Flashbacks	**0.78**	**0.76**	**0.72**	**0.64**	0.61	**0.66**	**0.75**	**0.72**
Somatoform	0.62	0.62	0.61	0.59	0.51	0.56	0.64	0.61
Trance	0.66	0.50	0.69	0.54	0.60	0.51	0.71	0.54
Identity confusion	0.52	0.39	0.69	0.50	0.61	0.45	0.67	0.46
Voices	0.57	0.53	0.65	0.52	0.58	0.48	0.66	0.54
Ego-alien experiences	0.62	0.50	0.71	0.53	**0.63**	0.48	0.71	0.53
Self-alteration experiences	0.56	0.47	0.66	0.53	0.52	0.48	0.65	0.52
Self-states and alters	0.51	0.42	0.58	0.46	0.51	0.40	0.58	0.45
Discontinuities of time	0.65	0.50	0.69	0.54	0.55	0.49	0.69	0.53
Finding evidence of actions	0.64	0.50	0.69	0.50	0.53	0.47	0.69	0.51
Ancillary	0.57	0.51	0.67	0.51	0.55	0.48	0.66	0.52

Notes. **Bolded** values indicate the strongest correlation with a MID scale in each column. All probability values are < 0.01. PTSD = Post-Traumatic Stress Disorder; MID = Multidimensional Inventory of Dissociation; PDS = Post-Traumatic Stress Disorder Scale; DAPS = Detailed Assessment of Post-Traumatic States; DES = Dissociative Experiences Scale.

[a]Sample size for DES × PDS correlations was 28; Sample size for DES × DAPS correlations was 24.

[b]Sample size for MID scores × PDS = 40; Sample size for MID scores × DAPS = 6.

Emrich, 2003). In Study 2, the MID significantly discriminated DID patients from DDNOS patients and nonclinical adults. The discriminant validity of the MID has been supported by data from the German MID (Gast et al., 2003), the Hebrew MID (Somer & Dell, 2005), and the MID's 12 factor scales (Dell & Lawson, 2005).

The Relationship Between the MID and Other Dissociation Instruments

Although the MID's correlations with the SCID-D-R and SDQ-20 (rs = 0.78 and 0.75, respectively) were somewhat lower than the MID's correlations with the DES and DIS-Q (rs = 0.90 and 0.83, respectively), the former correlations are still impressive because the SCID-D-R and SDQ-20 introduce significant methodological variance or content variance into the statistical relationship. The SCID-D-R is a clinician-administered rating scale and the SDQ-20 is based solely on somatoform symptoms.

The pattern of correlations of MID scales with the DES, SDQ-20, DIS-Q, and SCID-D-R (see Table 6 and Table 7) suggests that different measures of dissociation tap different phenomenological aspects of the construct. For example, the DES correlated most highly with the MID's Self-Alteration facet (r = 0.87). Of the MID's 14 facets, Self-Alteration has the highest item-total correlation (0.95). Self-Alteration was also the best-explained facet of the one-factor model of the MID (R^2 = 0.92). Taken together, these facts suggest that the MID and the DES focus on similar aspects of dissociation.

Not surprisingly, the SDQ-20 correlated most highly with the MID's Somatoform Symptoms facet (r = 0.86). Of the MID's 14 facets, Somatoform Symptoms had the second lowest item-total correlation (0.83); in addition, only 68% of its variance was explained by the one-factor model of the MID (R^2 = 0.68). Taken together, these facts suggest that the MID and the SDQ-20 focus on different aspects of dissociation.

The DIS-Q correlated most highly with the MID's Flashbacks facet (r = 0.85). Of the MID's 14 facets, Flashbacks had the lowest item-total correlation (0.82); only 61% of its variance was explained by the one-factor model of the MID (R^2 = 0.61). Taken together, these facts suggest that the MID and the DIS-Q focus on different aspects of dissociation.

The SCID-D-R Total Score correlated most highly with the MID's Identity Confusion facet. Identity confusion has consistently emerged as the first factor when the MID's 168 dissociation items were factor analyzed (Dell & Lawson, 2005). I have argued that identity confusion is the core subjective experience of pathological dissociation (Dell & Lawson, 2005, Dell, in press). The MID and the SCID-D-R appear to focus on very similar aspects of dissociation.

