

Structured Interview for Disorders of Extreme Stress (SIDES) & Self-Report Inventory for Disorders of Extreme Stress (SIDES-SR) Manual

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DESCRIPTION

The SIDES is a 45-item instrument which asks patients to describe their past and current functioning on six dimensions: (1) disorders of affect regulation, (2) amnesia and dissociation, (3) somatization, (4) disruptions in self-perception, (5) disorders in relationships with others, and (6) disrupted systems of meaning. These six dimensions represent the areas of impairment of the Disorders of Extreme Stress (DESNOS) construct. This constellation of dimensions is represented in the DSM-IV under Associated Features of PTSD (p. 425). The SIDES instrument may be administered either as a clinical interview or as a self-report measure. For each item, a respondent rates both lifetime presence (as a “yes/no” dichotomy), as well as current symptom presence and severity during the past month. Item descriptors contain concrete behavioral anchors in order to better facilitate patient responses and/or clinician ratings. The clinician-administered version of this instrument was utilized during the DSM-IV Field Trials for PTSD.

Important Note: As of 2019, there are no plans for further validation or update of the SIDES instruments. Further, the DESNOS construct is not aligned with the formulation of Complex-Posttraumatic Stress Disorder (C-PTSD) that has been developed, empirically validated and formally accepted for inclusion in the 11th edition of the International Classification of Diseases (ICD-II), the prevailing medical and mental health diagnostic classification system worldwide published by the World Health Organization (WHO). Accordingly, continued reliance upon the SIDES as an unofficial complex trauma diagnostic tool cannot be recommended.

Nevertheless, the SIDES instruments measure multiple domains and numerous symptoms of complex trauma adaptation not covered by the C-PTSD construct. Therefore, the SIDES instruments remain of value for two purposes: (1) clinical research on the complexity of adaptation to chronic, early onset and interpersonal forms of trauma and life adversity; and (2) baseline and ongoing assessment of particular psychotherapy clients for whom the forms of complex trauma symptom expression and associated functional impairment captured by the SIDES are relevant and not adequately covered by other measures in one’s clinical evaluation battery.

SCORING

The SIDES can be scored in one of two ways: (a) as a diagnostic tool to assess the presence and clinical weighting of clinically significant symptomatology within and across each of the six dimensions of DESNOS; and (b) as a continuous measure of DESNOS symptom severity.

Diagnostic Scoring:

Detailed instructions for this scoring approach are listed on the SIDES Data Entry Sheets provided in this packet and can be found immediately following each of the two SIDES instruments. Lifetime presence is rated on a yes/no dichotomy, and presence of symptoms during the past month is rated on a numerical scale ranging from 0 to 3. Respondents or clinician raters may also endorse an item as “Not applicable”, indicated with a rating of 4 on the measure. In general, endorsement of an item at 2 or above is considered indicative of a clinical level of severity. This scoring approach was based on the scoring of the SCID (the Structured Clinical Interview for DSM-IV Disorders), in which an item scored "1" is considered subclinical, a "2" is considered to be at a clinical level of impairment, and a "3" is considered to be severe.

Diagnostic scoring is recommended to ascertain whether an individual meets clinical threshold for each of the 6 DESNOS domains and then for the total scale (i.e., the presence of all 6 domains indicates presence of overall DESNOS). For example, as indicated in the detailed scoring instructions, for a respondent to meet criteria for domain *I: Alteration in Regulation of Affect and Impulses* one needs to meet criteria for subscale *I. a. Affect regulation* in addition to at least one of the other five subscales (b - f) of this domain. In turn, to meet criteria for subscale *I. a. Affect regulation*, at least 2 items within this subscale must be scored "2 or above" (i.e., 2 or 3, as a score of 4 indicates that this item is not applicable to the respondent). To meet criteria for subscale *I. b. Modulation of Anger*, at least 2 items within this subscale must be scored "2 or above." To meet criteria for subscales *I. c. through I. f.*, at least 1 item within a given subscale must be scored "2 or above." And so on until each of the current presence of clinically significant symptoms within each of the six domains has been ascertained.

Concurrent presence of all six domains of SIDES indicates that the respondent meets criteria for the overall DESNOS construct. Based upon unpublished instrument validation analyses conducted by Drs. Joseph Spinazzola, it is recommended that the Structured Clinical Interview version of this scale (SIDES) be used when possible to assess diagnostic presence of DESNOS domains. Conversely, clinical research samples administered the Self-Report version of this scale (SIDES-SR) have been found to underreport DESNOS symptoms related to affect dysregulation and modulation of anger compared to clinician rating of these items. Accordingly, the SIDES-SR appears to lack adequate sensitivity for solo use as a diagnostic tool.

Note: The diagnostic scoring approach described in detail on the SIDES Data Entry Sheets provides clinically weighted scores of current DESNOS symptoms. Subscale scores are obtained by first converting any item scored “1” or “4” into “0.” Next, all items within a given subscale are averaged. Finally, current domain severity scale scores are obtained by averaging the set of averaged subscale totals within each domain. Resulting scores provide a clinical weighting of current DESNOS symptomatology within each of the six DESNOS domains. Given the clinical cutoff based method of item conversion used in this scoring procedure (i.e., items endorsed at the clinical subthreshold level of “1” are recoded as “0” and thus not used in the computation of subscale averages), it is not recommended that diagnostic scoring be used to compute symptom severity scores for DESNOS as may be desired for purposes of select clinical research as well as routine clinical assessment and ongoing symptom monitoring over the course of psychotherapy. Instead, it is recommended that the Symptom Severity scoring approach described below be employed in these instances.

Symptom Severity Scoring:

The SIDES can also be scored as a continuous measure of the current symptom severity of each DESNOS dimension as well as overall DESNOS. Measurement of DESNOS symptom severity may often be desired for clinical research purposes and can be computed in addition to or in place of estimates of current diagnostic presence described above. Data entry sheets and score sheets for symptom-severity based scoring of the SIDES instruments are not provided. Individuals interested in computing SIDES severity can do so via creation of a simple data file using any of a number of widely available database software packages (e.g., Microsoft Excel; SPSS). Subscale scores can be obtained by first converting any item scored as *Not Applicable* (i.e., “4”) into “0.” Next, compute the sum of all items within a given subscale. Finally, obtain current domain severity scale scores by summing the set of subscale totals within each domain. Resulting domain scores provide an index of current DESNOS symptom severity within each of the six DESNOS domains. Total DESNOS severity can then be ascertained by summing the total scores for each of the six DESNOS domains. Accordingly, the total score on the overall scale can range from zero to 135 (45 items x maximum score of 3 per item). It is recommended that this symptom severity approach to scoring is used as the primary scoring approach whenever using the self-report version of the SIDES. Mean DESNOS dimension and full-scale scores--from clinical research and outpatient treatment samples-- derived using this scoring approach on the SIDES and SIDES-SR are provided in Tables 1-3 below.

The symptom severity approach to scoring the SIDES instrument also allows for the comparison of relative severity of symptoms across the six DESNOS domains. This can be achieved by first dividing each subscale score derived above by the total number of subscale items (i.e., averaging of subscale item scores following conversion of “4”s to “0”s) and then dividing each domain score by the total number of subscales for that domain (i.e., averaging of subscale scores for each domain).

Psychometric Properties:

Various studies have examined the reliability and validity of the SIDES instrument. During the DSM-IV Field Trials, the interview version of the SIDES, utilized as a dichotomous measure, demonstrated both good inter-rater reliability (Kappa = .81) as well as internal consistency (coefficient alpha ranged from .53 to .96) (Pelcovitz et al., 1997). Internal reliability has also been evaluated in an ongoing PTSD treatment-outcome study (Bessel van der Kolk, Primary Investigator). In a sample of 84 research study participants with a history of diverse trauma, internal consistency for the full interview scale (Alpha = .86) and the affect regulation subscale (Alpha = .71) were adequate (Spinazzola & van der Kolk, in preparation). Remaining subscales demonstrated coefficient alphas ranging from .41 to .69, suggesting that interpretation of these domains in a continuous fashion should be done with caution. Internal consistency of the self-report measure was assessed on a sub-sample of 61 research study participants. Full-scale internal consistency was high (alpha = .93) for the self-report measure, and all subscales with the exception of somatization (Alpha = .68) demonstrated strong internal consistency (alphas ranged from .74 to .82). These results suggest that the self-report measure may be reliably interpreted in a continuous fashion, although the somatization subscale should be interpreted with caution.

Validity of this instrument has been assessed in a number of ways. Convergent validity of the SIDES interview with the self-report measurement was assessed on a sample of 56 research study participants with diverse trauma histories. Significant correlations were found between the two measures on all subscales and on overall scores, with subscale correlation coefficients (Pearson r) ranging from .60 to .78, and a full-scale correlation coefficient of .86, indicating 74% shared variability between these two measures. Convergent and discriminant validity were further assessed on a subsample of 40 research study participants. Each participant was administered the self-report and interview versions of the SIDES as well as self-report (DTS) and clinical interview measures (CAPS) of DSM-IV PTSD symptoms, and a multi-trait, multi-method matrix was constructed. The matrix supported both the convergent and discriminant validity of the SIDES instruments, with the self-report and interview measures correlating more strongly with each other ($r = .85$) than with either the self-report or interview measures assessing PTSD symptoms (correlation coefficients range: .51 to .62).

Several studies have been conducted which support the construct validity of the SIDES instrument. In a combined community and clinic sample of respondents, higher lifetime and current incidence of impairment in domains assessed by the SIDES instrument was found in individuals with histories of PTSD as compared with individuals with no history of PTSD (van der Kolk et al, 1996). Similarly, presence of these symptoms discriminated rape victims with chronic PTSD from anxiety disorder and depressed controls (Spinazzola et al., 1994). Further support for construct validity was demonstrated in a study comparing research participants meeting criteria for PTSD with those participants who met criteria both for

PTSD as well as for impairment in the domains assessed by the SIDES instrument. Research participants demonstrating impairment on the SIDES instrument, as compared with those with PTSD alone, demonstrated more extensive comorbid Axis I and Axis II DSM-IV diagnoses, as assessed through the SCID-I and SCID-II instruments, as well as a specific pattern of diagnoses reflective of shared underlying deficits with the Disorders of Extreme Stress construct (i.e., disorders reflective of impairment in affect regulation, somatization, alterations in self-perception, and impairment in relations with others) (Blaustein et al., 2000).

NORMS

The SIDES instruments are unstandardized and no formal normative data exists for these measures. Preliminary information has been gathered from both a clinical sample and a research sample with diverse trauma histories (See Tables 1-3) (Spinazzola & van der Kolk, unpublished data). All individuals within the research sample met current criteria for PTSD, based on clinical interview, while information regarding percentage of individuals meeting criteria for PTSD was not available for the clinical sample. However, individuals within the clinical sample were all seeking services within an out-patient treatment program for individuals with a trauma history. As individuals were not selected for either sample based on DESNOS status, considerable within-sample variability exists, as can be seen in the provided data tables. This variability is considered to be representative of the variability in symptom presentation found within the population of individuals with trauma histories, and is not considered to be solely an artifact of measurement error. However, given this variability, use of these tables for interpretation of individual client results should be done with caution.

REFERENCES

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- Pelcovitz, D., van der Kolk, B., Roth, S., Mandel, F., Kaplan, S., & Resick, P. (1997). Development of a criteria set and a structured interview for Disorders of Extreme Stress (SIDES). *Journal of Traumatic Stress*, *10*, 3-16.
- van der Kolk, B., