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The Utility of the Structured Inventory of Malingered Symptomatology for Distinguishing Individuals with Dissociative Identity Disorder (DID) from DID Simulators

By:
Malarie Ours

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Committee Member Signature	Dr. Jeff Kukucka Type Name	5/4/17 Date
Committee Member Signature	Dr. Bruce Mortenson Type Name	5/3/17 Date
Committee Member Signature	Type Name	Date
Committee Member Signature	Type Name	Date
Dean of Graduate Studies	Janet V. DeLany Type Name	5-7-17 Date

Abstract

The Utility of the Structured Inventory of Malingered Symptomatology for Distinguishing Individuals with Dissociative Identity Disorder (DID) from DID Simulators

Malarie Ours

Due to the breadth of symptoms and history of trauma, individuals with dissociative disorders are at risk of being misclassified as malingering by psychological assessments and validity scales. Research has indicated a need for caution when using these measures with traumatized and dissociative populations. This study sought to explore the utility of the Structured Inventory of Malingered Symptomatology (SIMS) with individuals with dissociative identity disorder (DID). We hypothesized that individuals with DID would have higher scores on the SIMS than coached simulators of DID. Although this hypothesis was not supported, we found that the SIMS misclassified 67.7% of genuine DID patients as malingering. We also found a positive relationship between dissociation and total scores on the SIMS, indicating that individuals with DID have underlying dissociative phenomena that simulators are not able to imitate. These findings suggest that the SIMS is likely not a valid measure for individuals with dissociative disorders.

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Literature Review

The Utility of the Structured Inventory of Malingered Symptomatology for Distinguishing Individuals with Dissociative Identity Disorder (DID) from DID Simulators

Trauma is defined by the American Psychiatric Association as "an emotionally overwhelming, highly upsetting event that may involve actual or threatened death, injury, or sexual violence" (American Psychological Association, 2013). Trauma's impact is diverse and is associated with the development of a wide variety of often severe symptoms and effects, particularly when it is experienced repeatedly throughout childhood (Rogers, Payne, Correa, Gillard, & Ross, 2009). These symptoms can include somatic (physical) symptoms, depression, dissociation, anxiety, hearing voices, suicidality, and suicidal ideation (Foote et al., 2008; Stadnik, Brand, & Savoca, 2013). Trauma can cause several psychological problems and disorders including dissociation and posttraumatic stress disorder (PTSD; American Psychiatric Association, 2013). Antecedent trauma plays a key role in the development of the chronic dissociative disorders, particularly dissociative identity disorder (DID; Brand et al., 2009; Dalenberg et al., 2012), as well as the dissociative subtype of PTSD.

Dissociative symptoms are classified in the DSM-5 as positive (interruptions in consciousness by an aspect of identity of which that person was not previously aware; intrusion symptoms; flashbacks) or negative (deficits in memory and sense of control and or/self). According to the DSM-5, dissociative symptoms are experienced as a) unwanted intrusions into awareness, with loss of continuity in subjective experiences ("positive" symptoms) and b) inability to access information or to control mental functions ("negative" symptoms). This discontinuity is often apparent in memory, identity, motor control, and perception (Spiegel et al., 2011). Dissociation is "a disruption of and/or discontinuity in the normal, subjective integration

of one or more aspects of psychological functioning, including—but not limited to—memory, identity, consciousness, perception, and motor control" (Spiegel et al., 2011). Dissociation can occur in many forms and may be of sudden onset, gradual, and/or chronic (Sar, 2011). The dissociative disorders include depersonalization/derealization disorder, dissociative amnesia, and dissociative identity disorder. Dissociative conditions that do not fit the diagnostic criteria of these disorders are diagnosed as dissociative disorder not otherwise specified (DDNOS). DID and DDNOS are the most complex, chronic dissociative disorders (Sar, 2011).