Theoretical Implications of the MID Validation Studies

Despite more than a century of research, there is still no generally accepted definition of dissociation. Even DSM-IV and ICD-10 do not define dissociation. Instead, these diagnostic manuals limit themselves to characterizing "the essential feature of the Dissociative Disorders" (American Psychiatric Association, 2000, p. 519) and "the common theme shared by dissociative . . . disorders" (World Health Organization, 1992, p. 151).

The MID, however, is explicitly based on a definition and a model of dissociation. In fact, the MID was developed precisely in order to embody the subjective-phenomenological model of pathological dissociation and in order to test two conjectures about dissociation that stem from that model. These two conjectures define pathological dissociation and specify its phenomenological domain: (1) the phenomena of pathological dissociation are recurrent, jarring intrusions into executive functioning and sense of self and (2) no aspect of human experience is immune to dissociative intrusion. The latter conjecture has two deductive corollaries. First, if dissociative intrusions can affect every domain of human functioning, then it follows that (1) the phenomena of pathological dissociation must be quite heterogeneous (Dell, in press), but (2) these heterogeneous phenomena must cluster together statistically. Second, the prototype of dissociative pathology (i.e., DID) will probably manifest *all* of those heterogeneous dissociative symptoms (Dell, 2001a, in press). This second corollary is especially important. If true, it means that the subjective-phenomenological domain of pathological dissociation and the dissociative symptom-domain of DID are identical–one and the same. In short, the subjective-phenomenological model of pathological dissociation provides a model of DID that specifies and predicts the dissociative symptoms of DID (Dell, 2006, in press).

The MID derived from a serious effort to embody both conjectures. To the extent that dissociative intrusions into every aspect of human functioning have been successfully operationalized by the MID, then (1) the MID allows the conjectures of the subjective-phenomenological model of pathological dissociation to be tested, and (2) the MID validation studies become more than just a psychometric demonstration of the MID's validity and reliability. They become "risky tests" (Popper, 1962/1965) that expose the subjective-phenomenological model of pathological dissociation to the danger of empirical refutation.

Corroboration of the Subjective-Phenomenological Model of Pathological Dissociation

The two conjectures of the subjective-phenomenological model of dissociation cannot be tested directly. Instead, they must be tested via their deductive corollaries. The first corollary–that strikingly different clinical phenomena will cluster together statistically–can be tested via the MID's internal consistency and its factor structure.

The Cronbach alpha coefficient assesses the degree to which the scores on a set of items cluster together statistically. If Corollary 1 is correct, then the Cronbach alpha coefficient of the MID's 23 symptoms of pathological dissociation must approach unity (i.e., an alpha value of almost 1.0); if they do not, then Corollary 1 must be rejected. In both studies of the present article, the scores from the 23 symptoms of pathological dissociation had a Cronbach alpha coefficient of 0.99. The validation studies of the Hebrew-MID (H-MID) in Israel (Somer & Dell, 2005) and the German-MID in Germany (Gast et al., 2003) both reported Cronbach alpha coefficients of 0.98 for the 23 symptoms of pathological dissociation. Thus, the 23 symptoms of pathological dissociation do, indeed, cluster together.

Confirmatory factor analysis (CFA) of a one-factor model provides an even more rigorous test of the extent to which the heterogeneous phenomena of pathological dissociation cluster together. If Corollary 1 is correct, then the heterogeneous phenomena of pathological dissociation must be accounted for by a single, overarching construct; if not, then Corollary 1 must be rejected.

Although EFA showed the MID's scales to have a unifactorial structure, CFAs of the 14 facets of pathological dissociation (CFI = 0.93; RMSEA = 0.14) and the 23 diagnostic scales of pathological dissociation (CFI = 0.90; RMSEA = 0.13) showed that the one-factor model of the MID's scales had poor goodness of fit. The author had anticipated that the scale structure of the MID (which were designed to diagnose the dissociative disorders) might adversely affect the scales' CFA fit statistics–but their badness of fit was greater than anticipated. Clearly, the MID's scale structure is not statistically optimum. Diagnostically, the MID has performed well (Dell, 2001b, 2006; Gast et al., 2003). Accordingly, the poor fit of the one-factor model of these scales was not used to reorganize or reduce the number of MIDs scales (in the interest of statistical parsimony). The MID's scale structure continues to reflect its clinical priorities.

