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# A New Model of Dissociative Identity Disorder

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The *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition-Text Revision* [1] (DSM-IV-TR) describes the classic features of dissociative identify disorder (DID) that are widely known in the general culture. According to the DSM-IV-TR description, a person who has DID switches from one personality to another; each personality has its own identity; and the host personality has amnesia for the activities of the other personalities. I have argued that this description of DID is deficient because it omits most of the dissociative phenomena of DID [2–4] and focuses solely on alter personalities.

This article presents data from 220 persons who have DID and explores how those data fit with three contrasting models of DID: (1) the DSM-IV's classic picture of DID (ie, multiple personalities + switching + amnesia), (2) Dell's subjective/phenomenological model of DID [4], and (3) the sociocognitive model of DID. The DSM-IV narrowly portrays DID as an alter disorder, whereas the subjective/phenomenological model portrays DID as a far more complex dissociative disorder that is characterized by recurrent dissociative intrusions into every aspect of executive functioning and sense of self.[1] The subjective/phenomenological model of DID subsumes the DSM-IV model of DID, but not vice versa. The sociocognitive model argues that DID is a socially-constructed, iatrogenic condition.

## The dissociative phenomena of dissociative identity disorder

Thirteen dissociative symptoms of DID have been well-replicated. These 13 dissociative symptoms have been reported by 8 to 32 empirical studies of

[1] This article does not address the psychological mechanism of these dissociative intrusions (ie, self-states or alter personalities); that topic requires a separate paper [4].

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Table 1
Thirteen well-documented dissociative symptoms of dissociative identity disorder

| Symptom | Empirical studies |
|---|---|
| Straightforward dissociative symptoms | |
| Amnesia | 32 |
| Conversion | 28 |
| Voices | 22 |
| Depersonalization | 20 |
| Trances | 17 |
| Self-alteration | 16 |
| Derealization | 14 |
| Awareness of the presence of alters | 10 |
| Identity confusion | 10 |
| Flashbacks | 8 |
| Psychotic-like dissociative symptoms | |
| Auditory hallucination | 13 |
| Visual hallucinations | 11 |
| Schneiderian first-rank symptoms | 14 |
| 'Made' actions | 6 |
| Voices arguing | 5 |
| Voices commenting | 4 |
| 'Made' feelings | 3 |
| Thought withdrawal | 2 |
| Thought insertion | 2 |
| 'Made' impulses | 1 |

Empirical studies are the number of empirical studies that have reported the occurrence of that dissociative symptom in persons who have dissociative identity disorder.

DID (Table 1). The subjective/phenomenological model accounts for these symptoms, but the DSM-IV model does not.[2]

Three items in Table 1 are psychotic symptoms (auditory hallucinations, visual hallucinations, and Schneider's first-rank symptoms), but I contend that there are many patients whose auditory hallucinations, visual hallucinations, or first-rank symptoms are dissociative in nature rather than psychotic (see later discussion).

### *Straightforward dissociative symptoms*

#### *Amnesia*

Amnesia is the most frequently reported dissociative symptom of DID [3–35]. At least 10 different manifestations of amnesia have been reported in persons who have DID: (1) time loss [3,6,10,11,14–18,20,24,25,27,32,33,35]; (2) fugues [3,5,7,10–14,20–22,24,27,29,31,32,36]; (3) being told of disremembered actions [3,10,11,13,14,16,17,19,27,32,35]; (4) temporary loss of well-practiced knowledge or skills [3,10,13–16,18,25,35]; (5) finding objects

[2] DSM-IV accounts for 2 of the 13 well-replicated dissociative symptoms of DID.

among one's possessions [3,10,13,14,27,32]; (6) amnesia for childhood [24,27,32]; (7) amnesia for personal identity [6,35]; (8) strangers know the person [27,32]; (9) objects are missing [27,32]; and (10) finding evidence of one's recent actions [3,6,14].

Amnesia is one of the five diagnostic symptoms of dissociation that the Structured Clinical Interview for DSM-IV Dissociative Disorders–Revised (SCID-D-R) [33] measures. Amnesia is also one of the two factors of pathological dissociation on the Dissociative Experiences Scale (DES) [54]. Despite its robust replication in the empirical literature on DID, amnesia did not become a diagnostic criterion for DID until the DSM-IV [37]. DSM-IV provides a vague definition of amnesia. Detection of amnesia would be greatly facilitated if the DSM included well-validated examples of amnesia in DID (such as those in the previous paragraph).

*Conversion symptoms*

The second most commonly documented dissociative symptom of DID is somatoform conversion (and other somatoform symptoms) [3,6,7,10–16,20–22,24,27,30–32,35,36,38–45]. Conversion symptoms have been considered to be somatoform dissociative symptoms since at least the time of Janet [46]. Nevertheless, despite cogent criticism and convincing empirical evidence [47–51], the DSM-IV classifies conversion disorder as a somatoform disorder, rather than a dissociative disorder. The *International Classification of Diseases, Tenth Edition* (ICD-10) [52], on the other hand, classifies conversion symptoms as *dissociative [conversion] disorders* (F44). The somatoform disorders section of DSM-IV states that dissociative and conversion symptoms commonly occur in the same individual. The dissociative disorders section of DSM-IV lists conversion symptoms among the associated descriptive features of DID.

*Voices*

The third most commonly documented dissociative symptom of DID is hearing voices [3,5–7,10,11,13–16,18–20,22,24,25,27,31,32,35,36,53]. These voices are usually, but by no means always, located "in the head." A small minority of persons who have DID deny hearing voices; some of the latter actually do hear voices, but they have reframed or rationalized them (eg, "it's me," "it's just my conscience"). Nevertheless, some persons who have DID genuinely do not hear voices. The descriptive text in DSM-IV mentions voices, but seems to (inaccurately) limit the presence of voices in DID to command hallucinations (ie, "a voice giving instructions") [1].

*Depersonalization*

Depersonalization is the fourth most frequently documented dissociative symptom of DID [3,5–12,14,21–24,27,31,33–36]. Depersonalization is one of the five diagnostic symptoms of dissociation that the SCID-D-R assesses.

Depersonalization/derealization is also one of the DES's two factors of pathological dissociation [54,55]. The DSM-IV account of DID makes no mention of depersonalization.

*Trance states*

The empirical literature on DID has repeatedly documented the presence of trance states (ie, periods of nonresponsiveness during which the person manifests a blank stare) [3,5,6,11,14–20,24,25,27,31,35,36]. Although the occurrence of trance states is thoroughly documented in the adult and child literature on DID, the DSM-IV makes no mention of trance states in DID.