Individuals with dissociative disorders have high levels of comorbid disorders including personality, mood, and anxiety disorders (Dell, 1998), PTSD, and substance use disorder, among others (Brand et al., 2009; Foote et al., 2008). These individuals are likely to endorse a wide range of serious psychiatric symptoms due to these well-documented comorbid disorders as well as the wide range of dissociative symptoms that characterize this population. Individuals with DID report a number of early childhood maltreatment experiences, including physical, sexual, or emotional abuse and neglect (Brand, Lowenstein, & Lanius, 2014). Individuals with DID also endorse a high rate of adult trauma, such as rape, domestic violence, and sexual trafficking (Simeon & Lowenstein, 2009). There is extensive literature on the relationship of trauma and dissociative disorders (Brand, Lowenstein, & Lanius, 2014; Chu & Dill, 1990; Simeon & Lowenstein, 2009; Van der kolk et al., 2006). Dissociation can disrupt functioning in several ways. A study completed by Mueller-Pfeiffer et al. (2012) found that functional impairment was higher for those with DID and DDNOS than other Axis-I disorders and that affective and psychotic disorders were strong predictors for low global functioning.

Due to the breadth of severe psychological problems associated with developmental trauma, individuals who experienced chronic childhood trauma often endorse an unusually wide

range of severe and often somewhat atypical difficulties on psychological tests and inventories. Researchers have found that individuals who have experienced severe trauma or difficult childhoods have elevated scores on personality tests that were created to detect symptom exaggeration (Brand, et al., 2006; Coons & Sterne, 1986; Klotz-Flitter, Elhai, & Gold, 2003; Stadnik, Brand, & Savoca, 2013).

Because individuals with dissociative disorders present with a wide range of severe symptoms, they are at risk for being misclassified as malingering (Brand & Chasson, 2014; Brand, McNary, Loewenstein, Kolos, & Barr, 2008). Malingering is the intentional gross exaggeration or fabrication of physical or psychological symptoms (American Psychological Association, 2013). On clinical and validity scales, individuals with DID often have high elevations (Coons & Sterne, 1986). This has been shown to be true for tests such as the Minnesota Multiphasic Personality Inventory-II (MMPI-II; Coons & Sterne, 1986; Solomon, 1983) as well as the Structured Interview of Reported Symptoms (SIRS) and the Personality Assessment Inventory (PAI; Brand, McNary, Lowenstein, Kolos, & Barr, 2006; Rogers, et al., 2009; Stadnik, Brand, & Savoca, 2013). On the MMPI-II, some of the so-called "fake bad" validity scales were elevated for individuals with DID. Researchers suggest that this is a result of high endorsement of items related to trauma and dissociation, such as the item stating they "sometimes do things and don't remember doing them" (Brand & Chasson, 2014; Stadnik, Brand, & Savoca, 2013). Some pilot research has shown that DID patients may be difficult to distinguish from individuals who are attempting to feign DID (Welburn et al., 2003), although arguably more recent studies with large samples have been able to make this distinction with acceptable specificity (the test's ability to identify negative results) and sensitivity (the test's ability to identify positive results).

There are multiple scenarios in which an individual would be motivated to feign a mental disorder or cognitive impairment. In forensic settings, the motivation often involves a reduction or complete avoidance of sentencing (Cima, Merckelbach, Hollnack, & Knauer, 2002). The degree of response distortion on psychological evaluations is often increased in this setting (Edens, Poythress, & Watkins-Clay, 2007). Some individuals seek monetary gain or other benefits by faking symptoms of a disorder or intentionally exaggerating pre-existing ones (Smith & Burger, 1997). It is estimated that malingering of psychological disorders occurs in about 15% of litigation cases (Rogers, 1997). Rates of malingering among individuals with dissociative disorders have been found to be more variable (2%-14%; Coons & Milstein, 1994) compared to individuals in a more general psychiatric population (5%-6%; Eisendrath, 1995). It is also possible that an individual may have a severe dissociative disorder and engage in factitious exaggeration that results in a mixture of exaggerated and genuine psychiatric symptoms (Brown & Scheflin, 1999), or they may believe they have DID when they do not (factitious DID). These rates of feigning psychiatric disorders underscore the importance of reliable measures to assess malingering in forensic and clinical settings.