Taken alone, the poor fit of the MID's clinical scales to the one-factor model would seem to refute the subjective-phenomenological model of dissociation. Fortunately, two large datasets (N = 1,386 and 1,310) have recently made it possible to conduct an *item-analysis* of the MID's 168 dissociation items with one sample and to replicate that analysis with an independent, second sample (Dell & Lawson, 2005).[6] In these investigations, statistical parsimony *was* given priority. Principal axis factor analysis with Promax rotation extracted 12 stable factors from the first dataset: (1) Self-Confusion and Dissociative Loss of Groundedness, (2) Amnesia, (3) Subjective Awareness of the Presence of Alters or Self-States, (4) Flashbacks, (5) Body Symptoms, (6) Circumscribed Loss of Autobiographical Memory, (7) Trance, (8) Derealization/Depersonalization, (9) Dissociative Disorientation, (10) Persecutory Intrusions (i.e., persecutory voices), (11) Angry Intrusions, and (12) Distress about Memory Problems (Dell & Lawson, 2005). Each of these 12 factors correlated most highly with a conceptually similar MID scale. When this item-analysis was replicated with a second, independent dataset, an almost identical solution was obtained.

A CFA of the first dataset was then conducted to evaluate a one-factor model of scores from the 12 factor scales. The final model of the 12 factor scales included four theoretically consistent covariances; CFA of this final one-factor model produced a CFI of 0.96 and a RMSEA of 0.05. When this final model was applied to the second, independent dataset, CFA generated fit statistics that were identical to those of the first sample (i.e., CFI = 0.96; RMSEA = 0.05). Thus, the MID's 168 dissociation items have a single, second-order factor (i.e., pathological dissociation) which explains 96% of the variance in the 12 first-order factors. And, because these findings were successfully replicated, it also seems safe to conclude that the subjective-phenomenological model of dissociation has received some potent corroboration.

Corroboration of the Subjective-Phenomenological Model of DID

Corollary 2 states that the dissociative symptom-domain of DID is identical to the subjective-phenomenological domain of dissociation. In other words, DID patients are hypothesized to undergo recurrent intrusions into every aspect of their experience. Corollary 2 can be tested by examining whether DID patients report clinically significant levels of all 23 dissociative symptoms. If they do not, then Corollary 2 must be rejected. A cross-sectional study found that 220 DID patients reported a clinically significant level of 20.2 of the 23 dissociative symptoms

(Dell, 2006). An earlier pilot study of 34 DID patients (Dell, 2001b) and a well-controlled German study (Gast et al., 2003) have reported virtually identical results. Thus, three tests of Corollary 2 have provided consistent corroboration for the subjective-phenomenological model of DID.

The Relationship Between Trauma and Pathological Dissociation

The present studies found a strong relationship between traumatization and dissociation (*r*s = 0.58 to 0.63). These strong correlations between the MID and TEQ have been replicated in Israel ($r = 0.70$; Somer & Dell, 2005). Both the American study and the Israeli study found that the MID had incremental validity over the DES; the MID predicted an additional 18-21% of the variance of weighted abuse scores on the TEQ. Given the high correlation between the MID and the DES (i.e., 0.91-0.94) this incremental validity is striking. Because the DES includes many items that measure normal dissociation, it seems reasonable to infer that pathological dissociation (as measured by the MID) is more closely related to traumatization than is a mixture of pathological and normal dissociation (as measured by the DES).

MID scores correlated strongly with measures of PTSD (*r*s = 0.72 and 0.61). Most interesting, however, was the *pattern* of these correlations. MID Flashbacks and Somatoform Symptoms correlated most highly with PTSD Intrusion, whereas the other 12 MID facets correlated most highly with PTSD Avoidance (Table 9). This pattern suggests an interesting conceptual formulation. The intrusive symptoms of PTSD are generally understood to be autonomous. That is, intrusive symptoms occur without the person's choice or intent; they just intrude into his or her consciousness. In contrast, many of the avoidant symptoms of PTSD are clearly intentional; the person deliberately avoids reminders of trauma. The fact that dissociative symptoms generally correlate most highly with avoidance implies that many (most?) dissociative symptoms may involve motivated, defensive avoidance of reminders of trauma.

Pathological Dissociation Is a Stable Trait

DES scores have a four-week temporal stability of 0.93 (Frischholz et al., 1990), a four to eight-week temporal stability of 0.90 (Bernstein & Putnam, 1986), and a one-year temporal stability of 0.78 (Putnam et al.,

1992). MID scores have a four to eight-week temporal stability of 0.97 and a three to four-week temporal stability of 0.98 (Somer & Dell, 2005). These high levels of temporal stability indicate that dissociation, especially pathological dissociation, is a very stable trait.