*Self-alteration*

Self-alteration is the sixth most frequently documented dissociative symptom of DID. [3,5,6,8,11,14–20,25,33–35]. Self-alteration is not synonymous with switching from one personality to another. Self-alteration is the subjective experience of undergoing sudden, inexplicable, and often ego-alien changes in one's sense of self. These experiences are obviously similar to depersonalization, but they do not have depersonalization's quality of generalized detachment and alienation. In self-alteration, for example, one does not feel so much detached from one's body, thoughts, or urges as one feels that one's body, thoughts, or urges belong to someone else. Identity alteration is one of the five diagnostic symptoms of dissociation that the SCID-D-R assesses. DSM-IV focuses on visible switching from one personality to another; it makes no mention of the experience of self-alteration.

*Derealization*

Derealization has repeatedly been reported by persons who have DID [3,6,8–11,14,23,24,27,32–34]. Derealization is one of the five diagnostic symptoms of dissociation that the SCID-D-R measures. Depersonalization/derealization is also one of the DES's two factors of pathological dissociation [55]. The DSM-IV account of DID makes no mention of derealization.

*Awareness of the presence of other personalities*

Awareness of the presence of other personalities has been widely reported in the empirical literature on DID [16–20,24,25,27,32,35]. Such awareness is a common occurrence in DID. Moreover, many patients who have DID hear or see what some personalities say or do when they are "out." Many clinicians have incorrectly assumed that a person who has DID can never be aware of the activities of another personality. This assumption, which is supported by the classic view of DID, is often cited as a reason for ruling out the diagnosis of DID (ie, if the patient remembers what an alter personality did or said, then the patient, supposedly, does not have DID) [56]. The Dissociative Disorders Interview Schedule (DDIS) [64] and the SCID-D-R inquire about the person's subjective awareness of other personalities. The

DSM-IV does not mention that patients who have DID typically have subjective awareness of other personalities.

*Identity confusion*

Identity confusion is often reported in persons who have DID [3,8–10,14,17,32–35]. Identity confusion is one of the five diagnostic symptoms of dissociation that the SCID-D-R measures. The DSM-IV account of DID makes no mention of identity confusion.

*Flashbacks*

Flashbacks are common for persons who have DID [3,10,14,18,24,27,32,35]. Similarly, posttraumatic stress disorder (PTSD) has been reported to be extensively comorbid with DID [10–12,15,24]. The DDIS and the SCID-D-R inquire about flashbacks. DSM-IV lists flashbacks as an associated descriptive feature of DID.

*Psychotic-like dissociative symptoms*

In the 1980s, researchers of DID were acutely aware that many cases of multiple personality had received a prior diagnosis of schizophrenia [6,7,9,22,27,31,36,53,57]. Accordingly, research in the 1980s often focused on psychotic-like symptoms of DID (which could lead to an erroneous diagnosis of schizophrenia).

*Auditory hallucinations*

At least 13 studies have documented the presence of auditory hallucinations in patients who have DID [5–7,11–13,18,20,21,24,25,35,36]. Authors of studies reporting auditory hallucinations have typically provided little description or explication of the clinical phenomena that they included under this rubric, which is unfortunate because at least three different referents for auditory hallucinations are present in a population of patients who have DID. These are: (1) hearing the voices of alter personalities, (2) the auditory component of dissociative flashbacks, and (3) genuinely psychotic auditory hallucinations. I suspect that most of the 21 studies that have reported auditory hallucinations in persons who have DID are referring to hearing the voices of alter personalities. This interpretation of voices in DID would seem to underlie the DSM-IV-TR's view of auditory hallucinations in DID: "an identity that is not in control may nonetheless gain access to consciousness by producing auditory … hallucinations (e.g., a voice giving instructions)" [1].

*Visual hallucinations*

Eleven studies have reported that patients who have DID experience visual hallucinations [6,7,11–13,18,20,21,24,35,36]. The same problem exists in these reports as in reports of auditory hallucinations; the authors of the studies have provided very little description or explication of the clinical

phenomena they included under this rubric. In a population of patients who have DID, at least three possible referents for visual hallucinations exist: (1) seeing or visualizing alter personalities (either in the mind or externally), (2) the visual component of dissociative flashbacks, and (3) genuinely psychotic visual hallucinations. In my experience with patients who have DID, genuinely psychotic visual hallucinations are uncommon, but they may occur if a person who has DID develops reactive dissociative psychosis [58] or another (comorbid) psychotic disorder. On the other hand, visual flashbacks and seeing alters are common experiences. Seeing or visualizing an alter seems to underlie DSM-IV-TR's view of visual hallucinations in DID: "an identity that is not in control may nonetheless gain access to consciousness by producing … visual hallucinations" [1].

*Schneiderian first-rank symptoms*

Fourteen studies have reported the occurrence of Schneiderian first-rank symptoms [59] in persons who have DID [5,18,24,26–32,38,53,60,61]. Another eight studies have reported the occurrence of specific first-rank symptoms in patients who have DID, including voices arguing [10,13,14,20], voices commenting [6,10,14,20], "made" feelings [3,10,35], "made" impulses [10], "made" actions [3,6,10,20,35,36], thought withdrawal [3,6], thought insertion [3,6], thought broadcasting [6,10], and delusional perception [6,36].

Kluft [53] was the first to document the frequency of the 11 Schneiderian first-rank symptoms in a well-diagnosed series of DID cases. He reported that eight of the first-rank symptoms (voices arguing, voices commenting, "made" feelings, "made" impulses, "made" actions, influences on the body, thought withdrawal, and thought insertion) were common in DID, but that three of the first-rank symptoms (thought broadcasting, audible thoughts, and delusional perception) did not occur in DID. Although other researchers have occasionally reported thought broadcasting, audible thoughts, and delusional perceptions in patients who have DID [6,10,18,26,36], I concur with Kluft that such symptoms are not phenomena of DID. Instead, these symptoms may occur if a patient who has DID undergoes a true psychotic episode (eg, major depressive episode with psychotic features, reactive dissociative psychosis). Still, this matter will probably not be resolved until two issues are clarified further: whether the 11 Schneiderian symptoms should be construed narrowly or broadly, and whether the 11 Schneiderian symptoms are qualitatively different in persons who have DID (compared with persons who have a psychotic disorder) [10,28,62–64]. The DSM-IV account of DID makes no mention of first-rank symptoms.

*Commentary on the literature about the dissociative phenomena of dissociative identity disorder*

The preceding 13 sections illustrate the extent to which the empirical literature's picture of DID is strikingly different from the DSM-IV's picture of

DID. Only 2 of the 13 dissociative symptoms in Table 1 are strongly included in the DSM-IV-TR diagnostic criteria for DID: amnesia and objective signs of self-alteration. Of the remaining 11 dissociative symptoms in Table 1, 5 receive no mention whatsoever in the DSM-IV-TR (depersonalization, derealization, awareness of the presence of alters, identity confusion, and first-rank symptoms); 3 are mentioned in the text pertaining to diagnostic features (auditory flashbacks, visual flashbacks, and voices); 2 are listed among the associated descriptive features of DID (conversion and flashbacks); and 1 is mentioned under differential diagnosis (trance).

