The Inventory of Altered Self-Capacities (IASC)

A Standardized Measure of Identity, Affect Regulation, and Relationship Disturbance

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This article describes the Inventory of Altered Self-Capacities (IASC), a 63-item standardized measure of disturbed functioning in relation to self and others. The seven scales of the IASC are Interpersonal Conflicts, Idealization-Disillusionment, Abandonment Concerns, Identity Impairment, Susceptibility to Influence, Affect Dysregulation, and Tension Reduction Activities. The psychometric properties of the IASC were examined in general population, clinical, and university samples. The IASC was found to have internal consistency/reliability and validity in all three samples. Generally as predicted, IASC scales were associated with existing measures tapping borderline and antisocial personality features, depression, suicidality, substance abuse, somatization, and dysfunctional sexual behavior.

Keywords: Inventory of Altered Self-Capacities, trauma, assessment, psychodynamic, self-psychology

Recent research suggests that clinical difficulties in the areas of affect regulation, identity, and relatedness may have a role in a number of psychological difficulties or disorders. Although this appears most obvious with regard to personality disorders (especially those defined as within "Cluster B" of the Diagnostic and Statistical Manual of Mental Disorders [text revision] [DSM-IV-TR], American Psychiatric Association, 2000), problems in affect regulation and related self-domains also have been implicated in the development of depression (e.g., Garber, Braafladt, & Weiss, 1995), suicidality (e.g., Zlotnick, Donaldson, Spirito, & Pearlstein, 1997), impulse control problems (e.g., Herpertz, Gretzer, Steinmeyer, Muehlbauer, et al., 1997), substance abuse (e.g., Grilo, Martino, Walker, Becker, Edell, & McGlashan, 1997), self-mutilation (e.g., Briere & Gil, 1998), indiscriminant sexual behavior (e.g., Brennan & Shaver, 1995), and bulimia (e.g., Stice, Nemeroff, & Shaw, 1996).

In combination, identity, affect regulation, and selfother difficulties may be subsumed under the rubric of "altered self-capacities" per a related formulation by McCann and Pearlman (1990) and earlier psychoanalytic conceptualizations (e.g., Davis, 1983; Kohut, 1977). This construct reflects the notion that successful interpersonal functioning includes the extent to which the individual is able to accomplish three tasks: (a) maintain a sense of personal identity and self-awareness that is relatively stable across affects, situations, and interactions with other people; (b) tolerate and control strong (especially negative) emotions without resorting to avoidance strategies such as dissociation, substance abuse, or external tension-reducing activities; and (c) form and maintain meaningful relationships with other people that are not disturbed by inappropriate projections, inordinate fear of abandonment, or activities that intentionally or inadvertently challenge or subvert normal self-other connections¹ (Briere, 2002; Elliott, 1994;

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Kohut, 1977; McCann & Pearlman, 1990; see also Linehan, 1993, for a more directly cognitive-behavioral formulation of self-skills).

Based on this definition, altered or reduced selfcapacities seemingly are a common element of personality disorder (Gunderson, Zanarini, & Kisiel, 1996) and correspond to characteristics that have been found in some individuals who were severely abused, neglected, or otherwise maltreated as children (Briere, 1996; Elliott, 1994; Herman, Perry, & van der Kolk, 1989). Although clients with altered self-capacities may receive a DSM-IV-TR diagnosis of (most typically) borderline personality disorder or traits, optimal understanding of their difficulties often involves more than a diagnostic label. Instead, accurate assessment of the client's underlying self-other functioning is usually necessary—especially when targets for treatment are being formulated.

Unfortunately, other than through direct observation of the client in therapy, the clinician wishing to evaluate the self-capacities of a given individual is limited to a small number of existing psychological measures. These generally fall into the categories of performance ("projective") personality tests, self-report ("objective") inventories that include personality disorder scales, and specialized tests of impaired object relations.

The best-known performance test of self-capacities is the Rorschach (Rorschach, 1921/1981). This instrument can yield information on constructs such as object relations, psychic defenses, reality testing, and ego resources, especially when interpreted using modern methodologies (Exner, 1993). However, Rorschach administration and scoring is time-consuming, requires relatively extensive training, and does not always provide as much specific information on the self-capacities outlined above as might be desired.

There are several self-report, multiscale tests that examine symptoms relevant to altered self-capacities, including the Millon Clinical Multiaxial Inventory-III (MCMI-III) (Millon, 1994) and the Personality Assessment Inventory (PAI) (Morey, 1991). The MCMI-III assesses a variety of Axis-II (American Psychiatric Association, 2000) concerns but generally conceptualizes them as disorders, as opposed to specific self-capacity problems. The PAI may be the best instrument of this type (Briere, 1997), generating not only diagnostic information (e.g., the Borderline Features and Antisocial Features scales) but also four six-item Borderline subscales that tap certain self-capacity- related phenomena (i.e., Affective Instability, Identity Problems, Negative Relationships, and Self-Harm). However, administration of the entire 344item PAI is required to obtain this information, and not all aspects of self-capacity are evaluated by these subscales.

Finally, the only standardized test of disturbed object relations is the Bell Object Relations and Reality Testing Inventory (BORRTI) (Bell, 1995). This instrument yields data on four object relations constructs—Alienation, Insecure Attachment, Egocentricity, and Social Incompetencethat are tangentially related to self-functioning. Two potential problems with the BORRTI as an assessment of impaired self-capacities are (a) the lack of concordance between its scales and some self-capacity constructs and (b) its specific grounding in object relations theory, which may or may not correspond to the tester's theoretical perspective.

In light of these problems, the Inventory of Altered Self-Capacities (IASC) (Briere, 2000) was developed. The IASC is a relatively brief (63 items), standardized, selfreport test that evaluates seven types of self-capacity disturbance: Interpersonal Conflicts, Idealization-Disillusionment, Abandonment Concerns, Identity Impairment (with two subscales), Susceptibility to Influence, Affect Dysregulation (with two subscales), and Tension Reduction Activities. This article outlines the characteristics of the IASC, including its readability and reliability, as well as evidence for its psychometric validity.

METHOD

Scale Development

As the first step in the development of the IASC, 166 items were created to tap each of 11 theoretically derived types of altered self-capacity. Each item described a selfrelated problem (e.g., "Getting confused about what you want when you are with other people" and "Having a hard time calming down once you get upset"), rated on a Likerttype scale ranging from 1 (has never happened in the last 6 months) to 5 (has happened very often in the last 6 months). All items were worded in the positive (symptomatic) direction. Despite the potential complexity of some self-capacity constructs, each item was intentionally written to be comprehensible to individuals with no more than a junior high school level education.

Following consultation with several clinicians experienced in the assessment and treatment of characterologic issues, 28 items were eliminated because they were redundant, overly complex, or in some other way problematic. The remaining items were administered to the first 105 participants of the standardization sample and were submitted to preliminary item analyses. Based on the results of these analyses, along with data from the final standardization sample, several of the initially proposed scales were either eliminated (i.e., a maladaptive sexual behavior

TABLE 1 Description of the Inventory of Altered Self-Capacities Scales

Inventory of Altered Self-Capacities Scale	What It Measures
Interpersonal Conflicts (IC)	Problems in relationships with others and a tendency to be involved in chaotic, emotionally upsetting relationships.
Idealization-Disillusionment (ID)	A predisposition to dramatically change one's opinions about significant others, generally from a very positive view to an equally negative one.
Abandonment Concerns (AC)	A general sensitivity to perceived or actual abandonment by significant others and the tendency to expect and fear the termination of important relationships.
Identity Impairment (II)	Difficulties in maintaining a coherent sense of identity and self-awareness across contexts. There are two subscales of the II: Self-awareness (II-S) taps a lack of understanding of oneself and sense of identity, whereas Identity Diffusion (II-D) evaluates the tendency to confuse one's feelings, thoughts, or perspectives with those of others.
Susceptibility to Influence (SI)	A proclivity to follow the directions of others without sufficient self-consideration and to accept uncritically others' statements or assertions.
Affect Dysregulation (AD)	Problems in affect regulation and control, including mood swings, problems in inhibiting the expression of anger, and inability to easily regulate dysphoric states without externalization. There are two subscales of the AD: Affect Instability (AD-I) taps the actual phenomenon of rapidly changing mood, whereas Affect Skills Deficits (AD-S) assesses the underlying deficits in affect control thought to underlie some affect dysregulation.
Tension Reduction Activities (TRA)	The tendency to react to painful internal states with externalizing behaviors that—although potentially dysfunctional—distract, soothe, or otherwise reduce internal distress.

scale) or combined (e.g., identity and boundary demarcation scales), and additional items were deleted. Ultimately, 63 of the initial 166 items were retained, constituting the final seven clinical scales of the IASC. These scales, and the domains they evaluate, are presented in Table 1.

Participants

Three samples were used to test the reliability and validity of the IASC. The procedure for data collection and the characteristics of each sample are presented below.

Standardization sample. A national sampling service generated a random sample of registered owners of automobiles and/or individuals with listed telephones in the general population, stratified on geographical location. According to the 1990 U.S. Census, more than 95% of all households have telephones, allowing this sample to tap the majority of individuals in the United States, although not those without phones (or who have an unlisted phone number) who do not own a car. Participants were mailed a questionnaire containing the IASC, as well as other measures, including the Detailed Assessment of Posttraumatic States (DAPS) (Briere, 2001) and a revised version of the Traumatic Events Survey (TES) (Elliott, 1992). The DAPS is a standardized test that includes a Trauma Specification section and contains scales that evaluate the symptomatic components of posttraumatic stress disorder, a variety of dissociative responses, suicidality, and substance abuse. The TES evaluates self-reports of up to 30 different child-hood and adult interpersonal and environmental traumas, and it includes an Emotional Abuse scale.

Participants received \$5 for completing the question-naire. In addition, 70 university students were tested with the same protocol (but without financial compensation) to provide additional participants in the lower age ranges. All questionnaires were anonymous, although financial compensation in the general population sample was tied to names and addresses that were destroyed before data analysis was initiated. Overall, 623 of 5,485 potential participants (11.4%) returned the IASC, of which 620 were substantially complete. The mean age was 47 years (SD = 17), ranging from 18 to 91 years. Of the total sample, 53% were male and 47% were female. Racial composition was 80% Caucasian, 6% African American, 3% Hispanic, 3% Asian, 3% Native American, 1% "other," and 5% did not indicate their race.

Clinical sample. A total of 116 participants were recruited by 11 clinicians across the United States from their evaluation or treatment caseloads. Clinicians involved in this study were among those who had purchased tests from Psychological Assessment Resources (PAR) in the past and who responded to a mailed invitation to be part of the IASC validation study. Although the majority (9 of 11) were Ph.D. psychologists, they were not selected based on clinical orientation, level of clinical experience, or other screening variables. In compensation for their involve-

ment, all clinicians who volunteered test protocols received credit for other PAR tests. Participants recruited by clinicians were not selected on the basis of any variable (e.g., intelligence or clinical diagnosis), although, due to the specialized interests of several clinicians, histories of interpersonal victimization may have been overrepresented in this sample. Informed consent was gathered in all instances.

The IASC was administered to individuals in these subsamples along with a variety of other tests. The specific tests coadministered with the IASC varied by subsample, based on which measures were commonly used at each location. Across subsamples, 72% of participants were women, the mean age was 31 years (SD = 11), and ethnicity was 70% Caucasian, 14% Hispanic, 5% African American, 2% Asian, and 2% Native American. (The remainder was "other" or unspecified.)

University sample. This sample consisted of 290 students (74 men and 216 women) from a midsized Canadian university with a mean age of 20 years (SD = 3). Ethnicity was 83% Caucasian, 8% Asian, 2% native Canadian/First Nations people, and the remainder was mixed or other. Ninety-six percent were unmarried/single and 2% were married or cohabiting.

Readability

The items of the IASC were analyzed for readability using the Flesch-Kincaid Grade Level index of the Microsoft Word 2000 (1999) software program. It was anticipated that the index would be less than or equal to nine, indicating that the IASC could be read and understood by those with a junior high school education or greater.

Tests of Convergent and Discriminant Validity

To examine their convergent and discriminant validity, the scales of the IASC were correlated with 29 clinical sample participants' scores on specific scales of the PAI (Morey, 1991). Four PAI scales were selected based on their perceived similarity to, or divergence from, the selfcapacities tapped by the IASC. The most related scale of the PAI was hypothesized to be the Borderline Features scale because issues of identity, abandonment, affect regulation, and disturbed relatedness measured by the IASC appear to be most directly relevant to borderline personality disorder of all current psychiatric diagnoses (Gunderson et al., 1996). The Antisocial Features scale of the PAI was also included as a potential intermediate correlate because antisocial personality disorder tends to stress issues like egocentricity and callousness that are not tapped by the

IASC, yet it is still a "cluster B" personality disorder involving issues of relatedness and affect/impulse control (American Psychiatric Association, 2000). Two PAI scales judged by the authors to be less related to selfcapacity disturbance—Mania (because it reflects a relatively biologically based, Axis I affective disorder) and Somatic Complaints (because it taps bodily preoccupation rather than manifestly interpersonal symptoms)—were also included, with the assumption that IASC scales would correlate least, if at all, with these scales.²

Test of Construct Validity

The construct validity of the IASC was evaluated by examining its correlation with depression and three types of dysfunctional behavior thought to be associated with impairment in the "self" domain: self-reported suicidality, substance abuse, and dysfunctional sexual behavior.

Depression. Based on affect regulation research by Garber et al. (1995), Billings and Moos (1984), and others, as well as psychodynamic formulations of the role of early loss or disruption of parent-child relatedness in the development of depression (e.g., Blatt, 1998), it was hypothesized that IASC scores, perhaps especially Affect Dysregulation (as suggested by Garber et al., 1995) and Abandonment Concerns (as suggested by Blatt, 1998), would be associated with self-reported depression. To test this hypothesis, the relationship between the seven IASC scales (controlling for age and gender) and the total score of the Multiscore Depression Inventory (Berndt, 1986) was evaluated in the clinical sample.

Suicidality. The relationship between personality disorder (especially of the borderline type) and suicidality is well known (Bongar, 1991; Linehan, 1993). In fact, suicidal behavior is described specifically in the DSM-IV-TR (American Psychiatric Association, 2000) diagnostic criteria for borderline personality disorder. Because borderline symptoms overlap substantially with the self-capacity issues tapped by the IASC, and because suicidality appears to covary with affect regulation problems (MacLeod, Williams, & Linehan, 1992; Zlotnick et al., 1997), evidence that the IASC predicts self-reported suicidality would support the construct validity of this measure.

To test the hypothesized suicidality-IASC association, standardization sample participants' scores on the seven IASC scales were used to discriminate between individuals who described themselves as acutely suicidal within the last month on the Suicidality scale of the DAPS (Briere, 2001) and those with less or no suicidal endorsements on this scale. Acute suicidality was indexed as present when participants indicated a 2 or higher (i.e., has happened "once or twice in the last month" or more often) on at least one of the following four DAPS Suicidality scale items: "Making a plan about how you could commit suicide"; "Thinking about how to kill yourself"; "Nearly attempting suicide, then stopping because you scared yourself or because it would hurt too much"; or "Attempting suicide." The remainder of the standardization sample was deemed, by definition, less suicidal or nonsuicidal.

Substance abuse. Like suicidality, substance abuse appears to be more common among those with altered selfcapacities, including those with borderline personality disorder or borderline traits (Trull, Sher, Minks-Brown, Durbin, & Burr, 2000). Furthermore, it is likely that substance abuse is used in some cases as a way to reduce distress and dysphoria in individuals with underdeveloped affect regulation capacities (Briere, 1996; Grilo et al., 1997; Verheul, van den Brink, & Geerlings, 1999). As a result, it was predicted that, to the extent that they had construct validity, IASC scales would be associated with higher scores on a measure of alcohol and drug abuse. This hypothesis was tested by evaluating the relationship between standardization sample participants' age, sex, and IASC scale scores and their responses to the Substance Abuse scale of the DAPS. This 10-item scale evaluates individuals' self-reported use of alcohol and drugs on a 5point Likert-type scale, ranging from 1 (never happened in the last month) to 5 (happened very often in the last month) (Briere, 2001).

Dysfunctional sexual behavior. The fourth test of the construct validity of the IASC involved its potential association with sexual behavior that is inappropriate by virtue of its indiscriminant qualities or its use to reduce negative internal states. Such sexual behavior has been linked to, among other constructs, borderline personality disorder, problems in affect regulation, disturbed self-other attachment, and the use of tension-reduction behaviors as a way to decrease distress and dysphoria (Becker, Rankin, & Rickel, 1998; Brennan & Shaver, 1995; Briere, 1996) and thus would be expected to correlate with the scales of the IASC. The relationship between IASC scores and selfreported dysfunctional sexual behavior was tested in the current analysis by correlating IASC scores with the Dysfunctional Sexual Behavior scale of the Trauma Symptom Inventory (TSI) (Briere, 1995) in the 40-person subsample of clients who had completed the TSI.

Experiment-Wise Error Rate Correction

Because of the relatively large number of statistical tests calculated in this study, it was necessary to address the likelihood of experiment-wise error-rate inflation. This was done by limiting analyses to the primary scales of the IASC (i.e., not the four subscales) and by performing

Bonferroni error-rate corrections (constraining the overall alpha per set of analyses to p < .05) on all univariate tests that were not "protected" (Cohen & Cohen, 1983) by a significant omnibus multivariate test.

RESULTS

Descriptive Data

Analysis of the minimal reading level required for the IASC indicated a Flesch-Kincaid score of 6, indicating that the items of the IASC are understandable for those with a reading comprehension level equivalent to that of the average sixth grader or higher.

The means, standard deviations, and standard errors for the scales and subscales of the IASC are presented in Table 2, according to sample. Inspection of these data suggests that clinical respondents score considerably higher on IASC scales than do individuals from the general population, with university students scoring between these two groups.

Reliability

As indicated in Table 2, reliability (Cronbach's α) coefficients for IASC scales and subscales in the standardization sample ranged from .78 (for Tension Reduction Activities) to .93 (for Identity Impairment), with an average scale α coefficient of .89. Alpha coefficients for the clinical sample were of similar magnitude, ranging from .86 (for Tension Reduction Activities) to .96 (for Identity Impairment), with an average α of .93. Alpha coefficients in the university sample ranged from .82 (for Tension Reduction Activities) to .93 (for Abandonment Concerns and Affect Skill Deficits), with an average α of .89.

Influence of Demographic Variables on IASC Scores

Separate analyses examining the relationships between age, gender, and race and the scales of the IASC in the standardization sample indicated that (a) women scored higher than men on four of seven IASC scales (Interpersonal Conflicts, Idealization-Disillusionment, Abandonment Concerns, and Identity Impairment), (b) younger participants (younger than 55 years) scored higher than older participants (55 years or older) on two IASC scales (Interpersonal Conflicts and Identity Impairment), and (c) race was not associated with IASC scores in any instance (see Table 3 for ANOVA data on the significant sex and age effects). Although gender differences were found for a number of IASC scales, the amount of variance accounted

Standardization Sample (N = 620) Clinical Sample (N = 116) University Sample (N = 286-289) Number SD SD SE^a SD SE IASC Scale of Items M α M α M SE α Interpersonal Conflicts 9 11.61 4 26 0.17 90 21.59 8 17 0.79 .93 19.12 5.90 .35 .88 Idealization-Disillusionment 9 11.37 4.27 0.17 20.29 8.09 0.79 .91 17.34 7.19 .90 92 42 Abandonment Concerns 9 11.28 4.54 0.18 .92 20.79 9.92 0.96 .95 18.72 8.32 .49 .93 Identity Impairment 9 11.09 4.46 0.18 .93 21.92 1.05 1.05 .96 19.04 8.01 .47 .91 5 .90 .94 29 Self-Awareness 6.35 2.84 0.11 13.02 6.50 0.62 11.23 4.89 .88 4.74 Identity Diffusion 4 1.82 0.07 .85 8.96 4.85 0.47 .92 7.83 3.63 .21 .84 Susceptibility to Influence 9 10.87 3.48 0.14 .89 18.62 9.00 0.87 .95 16.62 6.49 .38 .91 9 4.42 .92 0.97 .95 7.57 .45 Affect Dysregulation 11.24 0.18 21.45 10.02 16.88 .93 Affect Instability 4 5.14 2.30 0.09 .88 9.78 4.68 0.45 .92 7.97 3.76 .22 .89 Affect Skill Deficits 5 8.91 .25 6.11 2.42 0.10 .89 11.67 5.98 0.58 .94 4.26 .89 Tension Reduction Activities 10.31 2.60 0.11 .78 16.26 7.13 0.70 13.67 5.09 30 .82 .86

TABLE 2 Characteristics of Inventory of Altered Self-Capacities (IASC) Scale Scores in the Standardization, Clinical, and University Samples

TABLE 3 ANOVA Results for Significant Age and Sex Effects on Inventory of Altered Self-Capacities (IASC) Scores

	Age					Sex				
	19-	·54 ^a	55 or	Older ^b		M	ales ^c	Fem	ales ^d	
IASC Scale	M	SD	M	SD	F(1, 569)	M	SD	M	SD	F(1, 553)
Interpersonal Conflicts	12.0	4.7	10.8	3.2	8.86*	11.2	3.6	12.2	4.9	8.71*
Idealization-Disillusionment	11.3	4.5	11.5	3.9	0.20	10.8	3.5	12.0	4.9	11.67*
Abandonment Concerns	11.6	5.0	10.6	3.5	5.61	10.7	3.9	12.0	5.2	11.58*
Identity Impairment	11.5	5.0	10.3	3.2	8.98*	10.6	3.7	11.8	5.4	9.27*
Susceptibility to Influence	10.8	3.6	10.9	3.5	0.03	10.6	2.9	11.1	3.8	2.63
Affect Dysregulation	11.4	4.7	11.0	4.1	1.24	10.8	3.5	11.8	5.3	8.13
Tension Reduction Activities	10.5	2.9	10.0	2.0	3.92	10.1	2.2	10.6	3.0	6.36

a. N = 386.

for by gender was very small, ranging from 0.5% to 2.1%. Age difference effects were also small, ranging from 0.0% to 1.8%.

Dimensionality

Factor analysis (principal factors solution) with Varimax rotation was conducted on the full set of 63 IASC items in the standardization sample to determine its internal structure. A total of 10 factors had eigenvalues of 1.0 or greater. The a priori construction of the IASC was supported in that the items from each scale generally loaded on separate factors, with the exception of the Tension Reduction Activities scale, which separated into three types of externalization (self-injury, sexual, and food bingeing).³

Discriminant Validity With Reference to the PAI

The Borderline Features, Antisocial Features, Somatic Complaints, and Mania scales of the PAI (Morey, 1991) were analyzed in terms of their correlation with the scales of the IASC in the clinical sample, as shown in Table 4. All seven IASC scales were significantly correlated with the Borderline Features scale of the PAI, whereas three scales (Idealization-Disillusionment, Affect Dysregulation, and Tension Reduction Activities) were significantly related to the PAI Antisocial Features scale, two scales (Identity Impairment and Affect Dysregulation) were correlated with the PAI Somatic Concerns scale, and no IASC scales correlated with the PAI Mania scale.

a. Standard error of the mean.

b. N = 185.

c. N = 293.

d. N = 262.

^{*} $p \le .004$ (experiment-wise error rate corrected to p < .05), two-tailed test.

Construct Validity

Depression. Multiple regression analysis of IASC scales, age, and sex on the total Multiscore Depression Inventory (MDI) score in the standardization sample indicated a significant relationship, $R^2 = .73$, F(9, 34) = 10.12, p < .001. As indicated in Table 5, although all IASC scales correlated with the MDI at the univariate (Pearson's r) level, the multiple regression finding was primarily due to significant prediction by Affect Dysregulation and Abandonment Concerns when all variables were considered simultaneously.

Self-reported suicidality. Discriminant function analysis indicated that all IASC scales were considerably higher for respondents actively considering suicide as compared to the remainder of individuals in the normative sample, $\chi^2(9) = 91.6$, p < .001. This was especially the case for the Identity Impairment and Affect Dysregulation scales, which were nearly twice as high for suicidal individuals than for non/less suicidal ones (see Table 6).

Self-reported substance abuse. As shown in Table 7, all seven IASC scales were correlated significantly with the DAPS Substance Abuse scale in the standardization sample. Multiple regression analysis indicated that, once all variables were considered simultaneously, the Affect Dysregulation scale and male gender were unique predictors of self-reported substance abuse on the DAPS, $R^2 = .17$, F(9, 516) = 11.4, p < .001.

Self-reported dysfunctional sexual behavior. Correlation analysis of the relationship between IASC scales and the Dysfunctional Sexual Behavior scale of the TSI in the clinical sample revealed that four of seven IASC scales (Abandonment Concerns, Identity Impairment, Susceptibility to Influence, and Tension Reduction Activities) were significantly related to Dysfunctional Sexual Behavior scores (see Table 8).

DISCUSSION

The data presented in this article suggest that the IASC has a number of positive psychometric properties. Its scales demonstrated high internal consistency/reliability across general population, clinical, and university samples and were found to correspond to the results of an itemlevel factor analysis. In addition, IASC scales were shown to correlate with other measures and self-reported behaviors in ways that support their discriminant and construct validity. In this regard, those with higher scores on the IASC were also more likely than those scoring lower on IASC scales to (a) endorse items tapping borderline and antisocial symptoms than they were for other symptom

TABLE 4
Correlations Between Inventory of Altered
Self-Capacities (IASC) Scales and Selected
Scales of the Personality Assessment
Inventory (PAI) (N = 28-29)

	Selected PAI Scales					
IASC Scale	BOR	ANT	SOM	MAN		
Interpersonal Conflicts	.69**	.46	.49	.33		
Idealization-Disillusionment	.71**	.55**	.51	.44		
Abandonment Concerns	.74**	.54	.43	.25		
Identity Impairment	.84**	.50	.56**	.25		
Susceptibility to Influence	.61**	.50	.31	.42		
Affect Dysregulation	.86**	.59**	.64**	.46		
Tension Reduction Activities	.66**	.58**	.22	.25		

NOTE: BOR = Borderline Features scale; ANT = Antisocial Features scale; SOM = Somatic Complaints scale; MAN = Mania scale. ** $p \le .002$ (experiment-wise error rate corrected to p < .05), two-tailed test

TABLE 5

Multiple Regression and Simple Correlation
Analysis of the Multiscore Depression
Inventory Using Inventory of Altered
Self-Capacities (IASC) Scale Scores, Age,
and Gender in the Clinical Sample (N = 44)

IASC Scales and		mple elations	Multiple Regression Analysis		
Demographic Variables	r	p < a	β	t	p <
Age	27	.039	14	-1.52	ns
Gender $(0 = male,$					
1 = female	.08	ns	05	-0.52	ns
Interpersonal Conflicts	.65	.001	.11	0.84	ns
Idealization-					
Disillusionment	.59	.001	03	-0.19	ns
Abandonment Concerns	.67	.001	.33	2.45	.021
Identity Impairment	.64	.001	.18	1.31	ns
Susceptibility to Influence	.44	.001	.07	0.60	ns
Affect Dysregulation	.74	.001	.56	3.07	.001
Tension Reduction					
Activities	.56	.001	25	-1.50	ns

a. Two-tailed test.

constructs, (b) have higher depression scores, and (c) describe involvement in behaviors often seen in individuals with dysfunctional personality traits, such as suicidality, substance abuse, and potentially problematic sexual behavior. It should be noted, however, that the various tests of validity presented here are limited to correlations between IASC scales and other inventories, as opposed to predicting individuals' actual *DSM-IV-TR* Axis II diagnoses or independently determined dysfunctional behaviors. Further studies are indicated to examine the validity of the IASC in the discrimination of, for example, those with versus those

TABLE 6 Post Hoc Analyses of the Level of Detailed Assessment of Posttraumatic States (DAPS) Suicidality in the Standardization Sample

Inventory of Altered Self-Capacities Scales and Demographic	Suici	ower dality 510)	Suici	gh dality = 22)		
Variables	M	SD	M	SD	F(1, 526)	p <
Age	46.8	16.9	40.1	19.0	2.7	ns
Gender $(0 = male,$						
1 = female)	0.5	0.5	0.4	0.5	0.5	ns
Interpersonal						
Conflicts	11.5	4.1	16.8	6.3	28.2	.001
Idealization-						
Disillusionment	11.2	4.0	16.4	6.8	27.5	.001
Abandonment						
Concerns	11.1	4.3	17.6	8.1	36.1	.001
Identity						
Impairment	10.8	4.2	19.3	7.5	66.5	.001
Susceptibility to						
Influence	10.7	3.1	16.2	6.2	51.5	.001
Affect						
Dysregulation	11.0	4.1	19.1	6.5	63.9	.001
Tension Reduction						
Activities	10.2	2.4	14.7	5.1	53.6	.001

without a borderline personality diagnosis or independently verified suicidal behavior.

The standardization sample response rate reported in this study (11.4%) was below that considered optimal for mail-out studies (Dillman, 1978). Perhaps as a result, as compared to 1990 census data, the standardization sample underrepresented non-Caucasians by 10% and women by 5%. The effect of this demographic skew on the standardization sample is unknown. However, IASC scores in the standardization sample were equivalent across racial groups, and those sex and age differences found were small, accounting for less than 3% of scale variance in any given instance. These data suggest that any demographic bias arising from the current response rate may not have had a major impact on the generalizability of the results reported here. At minimum, these results provide information on the characteristics of the IASC in a large sample of demographically diverse, nonclinical individuals from across the United States.

Because the IASC focuses on self-capacities, it may allow the evaluation of psychodynamic issues that are often underassessed by existing inventories. For example, the notion that a given psychotherapy client "has abandonment issues" or "idealizes and devalues" rests almost entirely on the therapist's perception and thus may be prone to vagaries of subjective evaluation, including counter-

TABLE 7 **Multiple Regression and Simple Correlation** Analysis of Detailed Assessment of Posttraumatic States (DAPS) Substance **Abuse Scale Scores Using Inventory of Altered Self-Capacities Scales (IASC)** Scale Scores, Age, and Gender in the Standardization Sample (N = 528)

IASC Scales and		nple elations	Multiple Regression Analysis			
Demographic Variables	r	p < a	β	t	p <	
Age	02	ns	.03	0.7	ns	
Gender $(0 = male,$						
1 = female)	05	ns	09	-2.2	.032	
Interpersonal Conflicts	.29	.001	05	-0.7	ns	
Idealization-						
Disillusionment	.23	.001	08	-1.2	ns	
Abandonment Concerns	.30	.001	.14	1.9	ns	
Identity Impairment	.30	.001	.14	1.9	ns	
Susceptibility to						
Influence	.20	.001	05	-0.9	ns	
Affect Dysregulation	.33	.001	.24	3.5	.001	
Tension Reduction						
Activities	.32	.001	.10	1.4	ns	

a. Two-tailed test.

TABLE 8 **Correlations Between Inventory of Altered** Self-Capacities Scales (IASC) Scales and the Dysfunctional Sexual Behavior (DSB) Scale of the Trauma Symptom Inventory (N = 39-40)

IASC Scale	DSB
Interpersonal Conflicts	.34
Idealization-Disillusionment	.40
Abandonment Concerns	.55*
Identity Impairment	.43*
Susceptibility to Influence	.51*
Affect Dysregulation	.37
Tension Reduction Activities	.79*

^{*} $p \le .007$ (experiment-wise error rate corrected to p < .05), two-tailed

transference, minimization or magnification, and simple clinical error. Furthermore, although many theories of personality disorder stress difficulties in identity, affect regulation, and related constructs, in most cases the clinical assessment of these theoretically important client characteristics has not been possible. In this context, application of the IASC may allow the clinician not only to consider the possibility that a given client has dysfunctional personality traits but also to determine the specific, quantitative extent to which he or she suffers from core symptoms of such dysfunction.4

Information on a given client's relative self-capacities is useful not only to psychodynamic therapists but also to those who provide cognitive-behavioral therapy, particularly for trauma-related conditions. For example, insufficient capacity to modulate or tolerate distress (as measured by the Affect Dysregulation scale and its subscales and, implicitly, by the Tension Reduction Activities scale) may cause some clients to be overwhelmed by painful memories or affects during imaginal exposure activities (Briere, 2002; Chemtob, Novaco, Hamada, Gross, & Smith, 1997; Cloitre & Koenan, in press), potentially leading to outcomes ranging from intrasession dysphoria and avoidance to treatment dropout. Knowledge of a client's problems in this area might lead the therapist to approach therapeutic exposure in a more titrated or graduated fashion, at least until the client's self-capacities are strengthened.

Similarly, individuals who are prone to turning to others for information about self or who are especially suggestible (as evaluated by the Susceptibility to Influence [SI] scale) may be at risk for uncritically accepting or reflexively internalizing their therapists' statements. These responses, in turn, might lead to the underdevelopment of self-assertion skills during treatment or, when the therapist's statements are especially inaccurate and SI is especially high, perhaps even the formation of iatrogenically distorted beliefs (e.g., false memories). IASC data regarding which clients are more likely to experience these or similar problems may decrease the likelihood that the clinician will be blindsided by such phenomena.

Because of the relative dearth of psychometrically valid outcome variables in the study of psychodynamic principles, certain important issues, such as the etiology and impacts of affect dysregulation or identity diffusion, have been neglected relative to other, more easily operationalized areas in clinical research. The IASC may allow concrete measurement of such constructs, thereby promoting empirical tests of psychodynamic theory and related domains. As well, subject to future research on the temporal stability of the IASC, this measure may be useful in research on the treatment of altered self-capacities. In this regard, although most recent treatment outcome studies suggest that cognitive-behavioral therapy is more effective than psychodynamic therapy for certain anxiety and depressive disorders, some of this apparent superiority may be an artifact of the type of tests used to assess therapeutic outcome. Instruments that tap self-reported anxiety, depression, or cognitive distortions may be good measures of the kinds of improvements provided by cognitivebehavioral interventions but may not address other issues more relevant to psychodynamic therapies. For example, standardized measures of self-capacities may offer a better approach for evaluating interpersonal treatments that focus on improving relational functioning, identity and boundary awareness, issues related to perceived abandonment, or capacity to endure and modulate distress without externalization or excessive avoidance.

The quality of psychological assessment and clinical research is partially dependent on the psychometric tools available for that endeavor. This may be especially true for "softer" psychological constructs whose genesis typically has not been within the psychological laboratory. The IASC was developed to assist in the assessment of one such group of constructs, one's relationship to oneself and others. The data reported here provide evidence for the psychometric reliability and validity of this instrument and suggest its potential relevance to a range of difficulties found in a significant proportion of clinically presenting individuals.

NOTES

- 1. McCann and Pearlman (1990) listed four types of self-capacities: the ability to tolerate strong affect, to be alone without being lonely, to calm oneself, and to tolerate self-loathing. Thus, the current definition, by virtue of including identity and broader self-other constructs, is a superset of McCann and Pearlman's model.
- 2. It should be noted, however, that somatization has been linked to personality disorders and dysfunctional personality traits in several studies (e.g., Hayward & King, 1990; Stern, Murphy, & Bass, 1993), and thus some correlation with Inventory of Altered Self-Capacities (IASC) scores seemed possible.
 - 3. The factor structure of the IASC is available from the first author.
- 4. This can be determined through the use of IASC T scores. Based on the standardization sample data, these linear transformations of raw scale scores have a mean of 50 and a standard deviation of 10. For example, a T score of 70 on the Affect Dysregulation scale indicates that the respondent's score is two standard deviations above the standardization sample mean and therefore exceeds the scores of approximately 98% of the participants in the general population.

REFERENCES

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text revision). Washington, DC: Author.
- Becker, E., Rankin, E., & Rickel, A. U. (1998). *High risk sexual behavior: Interventions with vulnerable populations*. New York: Plenum.
- Bell, M. D. (1995). *Bell Object Relations and Reality Testing Inventory*. Los Angeles: Western Psychological Services.
- Berndt, D. J. (1986). *Multiscore Depression Inventory (MDI) manual*. Los Angeles: Western Psychological Services.
- Billings, A.G., & Moos, R. H. (1984). Coping, stress, and social resources among adults with unipolar depression. *Journal of Personality & Social Psychology*, 46, 877-891.
- Blatt, S. J. (1998). Contributions of psychoanalysis to the understanding and treatment of depression. *Journal of the American Psychoanalytic Association*, 46, 723-752.
- Bongar, B. (1991). The suicidal patient: Clinical and legal standards of care. Washington, DC: American Psychological Association.
- Brennan, K. A., & Shaver, P. R. (1995). Dimensions of adult attachment, affect regulation, and romantic relationship functioning. *Personality & Social Psychology Bulletin*, 21, 267-283.

- Briere, J. (1995). Trauma Symptom Inventory professional manual. Odessa, FL: Psychological Assessment Resources.
- Briere, J. (1996). Therapy for adults molested as children (2nd ed.). New York: Springer.
- Briere, J. (1997). Psychological assessment of adult posttraumatic states. Washington, DC: American Psychological Association.
- Briere, J. (2000). Inventory of Altered Self-Capacities professional manual. Odessa, FL: Psychological Assessment Resources.
- Briere, J. (2001). Detailed Assessment of Posttraumatic States (DAPS) professional manual. Odessa, FL: Psychological Assessment Re-
- Briere, J. (2002). Treating adult survivors of severe childhood abuse and neglect: Further development of an integrative model. In J.E.B. Myers, L. Berliner, J. Briere, C. T. Hendrix, T. Reid, & C. Jenny (Eds.), The APSAC handbook on child maltreatment (2nd ed.). Newbury Park, CA: Sage.
- Briere, J., & Gil, E. (1998). Self-mutilation in clinical and general population samples: Prevalence, correlates, and functions. American Journal of Orthopsychiatry, 68, 609-620.
- Chemtob, C. M., Novaco, R. W., Hamada, R. S., Gross, D. M., & Smith, G. (1997). Anger regulation deficits in combat-related posttraumatic stress disorder. Journal of Traumatic Stress, 10, 17-35.
- Cloitre, M., & Koenan, K. (in press). Interpersonal group process treatment for CSA-related PTSD: A comparison study of the impact of borderline personality disorder on outcome. International Journal of Group Psychotherapy.
- Cohen, J., & Cohen, P. (1983). Applied multiple regression/correlation analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Davis, H. B. (1983). An object relations approach to self. Contemporary Psychotherapy Review, 1, 47-56.
- Dillman, D. A. (1978). Mail and telephone surveys: The total design method. New York: John Wiley.
- Elliott, D. M. (1992). Traumatic Events Survey. Unpublished psychological test, Harbor-UCLA Medical Center, Torrance, CA.
- Elliott, D. M. (1994). Impaired object relationships in professional women molested as children. Psychotherapy, 31, 79-86.
- Exner, J. E. (1993). The Rorschach: A comprehensive system, Vol. 1: Basic foundations (3rd ed.). New York: John Wiley.
- Garber, J., Braafladt, N., & Weiss, B. (1995). Affect regulation in depressed and nondepressed children and young adolescents. Development & Psychopathology, 7, 93-115.
- Grilo, C. M., Martino, S., Walker, M. L., Becker, D. F., Edell, W. S., & McGlashan, T. H. (1997). Controlled study of psychiatric comorbidity in psychiatrically hospitalized young adults with substance use disorders. American Journal of Psychiatry, 154, 1305-1307.
- Gunderson, J., Zanarini, M. C., & Kisiel, C. L. (1996). Borderline personality disorder. In T. A. Widiger, A. J. Frances, H. A. Pincus, R. Ross, M. B. First, & W. W. Davis (Eds.), DSM-IV sourcebook (Vol. 2). Washington, DC: American Psychiatric Association.
- Hayward, C., & King, R. (1990). Somatization and personality disorder traits in nonclinical volunteers. Journal of Personality Disorders, 4,
- Herman, J., Perry, J., & van der Kolk, B. (1989). Childhood trauma in borderline personality disorder. American Journal of Psychiatry, 146(4), 490-495.
- Herpertz, S., Gretzer, A., Steinmeyer, E. M., Muehlbauer, V., et al. (1997). Affective instability and impulsivity in personality disorder:

- Results of an experimental study. Journal of Affective Disorders, 44,
- Kohut, H. (1977). The restoration of the self. New York: International Universities Press.
- Linehan, M. M. (1993). Cognitive-behavioral treatment of borderline personality disorder. New York: Guilford.
- MacLeod, A. K., Williams, J. M., & Linehan, M. M. (1992). New developments in the understanding and treatment of suicidal behaviour. Behavioural Psychotherapy, 20, 193-218.
- McCann, I. L., & Pearlman, L. A. (1990). Psychological trauma and the adult survivor: Theory, therapy, and transformation. New York: Brunner/Mazel.
- Microsoft Word 2000 [Computer software]. (1999). Redmond, WA: Microsoft Corporation.
- Millon, T. (1994). Manual for the Millon Clinical Multiaxial Inventory-III. Minneapolis, MN: National Computer Systems.
- Morey, L. C. (1991). Personality Assessment Inventory professional manual. Odessa, FL: Psychological Assessment Resources.
- Rorschach, H. (1981). Psychodiagnostics: A diagnostic test based upon perception (P. Lemkau & B. Kronemberg, Eds. & Trans., 9th ed.). New York: Grune & Stratton. (Original work published 1921).
- Stern, J., Murphy, M., & Bass, C. (1993). Personality disorders in patients with somatization disorder: A controlled study. British Journal of Psychiatry, 163, 785-789.
- Stice, E., Nemeroff, C., & Shaw, H. E. (1996). Test of the dual pathway model of bulimia nervosa: Evidence for dietary restraint and affect regulation mechanisms. Journal of Social & Clinical Psychology, 15, 340-363.
- Trull, T. J., Sher, K. J., Minks-Brown, C., Durbin, J., & Burr, R. (2000). Borderline personality disorder and substance use disorders: A review and integration. Clinical Psychology Review, 20, 235-253.
- Verheul, R., van den Brink, W., & Geerlings, P. (1999). A three-pathway psychobiological model of craving for alcohol. Alcohol & Alcoholism, 34, 197-222.
- Zlotnick, C., Donaldson, D., Spirito, A., & Pearlstein, T. (1997). Affect regulation and suicide attempts in adolescent inpatients. Journal of the American Academy of Child & Adolescent Psychiatry, 36, 793-798.

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