Is Pathological Dissociation a Taxon?

Waller and colleagues have presented taxometric evidence that pathological dissociation is (1) a type or a taxon (rather than a dimension) and (2) that dissociative persons have experiences that are qualitatively different from those of nondissociative individuals (Waller et al., 1996). Although the present study shows that dissociative patients exhibit many dissociative symptoms that nondissociative persons do not, this finding cannot shed light on the taxonic status of pathological dissociation. Only a taxometric analysis of the MID can do that.

Limitations of the Present Data

The findings about the relationship between MID scores and TEQ scores are limited by the fact that that TEQ scores are based solely on the patient's recall of traumatic experiences (rather than independent verification of those traumas). In addition, the data in this article are based on samples that were predominantly adult, female, clinical, outpatient, Caucasian, and North American. Thus, these findings have limited generalizability to other populations.

Clinical and Research Utility of the MID

The present article does not address the MID's diagnostic efficiency. Dell (2006) has reported that the MID correctly diagnosed 87% to 93% of DID cases. Gast et al. (2003) replicated that finding in Germany. Using the SCID-D-R as the gold standard for dissociative diagnoses, they reported that the G-MID had a positive predictive power of 0.93, a negative predictive power of 0.84, and an overall predictive power of 0.89 for the diagnosis of major dissociative disorder (i.e., DID or DDNOS).

The MID was designed to be comprehensive; it assesses a greater variety of dissociative phenomena than do other measures of dissociation.[7] Because it is self-administered and takes 30-50 minutes to complete (with some outliers who take substantially longer), the MID

readily lends itself to large-sample investigations of different clinical populations. MID research can assess (1) the dissociative profiles of the various dissociative disorders and (2) the dissociative profiles of diagnostic groups that are sometimes confused with DID–namely BPD, PTSD, bipolar disorder, schizophrenia, somatization disorder, and major depression.[8]

NOTES

1. The development of the DDIS was informed by more than the DSM. In particular, the DDIS was informed by Ross's thinking about trauma-related disorders and their likely phenomena (e.g., first-rank symptoms). As such, the DDIS covers many more dissociative phenomena than are contained among the symptoms of the DSM-IV dissociative disorders.

2. The term *phenomenological domain of pathological dissociation* does not refer to mechanisms or explanations of dissociation; it refers to the set of all possible signs and symptoms of pathological dissociation.

3. The 23rd symptom of DID, "made" or intrusive impulses, was inadvertently omitted from the initial version of the MID.

4. A review of 2000+ MID protocols showed that the vast majority of psychiatric patients obtain a MID score of 15 or less. Only *some* persons with a MID score of 15 or higher have a diagnosable dissociative disorder, but all persons with a MID score of 15 or higher are reporting at least a half-dozen dissociative symptoms (according to the MID's severe dissociation scoring system). My characterization of the sample–as 76% dissociative–is an informative generalization, not a precise scientific assertion. On the other hand, statistical comparisons of different groups in this study are based solely on SCID-D-R diagnoses.

5. Mildly dissociative participants manifested a clinically significant level of dissociation on one or two of the 23 dissociative symptoms.

6. In the first of Dell and Larson's two large samples, 818 (of 1,386) datasets came from the research participants of Study 1 ($N = 204$) and Study 2 ($N = 614$) of the present article. It should be noted that Dell and Larson's analyses were derived from factor analyses of *item scores*, whereas most of the statistical results in the present study were derived from analyses of *scale scores*.

7. Three measures of dissociation (i.e., DES, QED, and SDQ-20) yield a single dissociation score. Four other measures of dissociation have scales. The DIS-Q has four scales. The Multiscale Dissociation Inventory (MDI; Briere, 2002) has six scales. The SCID-D-R rates five symptoms of dissociation. The DDIS determines the presence or absence of each diagnostic criterion in DSM-IV dissociative disorders, each of the 11 Schneiderian first-rank symptoms, trance, and 11 features associated with DID.

8. Copies of the Multidimensional Inventory of Dissociation and its Excel-based scoring program, *MID Analysis*, are available from the author. *MID Analysis* provides scoring for both the MID's clinical scales and its factor scales.

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