The ''take-home message'' is that there is a large difference between the empirical literature's account of the dissociative phenomena of DID and the DSM-IV's account of the dissociative phenomena of DID.

## Two major clusters of dissociative phenomena

DID has two major clusters of dissociative phenomena, only one of which is described by DSM-IV: switching from one personality to another with concomitant amnesia. This cluster of dissociative phenomena is, in fact, identical to the DSM-IV model of DID. The second cluster of dissociative phenomena in DID is intrusions into executive functioning and sense of self by alter personalities.[3]

The remaining 11 of the 13 well-replicated dissociative symptoms of DID in Table 1 are intrusions by alter personalities. Strictly speaking, identity confusion is not a dissociative intrusion. Rather, identity confusion is the result of recurrent dissociative intrusions. The DSM-IV makes no mention of intrusions.

The first cluster of dissociative phenomena in DID—switching from one personality to another with concomitant amnesia—is known almost universally, even by the general public. Conversely, the second cluster of dissociative phenomena in DID—intrusion into executive functioning and sense of self by alter personalities—is largely unknown.

For several reasons, even clinicians who treat DID tend to have only a partial awareness or understanding of dissociative intrusions. First, the term *intrusion* has generally not been used to describe DID. That is, clinicians who treat DID readily use the term *intrusion* to refer to criterion B PTSD symptoms [1] (eg, intrusive memories, dreams, flashbacks), but not dissociative symptoms. Second, the notion that dissociative symptoms are intrusive is intuitively recognized by clinicians who treat DID, but not in a focal way. Third, clinicians who treat DID tend to think of these symptoms under a different rubric from intrusion. They think of these symptoms in terms of passive-influence phenomena (Schneiderian first-rank symptoms).

[3] I have argued elsewhere that switching with concomitant amnesia is actually a special case of dissociative intrusion. Thus, I contend that the subjective phenomenology of dissociative symptoms is always one of intrusion into executive functioning or sense of self.

More than 20 publications have reported that patients who have DID routinely experience one or more of the eight passive-influence phenomena. These eight Schneiderian first-rank symptoms are experienced as autonomous intrusions into a person's executive functioning and sense of self. In schizophrenia, these intrusions take a psychotic form. That is, the patient gives the intrusion a delusional explanation (eg, "Marilyn Monroe is controlling my thoughts"). In DID, these intrusions take a nonpsychotic form; they are noted and described by the patient, but they are not given a delusional explanation (eg, "I know this sounds crazy, but sudden strong thoughts come into my mind and they feel like they are not mine").

## The subjective/phenomenological model of pathological dissociation

The subjective/phenomenological model of pathological dissociation[4] is actually a generalized formulation of the eight Schneiderian passive-influence experiences. According to the subjective/phenomenological model of pathological dissociation, the phenomena of pathological dissociation are recurrent, jarring intrusions into executive functioning and sense of self by self-states or alter personalities. Such dissociative phenomena are startling, alien invasions of one's mind, functioning, and experience. These intrusions are always confusing [65–67] and often frightening. They frequently cause persons who are dissociative to fear for their sanity. The subjective/phenomenological model of pathological dissociation has four corollaries.

### *Pathological dissociation can affect every aspect of human experience*

No aspect of human experience is immune to invasion by dissociative symptoms. Dissociative intrusions can affect one's conscious awareness and one's experience of one's body, world, self, mind, agency, intentionality, thinking, believing, knowing, recognizing, remembering, feeling, wanting, speaking, acting, seeing, hearing, smelling, tasting, and touching.

### *Most phenomena of pathological dissociation are subjective and invisible*

The overwhelming majority of dissociative phenomena are subjective and invisible, rather than objective and visible [4]. Relatively few objective signs of dissociation exist, and the few objective signs that do exist are unreliably discerned, even by well-trained observers [68].

### *There are two major kinds of pathological dissociation: intrusions and amnesias*

Two major kinds of pathological dissociation exist: dissociative symptoms that are partially dissociated from consciousness (intrusions), and

[4] Strictly speaking, identity confusion is not a dissociative intrusion. Rather, identity confusion is the *result* of undergoing recurrent dissociative intrusions.

dissociative symptoms that are fully dissociated from consciousness (amnesias). When a dissociative symptom is partially dissociated from consciousness, the individual is contemporaneously (and disturbingly) aware of the jarring, alien intrusions into his or her executive functioning and sense of self. In contrast, when a dissociative event is fully dissociated from conscious awareness (ie, when amnesia occurs), the person has no awareness whatsoever of that occurrence.

*Most dissociative symptoms are not fully dissociated from consciousness*

With the exception of amnesia, dissociative individuals have contemporaneous, conscious awareness of all other dissociative intrusions (eg, depersonalization, derealization, voices, intrusive thoughts, "made" actions). Thus, with the exception of amnesia, all dissociative events are partially conscious.

A major shortcoming of the DSM-IV is encountered here. DSM-IV's classic picture of DID embraces full dissociation (ie, amnesia), but omits partial dissociation. This omission is a problem because incidents of partial dissociation are vastly more common than incidents of switching-accompanied-by-amnesia [4].

## A new model of the dissociative phenomena of dissociative identity disorder

In 2001 [2], I proposed an expanded view of the dissociative phenomena of DID, outlined in Box 1. I believe that this expanded view of DID is more accurate because, unlike DSM-IV, it delineates the predominance of intrusions in the dissociative symptoms of DID. The predominance of dissociative intrusions in DID is predicted by the subjective/phenomenological model of pathological dissociation [4] and supported by the decisive preponderance of intrusions among the 13 well-replicated dissociative symptoms of DID (Table 1).

According to the subjective/phenomenological model of pathological dissociation, the domain of pathological dissociation (ie, intrusions into every aspect of human experience) directly specifies the dissociative symptom-domain of DID [4]. Box 1 is an effort to operationalize this conjecture; it implicitly delineates (1) the entire domain of human experience, (2) the corresponding dissociative intrusions to which each aspect of that domain is subject, (3) the symptom-domain of DID, and (4) the subjective/phenomenological domain of pathological dissociation.[5]

[5] Although not identified as such in Box 1, both criterion A (general dissociative symptoms) and criterion B (partially-dissociated intrusions of another self-state) are considered to be partially dissociated intrusions. Criterion A is grouped separately from criterion B because it contains dissociative symptoms that often occur in nondissociative disorders (eg, PTSD, panic disorder, borderline personality disorder, schizotypal personality, major depressive disorder, somatization disorder).

**Box 1. The subjective/phenomenological model of dissociative identity disorder**

*General dissociative symptoms (4 of 6 required)*
- Memory problems
- Depersonalization
- Derealization
- Posttraumatic flashbacks
- Somatoform symptoms
- Trance

*Evidence of the partially dissociated intrusions of another self-state, as indicated by either 1 or 2:*
1. Clinician observation of a self-state that claims (or appears) to be someone other than the person being interviewed, as indicated by the person's
   - Co-conscious awareness of the activities of the self-state; and
   - Remembering what the self-state said and did
   - Experiencing the self-state as ''other.''
2. At least 6 of the following 11 symptoms of intrusion by a partially dissociated self-state:
   - Child voices
   - Internal struggle, conversation, or argument
   - Persecutory voices that comment harshly, make threats, or command self-destructive acts
   - Speech insertion (unintentional or disowned utterances)
   - Thought insertion or withdrawal
   - ''Made'' or intrusive feelings and emotions
   - ''Made'' or intrusive impulses
   - ''Made'' or intrusive actions
   - Temporary loss of well-rehearsed knowledge or skills
   - Disconcerting experiences of self-alteration
   - Self-puzzlement

*Evidence of the fully dissociated intrusions of another self-state (ie, amnesia), as indicated by either 1 or 2:*
1. Clinician observation of a self-state that claims (or seems) to be someone other than the person being interviewed, followed by the person's subsequent amnesia for the clinician's encounter with the self-state.
2. Recurrent amnesia, as indicated by the person's report of multiple incidents of at least two of the following:
   - Time loss
   - ''Coming to''
   - Fugues
   - Being told of disremembered actions
   - Finding objects among one's possessions
   - Finding evidence of one's recent actions

Before proceeding further, the new model of DID [4] must be distinguished from the diagnostic criteria that reflect that model [2]. Box 1 does not draw a distinction between the model and its diagnostic criteria. In fact, Box 1 explicates the model through a set of diagnostic criteria. Obviously, the new model of DID and diagnostic criteria that reflect that model cannot be completely separated from one another. Still, I am not proposing that the DSM-V diagnostic criteria for DID should include all 25 of the dissociative symptoms in Box 1. Even though I believe that these 25 symptoms routinely characterize DID, the issue of which (and how many) of those symptoms should be used in a new set of diagnostic criteria for DID is a pragmatic and empirical question that remains unanswered.

The present study is not meant to assess a new set of diagnostic criteria for DID; instead, this study assesses the degree to which the subjective/phenomenological model of DID (see Box 1) accurately describes a large sample of DID cases. To the extent that the dissociative symptoms of these persons with DID conform to Box 1, then, to that same extent, the DSM-IV model of DID is deficient.

### *Testing the subjective/phenomenological model of dissociative identity disorder*

Because no instrument comprehensively measured the hypothesized dissociative symptom-domain of DID, it was necessary to develop the Multidimensional Inventory of Dissociation (MID) [65]. The MID has 23 dissociation scales that assess the subjective/phenomenological domain of pathological dissociation and the hypothesized dissociative symptom-domain of DID (see Box 1).[6]

The internal consistency of the MID's 23 dissociation diagnostic scales was good-to-excellent in a large clinical sample (range of Cronbach $\alpha$ = 0.84 to 0.96; median $\alpha = 0.91$) and had good-to-excellent temporal stability over a 4- to 8-week test–retest interval (range of temporal stability coefficients = 0.82 to 0.97; median coefficient = 0.92) [65]. These results were replicated in Israel with the Hebrew MID (H-MID) [69] and in Germany with the German MID (G-MID) [70]. Each of the 23 dissociation diagnostic scales of the H-MID had good-to-excellent internal consistency (range of Cronbach $\alpha = 0.81$ to 0.97; median $\alpha = 0.93$). Each of the 23 dissociation

[6] Although the following seven paragraphs about the psychometrics of the MID could be placed in the section on "Methods," they are described here for an important reason. The MID was designed to comprehensively assess the subjective/phenomenological domain of dissociation. Accordingly, the validity and reliability of the MID simultaneously assess three other issues: (1) the validity of the subjective/phenomenological model of dissociation, (2) the validity of the subjective/phenomenological domain of dissociation, and (3) the validity of the subjective/phenomenological model of DID.

diagnostic scales of the G-MID had good-to-excellent internal consistency (range of Cronbach $\alpha = 0.80$ to 0.96; median $\alpha = 0.90$).

The MID's convergent validity was demonstrated by the instrument's high correlations with four other measures of dissociation [65]: the DES [54] ($r = 0.90$), the Dissociation Questionnaire (DIS-Q) [71] ($r = 0.83$), the SCID-D [33] ($r = 0.78$), Questionnaire of Experiences of Dissociation (QED) [72] ($r = 0.75$), and the Somatoform Dissociation Questionnaire-20 (SDQ) [39] ($r = 0.75$). The convergent validity of the MID was replicated in Israel; the H-MID correlated 0.91 with the Hebrew-DES and 0.89 with the Hebrew-SCID-D. The convergent validity of the MID was also replicated in Germany; the G-MID correlated 0.93 with the German-DES and 0.85 with the German-SCID-D.

Four studies have supported the discriminant validity of the MID's scales [3,65,66,70]. MID scores significantly discriminated among four groups: DID, dissociative disorder not otherwise specified (DDNOS)-1, mixed psychiatric, and nonclinical adults [3,65].[7]

In Germany, G-MID scores significantly discriminated among the same four groups [70]. Finally, various combinations of the 12 MID factor scales significantly discriminated among three patient groups: DID, DDNOS, and mixed psychiatric [66].

The structural validity of the MID was strongly supported by two exploratory factor analyses of the MID's 168 dissociation items [66]. These analyses extracted 12 factors. Confirmatory factor analyses of two independent samples tested a one-factor model of these 12-factor scales; the model explained 96% of the variance in the 12 factors. Thus, the MID's 12-factor scales are robustly explained by a single, overarching construct—pathological dissociation.

### *The present study*

The present study assesses whether the subjective/phenomenological domain of pathological dissociation accurately predicts the dissociative symptoms of persons who have DID. A pilot study found that the incidence of 22 subjective/phenomenological dissociative symptoms in 34 patients who had DID ranged from 74% to 100%, with a median frequency of 91% [14].

The present study analyzed the MID data of 220 clinically-diagnosed cases of DID; a subset of these clinically-diagnosed cases was confirmed with the SCID-D-R ($n = 41$). The specific purpose of the study was to assess whether DID is characterized by the 23 subjective/phenomenological dissociative symptoms that are measured by the MID (see Box 1).

[7] DDNOS-1 is the first example of DDNOS in DSM-IV: "Clinical presentations similar to Dissociative Identity Disorder that fail to meet full criteria for this disorder. Examples include presentations in which a) there are not two or more distinct personality states, or b) amnesia for important personal information does not occur" [37].