Many assessment tools for feigned mental disorders have been developed. These assessments are useful in a number of clinical situations, specifically for forensic evaluations. Beaber, Marston, Michelli, and Mills created the Malingering Test to assess feigned mental disorders in 1985. Originally created as a screen for feigned schizophrenia, it was applied to other feigned conditions as well. More recently, the Miller Forensic Assessment of Symptoms Test (M-FAST; Miller, 2001) and the Structured Interview of Reported Symptoms (SIRS; Rogers, Bagby, & Dickens, 1992) were developed. These screens for feigned mental illness are interview-based and have shown to be effective at detecting feigning of general psychiatric

symptoms (Rogers et al. 2009); however, the SIRS overclassifies approximately 35% of patients diagnosed with DID as malingering (Brand et al., 2006; Brand, Tursich, Tzall, & Lowenstein, 2014; Rogers et al. 2009).

The Structured Inventory of Malingered Symptomatology (SIMS) is a widely used measure of malingering that has not been extensively studied with DID. The SIMS is a 75-item self-report true-false questionnaire that screens for feigned mental disorders, as well as feigned cognitive impairment. Various strategies are used to detect malingering on the SIMS, including assessing for an individual's tendency to report unlikely complaints, (i.e. limp muscles and numb hands), approximate answers, and bizarre symptoms (i.e. constant ringing in ears and bugs crawling under skin; Smith & Burger, 1997). The affective disorders (AF) and psychosis (P) scales are designed to assess feigned mental disorders, and there are three scales to assess feigned cognitive impairments: low intelligence (LI), neurological impairment (NI), and amnestic disorders (AM; Rogers et al. 2014). Each of these scales includes 15 items and allow the SIMS to be used in multiple clinical settings. Many of the items were specifically created for the SIMS, although items from other assessments that showed clinical utility in detecting feigning were also included on the SIMS (Smith & Burger, 1997). A pool of experienced clinicians was consulted to rate each of the SIM's new items before including them.

The SIMS has internal consistency among its scales, with internal consistency reliabilities ranging from .80-.88 and low inter-correlations between scales (Smith & Burger, 1997). The authors found that the overall SIMS score was the best indicator of malingering for individuals believed to be feigning psychological or physical symptoms. Several studies have found that the sensitivity of the SIMS is excellent, and it has been shown to be effective within a criminal population (Rogers et al. 2014). For example, Lewis, Simcox, and Berry (2002) found the SIMS

useful in their research on criminal responsibility evaluations. However, Edens, Otto, & Dwyer (1999) found that individuals with genuine psychopathology were more likely to have higher total SIMS scores.

While there are a number of studies showing the utility of the SIMS with criminal populations, chronic pain claimants, and neurological patients (Edens, Poythress, & Watkins-Clay, 2007; Cima, Merckelbach, Hollnack, & Knauer, 2002; Clegg, Fremouw, & Mogge, 2008), there is concern about whether traumatized individuals will be misclassified as malingering by the SIMS because differentiating between some trauma-related disorders (such as PTSD and DID) and malingering can be difficult (Brand, Weberman, & Frankel, 2016). The symptoms that the SIMS subscales purportedly measure may be rare in the general population but are common among individuals with DID (Brand & Chasson, 2014). In the only study to investigate the profiles of DID individuals on the SIMS, individuals with DID scored higher on the SIMS' overall score than individuals who simulated DID and were also higher than individuals with PTSD (Vissia et al., 2016).

Amnesia is a required symptom of DID as conceptualized in the DSM-5, and is one of two core features that allows DID to be distinguished from other psychiatric disorders (Steinberg, 1994). Amnesia contributes to large detriments in global functioning. Kluft (1998) noted that people with DID can have "amnesia for amnesia." Individuals with DID can "lose" large amounts of time, meaning that they are amnestic for some of their behavior, often due to the switching of personality states. The AM scale on the SIMS is one of the five scales designed to detect malingering, yet people with DID are likely to be *honestly* reporting amnesia, rather than fabricating it. Of concern for this population, the authors of the SIMS state that even low levels of endorsement on the AM scale suggest exaggeration (Widows & Smith, 2005). A recent

study found that individuals with DID scored higher on the AM scale than individuals who were feigning DID (Vissia et al., 2016).