## Method

### Participants

The study comprised 220 persons who had DID diagnoses. All were undergoing active psychotherapy and had received a clinical diagnosis of DSM-IV DID from their therapists. A subset of the sample (n = 41) were administered the SCID-D-R, which confirmed their DID diagnoses. The participants had a mean age of 41 years (SD = 8.8 years) and a mean educational level of 14.6 years (SD = 2.7 years). The sample comprised 90% women (n = 199) and 9% men (n = 20); the gender of one participant was unrecorded. Of these participants, 89% (n = 195) were Caucasian, 4% (n = 8) were Hispanic, 3% (n = 7) were African-American, one participant was Native American, one participant was from the Pacific Islands, and one participant was of mixed racial origin. The race of 3% (n = 7) of the participants was not recorded. The participants comprised 26% inpatients (n = 57) and 73% (n = 161) outpatients; the status of two participants was not known. Participants came from outpatient settings throughout the United States and Canada, and from five inpatient settings in California, Texas, Massachusetts, Canada, and Australia.

### Materials

*Multidimensional Inventory of Dissociation*. The MID is a Likert-format 11-point (0–10, anchored by Never and Always) self-report instrument with 168 dissociation items and 50 validity items. The instructions are: "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." The MID has a Flesch-Kincaid Grade Level of 7.1 [65].

The MID has two scoring systems: mean scores and severe dissociation scores. Severe dissociation scores are based on empirically-determined pass/fail cutoff scores for each item and scale. The cutoff scores maximize the discrimination between persons who have and don't have a severe dissociative disorder. MID severe dissociation scores range from 0 to 168.

The MID has 23 dissociation diagnostic scales that vary in length from 3 to 12 items (Table 2). Seven of these scales are identical to their counterpart in the 14 primary scales. The MID has 50 validity items and 5 validity scales: defensiveness, rare symptoms, attention-seeking behavior, factitious behavior, and emotional suffering. The validity scales were designed to detect two response sets: defensive minimization and exaggerated responding. The present study does not present data from the MID's validity scales; that will be the topic of another publication. Validity data did not alter the substance or meaning of the findings reported here.

Table 2
Incidence of 23 dissociative symptoms in 220 persons who have dissociative identity disorder

| MID scale | SCID-D n = 41 | Total sample n = 220 | Outpatients n = 161 | Inpatients n = 57 |
|---|---|---|---|---|
| Mean number of symptoms | 19.7 | 20.2 | 19.9 | 21.3 |
| SD | 4.7 | 4.5 | 4.8 | 3.2 |
| *Percent incidence of each symptom* | | | | |
| General dissociative symptoms: | | | | |
| Memory problems (5/12)[a] | 100 | 94 | 93 | 98 |
| Depersonalization (4/12) | 95 | 95 | 94 | 98 |
| Derealization (4/12) | 93 | 92 | 89 | 98 |
| Posttraumatic flashbacks (5/12) | 93 | 92 | 90 | 96 |
| Somatoform symptoms (4/12) | 83 | 83 | 81 | 88 |
| Trance (5/12) | 88 | 87 | 84 | 96 |
| Partially-dissociated intrusions | | | | |
| Child voices (1/3) | 95 | 95 | 94 | 95 |
| Internal struggle (3/9) | 100 | 96 | 95 | 98 |
| Persecutory voices (2/5) | 88 | 90 | 87 | 96 |
| Speech insertion (2/3) | 85 | 83 | 81 | 86 |
| Thought insertion/withdrawal (3/5) | 93 | 91 | 90 | 95 |
| "Made"/intrusive emotions (4/7) | 95 | 91 | 90 | 96 |
| "Made"/intrusive impulses (2/3) | 85 | 89 | 87 | 93 |
| "Made"/intrusive actions (4/9) | 98 | 95 | 93 | 98 |
| Temp loss of knowledge (2/5) | 90 | 82 | 80 | 91 |
| Self-alteration (4/12) | 98 | 95 | 94 | 98 |
| Self-puzzlement (3/8) | 98 | 95 | 93 | 98 |
| Fully-dissociated intrusions (ie, amnesia) | | | | |
| Time Loss (2/4) | 88 | 88 | 87 | 89 |
| "Coming to" (2/4) | 78 | 79 | 75 | 88 |
| Fugues (2/5) | 83 | 75 | 71 | 86 |
| Being told of actions (2/4) | 85 | 86 | 85 | 88 |
| Finding objects (2/4) | 61 | 74 | 72 | 77 |
| Evidence of actions (2/5) | 71 | 77 | 76 | 81 |

*Abbreviations:* MID = multidimensional inventory of dissociation; SCID-D, Structured Clinical Interview for DSM-IV Dissociative Disorders-Revised; Temp loss of knowledge, temporary loss of well-rehearsed knowledge or skills; Self-alteration, experiences of self-alteration; Being told of actions, being told of disremembered actions; Finding objects, finding objects among one's possessions; Evidence of actions, finding evidence of ones recent actions.

[a] The first numeral is the number of items that must receive a clinically-significant rating by the test-taker for that symptom to be considered present; the second numeral is the number of items on that scale.

The present study used a 259-item precursor of the final version of the MID. The final version of the MID was created by deleting 41 items from the 259-item version. All MID data presented below are based on the final MID (ie, a 218-item scoring of the data from the 259 items). The present study's findings were not used to decide which items to delete from the MID to create the final, 218-item MID.

*Structured Clinical Interview for DSM-IV Dissociative Disorders–Revised.* The SCID-D-R [33,73,74] is a 277-item semistructured interview that rates five dissociative symptoms (amnesia, depersonalization, derealization, identity confusion, and identity alteration) and diagnoses the five DSM-IV dissociative disorders. The SCID-D-R has good-to-excellent reliability and validity for each of the five dissociative symptoms and the five dissociative disorders. The total SCID-D-R score correlates 0.78 with the DES [9] and 0.78 with the MID [65].

*Procedures*

During the development of the MID, the members of a dissociation discussion list on the Internet were invited to enlist patients to participate in this study. Therapists were sent a brief analysis of their patient's MID scores. All participants were recruited by their therapists. Participants either completed the MID at their therapist's office or at home between sessions. Forty-one individuals also agreed to participate in a SCID-D-R interview.

*Results*

*Incidence of the 23 dissociative symptoms in 220 clinically-diagnosed cases of dissociative identity disorder.* The median incidence of the 23 dissociative symptoms was 90% (range, 74%–96%; see Table 2). The 220 DID cases and the 41 SCID-D-R-diagnosed DID cases had means of 20.2 and 19.7 for dissociative symptoms, respectively.

*Mean scores for the 23 dissociation scales.* Mean scores on the 23 dissociation scales were virtually identical for the 220 clinically-diagnosed DID cases and the 41 SCID-D-R-diagnosed DID cases (see Fig. 1).

Inpatients who had DID had significantly higher scores on eight dissociation scales than did outpatients who had DID, including flashbacks, trance, persecutory voices, coming to, fugues, being told of recent actions, finding evidence of one's recent actions, and critical items (Table 3).

*Internal consistency of the 23 dissociative symptoms.* Scores on the 23 dissociation scales had a Cronbach $\alpha$ coefficient of 0.98. Thus, these 23 symptoms constitute a tightly-organized, unitary concept: DID.

*Schneiderian first-rank symptoms: the eight passive influence experiences.* The 220 patients who had DID had a mean of 7.24 (SD = 1.56) of the 8 predicted first-rank symptoms. The incidence of each symptom was high; 89% experienced voices arguing, 95% experienced voices commenting, 94% experienced "made"/intrusive feelings, 89% experienced "made"/intrusive impulses, 88% experienced "made"/intrusive actions, 94% experienced influences playing on the body, 83% experienced thought withdrawal, and 93% experienced thought insertion.

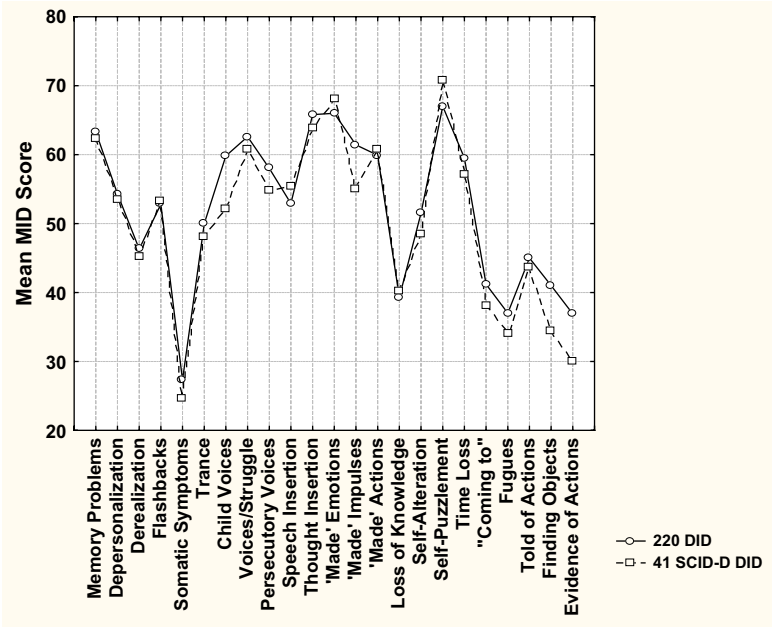


Fig. 1. Multidimensional inventory of dissociation scale scores of 220 persons who were clinically diagnosed with DID and 41 who were diagnosed using the SCID-D-R.

*Diagnostic accuracy of the 23 dissociative symptoms.* The 23 symptoms were sorted into three criteria (see Box 1): (A) general dissociative symptoms (4 of 6 symptoms are required), (B) partially-dissociated intrusions (6 of 11 symptoms are required), and (C) fully-dissociated actions (2 of 6 symptoms are required). To receive a diagnosis of DID, all three criteria must be met: 93% of the DID patients met criterion A; 93% met criterion B; 90% met criterion C; and 84% met all three criteria. When alternate criterion C was used (ie, criterion C plus temporary loss of knowledge/skill), 94% met this criterion and 87% met all three criteria for DID (Table 4).

## Discussion

The findings of this study strongly support the subjective/phenomenological model of DID. The 23 subjective/phenomenological dissociative symptoms that are measured by the MID had a median incidence of 90% in this study's 220 DID cases. The average patient who had DID had 20.2 of the 23 symptoms. Thus, as predicted, patients who have DID recurrently undergo an array of consciously experienced dissociative intrusions into their executive functioning and sense of self. These intrusive phenomena are well-documented in the empirical literature, but are oddly absent from DSM-IV's account of DID.

Table 3
Mean scores of 23 dissociative symptoms in 220 persons who have dissociative identity disorder

| | Mean score | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | SCID-D n = 41 | | Total sample n = 220 | | Outpatients n = 161 | | Inpatients n = 57 | |
| MID symptom-scale | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Mean MID score | 50.6 | 19.6 | 52.4 | 19.6 | 50.2 | 19.7 | 59.2** | 18.2 |
| Severe dissociation score | 124.0 | 29.1 | 128.4 | 32.1 | 124.4 | 33.6 | 139.8** | 24.9 |
| General dissociative symptoms | | | | | | | | |
| Memory problems | 62.3 | 19.7 | 63.6 | 21.7 | 61.4 | 22.3 | 69.8* | 19.4 |
| Depersonalization | 53.4 | 21.0 | 54.3 | 21.6 | 52.6 | 22.7 | 58.7 | 17.3 |
| Derealization | 45.2 | 22.8 | 46.3 | 23.0 | 44.2 | 23.5 | 52.3* | 20.6 |
| Posttraumatic flashbacks | 53.3 | 26.8 | 52.8 | 27.0 | 49.4 | 26.3 | 63.0*** | 26.5 |
| Somatoform symptoms | 24.7 | 18.8 | 27.3 | 17.4 | 26.2 | 17.6 | 30.4 | 16.5 |
| Trance | 48.0 | 23.2 | 50.0 | 23.7 | 47.0 | 23.8 | 59.0*** | 20.9 |
| Partially-dissociated intrusions | | | | | | | | |
| Child voices | 52.2 | 30.6 | 59.8 | 30.2 | 57.3 | 30.1 | 67.4* | 29.8 |
| Internal struggle | 60.7 | 26.0 | 62.6 | 25.6 | 60.5 | 25.8 | 69.0* | 24.5 |
| Persecutory voices | 54.8 | 32.3 | 58.0 | 30.6 | 53.5 | 31.5 | 71.5*** | 23.7 |
| Speech insertion | 55.4 | 26.7 | 52.9 | 28.4 | 51.5 | 28.8 | 56.7 | 27.6 |
| "Made"/intrusive thoughts | 63.9 | 25.7 | 65.8 | 23.6 | 63.8 | 24.4 | 71.7* | 19.7 |
| "Made"/intrusive emotions | 68.1 | 23.2 | 66.0 | 22.9 | 64.8 | 23.7 | 69.8 | 19.5 |
| "Made"/intrusive impulses | 55.0 | 28.8 | 61.4 | 26.9 | 58.8 | 27.1 | 69.2* | 25.3 |
| "Made"/intrusive actions | 60.8 | 22.9 | 59.9 | 23.0 | 58.0 | 23.7 | 65.3* | 20.5 |
| Temp loss of knowledge | 40.2 | 22.8 | 39.3 | 25.9 | 36.8 | 25.5 | 47.1* | 25.5 |
| Self-alteration | 48.5 | 23.2 | 51.5 | 22.6 | 49.7 | 22.6 | 56.9* | 22.2 |
| Self-puzzlement | 70.8 | 22.1 | 67.0 | 23.7 | 65.8 | 24.4 | 70.7 | 21.1 |
| Fully-dissociated actions | | | | | | | | |
| Time loss | 57.1 | 28.8 | 59.5 | 27.9 | 56.6 | 27.9 | 67.3* | 27.1 |
| "Coming to" | 38.1 | 28.5 | 41.2 | 29.6 | 37.0 | 28.3 | 53.0*** | 30.8 |
| Fugues | 34.1 | 25.9 | 37.0 | 29.1 | 33.3 | 27.9 | 47.5*** | 30.3 |
| Being told of actions | 43.7 | 23.7 | 45.0 | 26.1 | 41.6 | 25.3 | 53.9*** | 26.8 |
| Finding objects | 34.5 | 30.8 | 41.0 | 30.1 | 38.0 | 29.3 | 48.9* | 31.5 |
| Evidence of actions | 30.1 | 25.0 | 36.9 | 27.9 | 33.3 | 26.3 | 47.1*** | 30.3 |

Comparisons test only the difference between inpatients and outpatients. Bonferroni corrected significance level for 31 comparisons is $P < .016$.

*Abbreviations:* MID, multidimensional inventory of dissociation; SCID-D, Structured Clinical Interview for DSM-IV Dissociative Disorders-Revised; Temp loss of knowledge, temporary loss of well-rehearsed knowledge or skills; Self-alteration, experiences of self-alteration; Being told of actions, being told of disremembered actions; Finding objects, finding objects among one's possessions; Evidence of actions, finding evidence of one's recent actions.

* $P < .05$; ** $P < .01$; *** $P < .016$.

## *Implications of the present study for DSM-IV's classic model of dissociative identity disorder*

If the 23 subjective/phenomenological dissociative symptoms routinely occur in DID patients (see Table 2), then DSM-IV's model of classic DID must be deficient because it narrowly portrays DID as just an alter disorder. At best, the DSM-IV model of DID can account for only 8 of the 23

Table 4
Diagnostic accuracy of the 23 dissociative symptoms among 220 persons who had dissociative identity disorder

| | Percent who met the criterion | | | |
|---|---|---|---|---|
| Proposed diagnostic criteria | SCID-D n = 41 | Total Sample N = 220 | Outpatients n = 161 | Inpatients n = 57 |
| Criterion A: general dissociative symptoms (4 of 6) | 95 | 93 | 92 | 96 |
| Criterion B: partially-dissociated intrusions (6 of 11) | 98 | 93 | 92 | 98 |
| Criterion C: fully-dissociated intrusions (2 of 6) | 93 | 90 | 90 | 91 |
| Alternate Criterion C: C + temporary loss of well-rehearsed knowledge or skills (2 of 7) | 95 | 94 | 93 | 96 |
| DID = A + B + C | 85 | 84 | 82 | 88 |
| DID = A + B + Alternate C | 88 | 87 | 85 | 93 |

*Abbreviations:* MID, multidimensional inventory of dissociation; SCID-D, Structured Clinical Interview for DSM-IV Dissociative Disorders-Revised.

dissociative symptoms listed in Box 1: temporary loss of well-rehearsed knowledge or skills; disconcerting experiences of self-alteration; time loss; ''coming to''; fugues; being told of disremembered actions; finding objects among one's possessions; and finding evidence of one's recent actions. Thus, DSM-IV provides a very incomplete picture of the dissociative phenomena of DID.

Also, most dissociative symptoms of DID are subjective and invisible (rather than objective and visible). Of the 25 dissociative symptoms in Box 1, 23 are subjective. Because the patients who had DID in this study experienced a mean of 20.2 of those 23 subjective symptoms, subjective dissociative symptoms are clearly pervasive in DID. In contrast, the DSM-IV focuses on a single, objective, diagnostic sign of DID: switching from one personality to another. This diagnostic sign occurs infrequently [4,75] and is usually difficult to discern [4,75]. Because it bases the diagnosis of DID solely on this infrequent objective sign, the DSM-IV has made DID unnecessarily difficult to detect, provided clinicians with a one-sided picture of the disorder, and thereby contributed to the skepticism that has beset this disorder.

### *Implications of the present study for the sociocognitive model of dissociative identity disorder*

For the last decade, proponents of the sociocognitive model [76–82] have argued that DID is caused by social influence:

> DID is a socially constructed condition that results from inadvertent therapist cueing (eg, suggestive questioning regarding the existence of possible alters), media influences (eg, film and television portrayals of DID), and broader sociocultural expectations regarding the presumed clinical features of DID. For example, proponents of the sociocognitive model believe that the release of the book and film *Sybil* in the 1970s played a substantial role in shaping conceptions of DID in the minds of the general public and psychotherapists [77].

The sociocognitive model of DID is necessarily wed to the DSM-IV's model of classic DID. Why? Because the general culture's model of DID is classic DID. Classic DID is clearly reflected in *Sybil*. Classic DID has also been reflected in countless portrayals of DID in contemporary films and television programs. In short, the DSM-IV's essential phenomena of classic DID (ie, multiple personalities + switching + amnesia) are very familiar to the general culture.

Although not intended as such, the present findings refute the sociocognitive model of DID because 15 of the 23 subjective dissociative symptoms that were measured (the criterion A symptoms except for trance and the criterion B symptoms except for self-alteration; see Box 1) are invisible (ie, completely experiential), unknown to the media, unknown to the general public, and largely unknown to the mental health field. Nevertheless, these 15 subjective dissociative symptoms occurred in 83% to 95% of persons who had DID (Table 2). The pervasive presence of these symptoms cannot be explained (away) by the sociocognitive model's ''usual suspects''—therapist cueing, media influences, and sociocultural expectations regarding the clinical features of DID. There can be no therapist cueing, media influences, or sociocultural expectations about dissociative symptoms that are invisible, unknown to the media, unknown to the culture, and largely unknown to the mental health field.

The sociocognitive model explains and predicts the classic signs of DID, but the sociocognitive model neither predicts nor can explain (1) most of the empirical literature's well-replicated dissociative symptoms of DID (Table 1), (2) most of the subjective/phenomenological dissociative symptoms of DID (Box 1), or (3) most of the findings of the present study. In contrast, the subjective/phenomenological model of DID predicts and explains all of the symptoms of classic DID, all 13 of the well-replicated empirical findings about DID (Table 1), all 23 of the subjective/phenomenological dissociative symptoms in Box 1, and all 23 of the dissociative findings of the present study (Table 2).

On the grounds of greater verisimilitude—most importantly, its ability to predict a large number of dissociative phenomena that cannot be predicted by either the DSM-IV model of DID or the sociocognitive model of DID—the subjective/phenomenological model of DID should be considered superior, and the sociocognitive model of DID must be judged to be refuted.

*Limitations*

The strength of the present study is limited by two aspects of its methodology. First, the study is primarily based on a clinically-diagnosed sample of DID cases (rather than a sample of DID cases that were diagnosed with a structured interview such as the SCID-D-R). Fig. 1, however, demonstrates that there is a remarkable resemblance between the 220 patients who had DID who were clinically diagnosed and the 41 who were diagnosed by the SCID-D-R. Still, the SCID-D-R was administered in a clinical setting by therapists who were not blind to the patients' presenting symptoms, and was not subject to reliability checks across raters. Second, the present study did not employ SCID-D-R-diagnosed comparison groups (eg, general psychiatric patients, nonclinical adults, patients who had other dissociative disorders). Gast and colleagues [70], however, did use SCID-D-R-diagnosed comparison groups in their investigation of the diagnostic efficiency of the German MID. Their results replicated those of the present study. In a sample comprised of patients who had DID, patients who had DDNOS-1, general psychiatric patients, and nonclinical adults, Gast and colleagues reported that the dissociative symptoms in Box 1 (as assessed by 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 major dissociative disorder (DID or DDNOS-1).

*Why the subjective/phenomenological model of dissociative identity disorder is important*

Is it important that DID patients report all of these dissociative symptoms? Does it really matter? Yes, these dissociative symptoms are important not only because of what they say about DID but also because of what they imply about the nature of pathological dissociation itself.

Despite over a century of research, no generally accepted definition of *dissociation* or *pathological dissociation* exists. The DSM-IV and ICD-10 do not agree about which phenomena represent pathological dissociation and which do not. Moreover, although they tend to be interpreted otherwise, neither the American Psychiatric Association (APA) nor the World Health Organization (WHO) has attempted to define dissociation. True to their nature as systems of classification, the DSM and ICD have characterized the dissociative disorders, not dissociation. Starting with the clinical entities that each deems to be dissociative, the APA and WHO have simply described the essential features that dissociative disorders hold in common. Thus, the DSM-IV-TR states that "the essential feature of the Dissociative Disorders is a disruption in the usually integrated functions of consciousness, memory, identity, or perception" [1]. Similarly, ICD-10 states that "the common theme shared by dissociative (or conversion) disorders is a partial or complete loss of the normal integration between memories of

the past, awareness of identity and immediate sensations, and control of bodily movements'' [52].

These common, essential features do not define dissociation, but researchers almost routinely treat them as if they do. In the United States, almost every article on dissociation quotes the DSM statement about the essential features of the dissociative disorders and then treats that statement as if it were a definition of dissociation; however, it is not. Moreover, not only is it not a definition of dissociation, it is a partisan claim, because the APA and the WHO have competing systems of classification and disagree on the matter. For these reasons, I contend that the DSM-IV-TR description of the essential features of the dissociative disorders is a long way from being an acceptable definition of dissociation.

This issue (how to define dissociation) is where the larger importance of the subjective/phenomenological model of DID emerges. This model of DID arose from a process that was diametrically opposite to the process through which the DSM-IV and ICD-10 arrived at their statements about the essential features of the dissociative disorders. The new model of DID arose from two conjectures about the nature of pathological dissociation, whereas the ''definitions'': of dissociation in the DSM and ICD are merely semantic conveniences that rationalize their respective sets of diagnoses and criteria.

The subjective/phenomenological model of DID is a direct consequence of two conjectures: that the phenomena of pathological dissociation are recurrent, jarring intrusions into executive functioning and sense of self, and that pathological dissociative phenomena affect every aspect of human experience. The MID was developed to test these conjectures. Through 23 dissociative symptoms, the MID attempts to tap every aspect of human experience, and the dissociative events that can befall each aspect of human experience [65]. The MID research program has sought to corroborate (or refute) these conjectures about the nature and domain of pathological dissociation.

The conjecture that every aspect of human experience is subject to dissociative intrusion has a corollary: that very different phenomena from very different domains of human functioning and human experience ''go together'' (eg, amnesia, depersonalization, derealization, trances, conversion symptoms, flashbacks, hearing the voice of a child, hearing persecutory voices, self-confusion, experiences of self-alteration, ''made'' speech, ''made'' thoughts, ''made'' impulses, ''made'' actions). This corollary is an improbable prediction. Virtually no one outside the dissociative disorders field would predict that these strikingly different clinical phenomena belong together. This conjecture can be tested statistically by calculating the internal consistency and factor structure of the MID's 23 dissociative symptoms. These particular statistical analyses subject the conjecture to what Popper [83–85] would call ''grave danger of refutation.'' That is, unless the MID's 23 symptoms ''go together'' (ie, unless they have a very high $\alpha$ coefficient),

the conjecture and its corollary will be refuted. Similarly, unless confirmatory factor analysis shows that the MID's 23 dissociative symptoms have a robust unifactorial solution, the conjecture and its corollary will be refuted.

Not only did the corollary survive these tests, but it did so repeatedly. In 15 different clinical and nonclinical samples, in five countries and five languages, the $\alpha$ coefficient of the MID's 23 dissociative symptoms has been 0.96 or higher (P.F. Dell, unpublished data, 2004). In two large samples from multiple countries, two independent confirmatory factor analyses have shown that the unifactorial model of the MID's 12-factor scales has a comparative fit index (CFI) of 0.96 [66]. Thus, the unifactorial model of pathological dissociation explained 96% of the variance in subjects' scores on the 12-factor scales. These findings provide powerful corroboration for the subjective/phenomenological model of pathological dissociation. The phenomena that are specified by the subjective/phenomenological model of dissociation do "go together."

*The subjective/phenomenological model of dissociative identity disorder*

This model of DID was deduced from two conjectures. If both are true (if pathological dissociative intrusions can affect every aspect of human experience, and if those pathological dissociative intrusions group together), then it seems likely that persons who have been diagnosed with the prototypical form of dissociative psychopathology (ie, DID) would be characterized by dissociative intrusions in every domain of their experience. This deduction can be tested statistically by determining whether persons who have DID manifest all 23 dissociative symptoms that are measured by the MID. The present study showed that 220 persons who had DID had a mean of 20.2 of the 23 dissociative symptoms. Two other studies have also demonstrated that patients who have DID are characterized by these 23 dissociative symptoms [14,70].

## Summary

Data from 220 persons who had DID were used to compare three models of DID: the DSM-IV's classic model of DID (ie, multiple personalities + switching + amnesia), the subjective/phenomenological model of DID (Box 1), and the sociocognitive model of DID. The DSM-IV narrowly portrays DID as an alter disorder; the subjective/phenomenological model portrays DID as a far more complex dissociative disorder. The data indicate that the subjective/phenomenological model of DID is a superior predictor of the dissociative phenomena of DID. The three studies [14,70] that corroborate the subjective/phenomenological model of DID are important. They show that the subjective/phenomenological model of DID is more comprehensive and more accurate than the DSM-IV's classic model of DID. They also refute the sociocognitive model of DID. The subjective/phenomenological model of DID was deduced from a novel, empirically supported model

of pathological dissociation [4]; that model fully explains the empirical literature on DID, whereas the DSM-IV model of DID can account for little of that literature.

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