The SIMS also has been used to detect the malingering of affective disorders. However, dissociative disorders often occur in conjunction with anxiety and mood disorders (Dell, 1998). In fact, one of the most frequent comorbid conditions in dissociative disorders is affective disorders (Mueller-Pfeiffer et al., 2012). Abuse and trauma in adults has also been linked to Axis I and Axis II disorders, including major depression (Sansone, Sansone, & Wiederman, 1995). Researchers suggest that long-term abuse may contribute to an individual's difficulty modulating emotions. PTSD and emotion dysregulation are significantly associated with dissociation; thus people with DID are likely to score high on the SIMS AF scale (Powers, Cross, Fani, and Bredley, 2014). Consistent with the high comorbidity of depression and DID, Vissia et al. (2016) found that individuals with genuine DID had significantly higher scores on the AF subscale than individuals who were simulating DID. In this same study, scores on the AF subscale for individuals with DID were similar to scores for individuals with PTSD which the authors interpreted as consistent with both disorders being trauma-induced linked to a high risk for depression.

The psychosis subscale of the SIMS may also be elevated for individuals with dissociative disorders. Two common symptoms of DID, depersonalization and derealization, may contribute to these elevations. Psychotic and dissociative disorders show some similarities in symptoms (Kluft, 1987; Ross et al., 1990). First-rank Schneiderian symptoms occur in both DID and schizophrenia (Kluft, 1987), including auditory hallucinations, delusional perceptions, and thought withdrawal. DID patients do not have true delusions, and often have better cognitive insight than schizophrenic patients (Sar et al., 2012). However, they can hear multiple voices,

both in and outside the head, stemming from their experience of having dissociated self-states such that they can often report "hear" voices talking (Dorahy et al., 2009). Auditory hallucinations are common in DID and schizophrenia, although it is evident through rigorous assessments that these voices are functionally different in DID (Dorahy et al., 2009). An individual with DID may endorse items on the P subscale as true (e.g. "The voices that I hear have not stopped since they began") that would be rarely endorsed in other populations. DID patients may also experience dissociative psychosis for brief periods, which may make them appear as functionally psychotic (Dorahy et al., 2014). This makes it particularly likely that individuals with DID may elevate on the P scale on the SIMS, although no research has investigated this scale yet with this population.

Although the amnesia involved in dissociative disorders may cause them to elevate on the NI scale of the SIMS, other neural manifestations may contribute to high scores on this scale. There are neurological aspects that underlie the dissociative subtype of PTSD that create distinctive neurobiological activation pattern reactions for highly dissociative people (Lanius et al., 2010). Differences have been identified in regions of the brain responsible for both emotion regulation and arousal modulation (Lanius, et al., 2010). For example, in a study on amygdalar and hippocampal volumes in patients with DID versus healthy patients, individuals with DID had smaller volumes in these areas of the brain (Vermetten et al., 2006). These areas play a role in memory and stress-regulation. Several authors suggest that early childhood trauma can cause changes in the brain, which may influence how these individuals perform and present themselves on psychological assessments (e.g., Frewen et al., 2015; Lanius et al., 2010; Navalta et al., 2008).

The goal of the present study is to assess whether the SIMS is a valid measure of malingering for individuals with dissociative disorders by comparing DID patients against the

SIMS scores of individuals who were coached to simulate symptoms of DID. Given the difficulty of distinguishing genuine DID from factitious DID, it is important to test the efficacy of the SIMS with a dissociative population. We hypothesized that individuals with DID would score higher on the SIMS overall than individuals coached to feign DID, due to the severity of their symptoms. Specifically, we hypothesized that genuine DID patients would be likely to be misclassified as malingering. We also hypothesized that scores on a measure of dissociation (i.e., the Dissociative Experiences Scale) would positively correlate with SIMS overall scores.

Methods

Participants

Data for this study came from a larger study which sought to assess the validity of a variety of psychological tests in distinguishing genuine from feigned dissociative disorders. Participants included 31 individuals diagnosed with DID and 71 individuals instructed and coached to feign a dissociative disorder.

Dissociative sample. The dissociative sample included 31 DID participants. These participants were recruited from an inpatient unit treating patients with a history of severe trauma as well as from outpatient practices of therapists known to treat dissociative disorders. The diagnoses were assessed using the Structural Clinical Interview for DSM-IV Dissociative Disorders (SCID-D). Participants were between the ages of 19 and 60, M = 43.68, SD = 11.61, and most were female (96.8%). Most 90.3% identified as Caucasian and 9.68% identified as African American.

Coached simulating participants. Undergraduate students (n = 77) enrolled in an abnormal psychology course were recruited from a research pool. Their ages ranged from 18 to

58, *M* = 21.56, *SD* = 5.59, and most were female (77.92%). Fifty-one (66.23%) identified as Caucasian, 14.29% as African American, 3.90% as Asian-American, 3.90% as Hispanic, 3.90% as Biracial, and 7.79% did not specify an ethnic background. These participants were required to read factually accurate educational online material regarding DID and take a DID knowledge test to see if they could accurately identify classic symptoms of DID. Coached simulators were provided with information that people may look for online if they are motivated to malinger a psychological disorder. They were asked to simulate DID while they completed the SIMS and other tests used in the larger study.

Materials and Procedure

SIMS (Rogers et al., 2014): The SIMS is a 75-item self-report true-false questionnaire that screens for feigned mental disorders, as well as feigned cognitive impairment. There are 5 subscales, each with 15 items: low intelligence (LI), neurological impairment (NI), amnesia (AM), psychosis (P), and affective disorders (AF). Its reliabilities range from .80-.88 and it has low inter-correlations between scales (Smith & Burger, 1997). A cutoff score of 14 to indicate the possibility of malingering was suggested by the authors of the SIMS and is based on the original research group, *N* = 476 (Smith & Burger, 1997).

DID Knowledge Test: This 10-item, true-false quiz was provided to the DID simulators. It describes eight symptoms of DID (hear voices, have amnesia, act differently at different times, call themselves different names, have different personality states, typically have PTSD, have trance states, experienced childhood abuse) and two symptoms (out of touch with reality and psychotic, frequently wash hands) that are not characteristic of DID. Participants completed this test to ensure that they could accurately identify the symptoms of DID. With a cutoff of 70%, no participants were excluded due to DID Knowledge Test scores.

Dissociative Experiences Scale: The DES is a self-report measure of dissociative symptoms. It has 28 items and good validity and test-retest reliability (Carlson & Putnam 1993). The examinees rate the items on a scale according to frequency (from 0-100%), which is converted to a mean score. Scores greater than 30 are used a cut-off for indication of possible dissociation. Thus, Coached participants with DES scores above the cut-off were excluded from the study.

SCID-D-R (Steinberg, 1994): The SCID-D-R is a 277-item semistructured interview to diagnose dissociative disorders. It also assesses the severity and frequency of dissociative disorders. The SCID-D-R has good to excellent reliability and good discriminant validity in diagnosing dissociative disorders (Steinberg, 1994, 2000). This measure was used to diagnose each individual with DID in this study.

Procedure

This study was part of a larger study investigating the assessment of DID and the simulation of DID. The simulator group was first given the DID Knowledge test and the DES to answer truthfully. Those with a DES score of 30 or above were excluded from the study (11.49%) in order to screen out possible dissociative disorders. The simulator group was then asked to complete the remaining assessment measures as if they had DID. Undergraduate students were offered course credit and a $50 incentive was offered to the student who provided the best simulation each semester. DID patients were first assessed and diagnosed by the senior author and another DID experienced clinician using the SCID-D-R. They then completed all the questionnaires. The patients were offered $20 for participation.

Results

We evaluated whether total scores on the SIMS would differ for genuine DID patients and individuals coached to simulate DID. On average, the coached participants had a higher total SIMS score (M = 44.79, SD = 13.32) than those with genuine DID (M = 18.29, SD = 7.48). This was a significant difference, $t(106) = -13.080$, $p<.05$. However, the mean score of those with DID was significantly higher than the recommended cutoff score of 14, $t(30) = 3.20$, $p = .003$. A chi-square test revealed that 67.7% of individuals with DID scored above the cutoff ($X^2(1) = 19.69$, $p<.001$) and 97.4% of coached participants scored above the cutoff.

We evaluated the differences in subscale scores between groups using multivariate analysis of variance (MANOVA). The multivariate result was significant for genuine versus feigned DID, Pillai's Trace = .56, $F = 26.29$, $df = (5, 102)$, $p < .001$, indicating a difference between the subscale scores of individuals diagnosed with DID and those simulating DID. Univariate testing indicated significant differences between genuine DID participants and coached participants on each of the SIMS subscales (see Table 1). Examination of mean estimates indicated that individuals simulating DID scored higher on each subscale compared to those with genuine DID.

We evaluated the relationship between SIMS total scores and overall DES scores for individuals with genuine DID and individuals simulating DID. For individuals with DID, SIMS total scores were positively correlated with DES scores, $r(31) = .50$, $p < .05$. There was a negative correlation between SIMS total scores and DES scores for individuals instructed to simulate DID, $r(77) = -.21$, although this correlation was not significant, $p =. 07$.

Discussion

It is often challenging to distinguish genuine from feigned DID on forensic and personality assessments, due to genuine DID patients' elevations on validity and clinical scales. Research has indicated a need for measures to be analyzed for their utility with complex trauma populations including those with DID. We sought to determine if DID patients would score higher on the SIMS than those coached about and instructed to feign DID. Although the SIMS was designed to be able to distinguish individuals with possible feigned from genuine psychiatric disorders, 67.7% of the carefully diagnosed DID participants were misclassified as feigning by the SIMS. Guided by other studies' findings, and concerned about the items on the SIMS that are similar to the wide range of symptoms that have consistently been shown to characterize dissociative populations, we hypothesized that the DID group would have higher scores than the coached simulators. However, contrary to our expectations, simulators had higher overall scores on the total SIMS than the DID group. Consistent with original research on the SIMS, we found that 97.4% of simulators were correctly identified as malingering. Research on feigning shows that simulators typically score higher than genuine or control groups on validity scales, as well as measures designed to detect malingering (Rogers, Sewell, Martin, & Vitacco, 2003; Rogers, Gillis, Dickens, & Bagby, 1991). Thus our simulators scored higher than the DID patients they were attempting to emulate, which is consistent with the general feigning literature. The consequences of the SIMS potentially misclassifying genuine patients as malingering psychiatric symptoms could be severe in forensic, disability, and clinical contexts.

As expected, the subscale scores were significantly different for the groups. Contrary to our hypotheses, the simulators had higher subscale mean scores than individuals diagnosed with DID. Specifically, the coached group had higher scores on the AM, N, AF, P, and LI subscales

than the DID group. As anticipated, high percentages of SCID-D-R diagnosed DID patients endorsed at least one item on each of the following scales: 87.10% on N, 74.19% on P, 61.29% on LI, and 100% on both AM and AF. As noted above, items tapping amnesia, affective difficulties, neurological symptoms, and seemingly psychotic experiences have been repeatedly found to be common among DID patients; indeed, amnesia is a required DSM-5 symptom of DID (Spiegel et al., 2011; Steinberg, 1994; Mueller-Pfeiffer et al., 2012; Kluft, 1987; Ross et al., 1990).

Spanos (1994) suggested that the high rates of trauma reported by individuals with DID is due to the likelihood of a history of abuse being reported by those seeking psychiatric help. This same author opined that DID is a culturally-bound, "social creation, "which varies in frequency depending on the expectations for its occurrence (Spanos, 1994). A review of research by Dalenberg and colleagues (2012), including several meta-analyses of research, contradicted Spanos' and other sociocognitive theorists' opinions, showing that dissociation has a consistent positive relationship to trauma. If DID is a feigned disorder, rather than a genuine trauma-related disorder, both group's dissociation scores should have shown correlations in the same direction and at about the same magnitude with total SIMS scores. However, because dissociation is a trauma-related phenomenon, we hypothesized that scores on a measure of dissociative experiences (DES) would be positively associated with total SIMS scores for the DID group.

As expected, dissociation scores were positively correlated with total SIMS scores for individuals with DID. We believe this positive association is due to the number of trauma- and dissociation related items that are on the SIMS. Also as hypothesized, the simulators' dissociation scores were in the opposite direction, although this was a trend rather than a significant finding. This pattern of findings is consistent with the significant, positive

association between dissociation and the F, Fb, and Fp scales on the MMPI among DID patients, yet a negative correlation between dissociation and those same scores for the DID simulators (Brand & Chasson, 2014). The pattern of findings for the DID simulator group indicate that the SIMS was useful in detecting feigned DID, but to be a valid measure of feigning, a test must have adequate specificity (i.e., proportion of genuine patients correctly classified by a feigning test) as well as adequate sensitivity (i.e., proportion of feigners correctly classified by a feigning test). We found that the SIMS' specificity was unacceptably low (32.36%) even though its sensitivity was excellent (97.40%). The SIMS appears to be a valid and reliable measure of malingering for the general population. If the SIMS' specificity were higher, it may be more likely to correctly identify dissociative individuals as honest reporters, rather than feigners. However, because the SIMS includes items that are associated with trauma history and dissociative symptomology, it misclassified a substantial amount of DID patients. Thus, in this sample, the SIMS failed to demonstrate that it is a valid measure of malingering DID due to its unacceptably high rate of misclassifying patients with DID as feigners.

This high rate of misclassification suggests that although the SIMS has been found to be a valid indicator of feigning depression, mania, and psychosis, among others (Smith & Burger, 1997), it does not appear to be a valid test of feigning dissociative disorders, at least not in the current sample. This is consistent with the findings of Vissia et al. (2016) on the SIMS with DID patients. Other literature suggests that individuals with dissociative disorders have elevated scores on some validity scales designed to detect feigning symptoms of mental illness (Brand & Chasson, 2014; Brand et al., 2006; Brand et al., 2016; Brand, Tursich, Tzall, & Lowenstein, 2014; Bury & Bagby, 2002; Coons & Sterne, 1986; Stadnik, Brand, & Savoca, 2013). However, these studies have found that individuals with dissociative disorders tend to elevate on trauma-

related symptoms including difficulties with mood, sleep, amnesia, mistrust, impaired family relationships, and dissociation. Elevation on these types of symptoms is to be expected given the literature on trauma that documents these are characteristic difficulties related to trauma, particularly interpersonal trauma (Lowenstein & Brand, 2014; Kessler, Sonnega, & Bromet et al., 1995; Brand, 2003). In contrast, individuals with DID do not usually score above cutoffs on validity scales that do not include items related to trauma and dissociation. Consistent with this, Vissia et al. (2016) found that individuals with genuine DID scored higher on the SIMS total than individuals with PTSD, as well as professional actors imitating DID and healthy controls. Furthermore, individuals with DID and PTSD showed the highest elevations among the four groups, which was expected, given that both disorders are trauma-based disorders. As in the current study, professional actors could not successfully imitate DID on the SIMS. This pattern of findings has led researchers to note that these elevations are likely the result of endorsement of items related to trauma and dissociation (Brand, Tursich, Tzall, & Lowenstein, 2014; Brand & Chasson, 2014; Brand, Stadnik, & Savoca, 2013). This growing body of research suggests that assessment measures that include trauma related items are unlikely to be valid indicators of feigning for highly traumatized individuals.

This study has important implications. Screening for dissociation appears to be important prior to using the SIMS because of its high false positive misclassification rates with individuals with dissociative disorders. Assessors are advised to consider administering the DES to determine if the SIMS is likely to be valid when assessing an individual who has experienced trauma. If an individual scores high on the DES, the SIMS is likely not the best choice for assessing feigning of mental illness. Research suggests that the Trauma Index of the SIRS or SIRS-2 may be better choices for severely traumatized individuals (Brand, Tursich, Tzall, &

Lowenstein, 2014; Rogers et al., 2009). Another implication of this study is that the data provide further support for DID being a trauma-based disorder. Furthermore, the validity of DID is supported by the finding that the coached simulators' were not able to accurately imitate DID. Individuals with genuine dissociative disorders have underlying dissociative phenomena that coached simulators were not able accurately imitate, despite being provided with educational material about DID that is accurate and accessible on the internet.

Limitations to this study include a lack of diversity in regards to gender, ethnicity, and age for individuals with DID. Most individuals in the genuine DID sample were middle-aged, Caucasian women, although these demographics are characteristic of most DID research samples. Future research should strive to include a more diverse population of individuals with DID. The DID sample was also small, although we had sufficient power to detect differences between the groups. Future researchers should attempt to compare individuals with DID to individuals who are known to be feigning DID, although such a sample would be challenging to obtain.

In conclusion, this study yielded several important findings. Over two thirds (i.e., 67%) of the individuals with DID scored above the recommended cutoff score for feigning on the SIMS. If DID is not recognized, or if the assessor is uninformed about research on feigning involving dissociative samples, individuals with genuine DID may be at risk for being misclassified as feigning a psychiatric disorder. Furthermore, high scores on the SIMS may be related to its inclusion of dissociative and trauma-based difficulties and experiences and misclassify individuals with these trauma-based problems. Thus, at least in dissociative samples, considerable caution should be used when interpreting SIMS scores. Dissociative experiences are pervasive for individuals with trauma related disorders including dissociative disorders, and

feigners were not able to imitate well DID on the SIMS. This study suggests that the SIMS is not likely a valid measure of malingering psychopathology in individuals with dissociative disorders.

Appendix

Table 1. *Tests of between subject effects for genuine DID versus coached simulators.*

Subscale	*M*	*F*	*p*	Eta-squared
Amnestic Disorders	939.29	97.33	$p < .01$	.85
Psychosis	1240.66	81.63	$p < .01$	.44
Low Intelligence	444.19	51.85	$p < .01$	.33
Neurologic Impairment	600.20	43.43	$p < .01$	.29
Affective Disorders	172.83	32.25	$p < .01$	.23

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THE UTILITY OF THE STRUCTURED

MALARIE OURS

EDUCATION

Towson University, Towson Maryland
M.A. in Clinical Psychology (expected) **2017**
Thesis: The Utility of the Structured Inventory of Malingered Symptomatology for Distinguishing Individuals with Dissociative Identity Disorder (DID) from DID Simulators.

Concord University, Athens West Virginia
B.A. in Psychology **2014**

AWARDS

Psychology Student of the Year, Concord University **2014**

RELATED EXPERIENCE

Maryland Department of Probation and Parole
Intern **August 2016 – May 2017**
Compile data on sex offenders currently on probation, parole, and mandatory release. Present statistical analyses on new offenses and violations. Co-facilitate group counseling for sex offenders.

ResCare, Inc.
Service Coordinator **July 2014 – June 2015**
Ensure that consumers need are being met, link services to consumers that are in need of assistance. Assist families with special needs children and adults.

Concord University
Research Assistant **2010-2014**
Assist with research on childhood obesity, mental health on rural college campuses, and social issues on Concord's campus. Grant writing.

RESEARCH

Fixed Schedules of Reinforcement and Effectiveness on Rats 2012
Concord University

Concord University PostSecret 2013 and 2014
Concord University and the Concord University Bonner Scholars

Sleep and Ambient Light: The Effect of Light on Sleep Cycles 2013
Concord University (Presented at WVU Undergraduate Research Day, 2014)

The Utility of the Structured Inventory of Malingered Symptomatology for Distinguishing Individuals with Dissociative Identity Disorder (DID) from DID Simulators 2017
Towson University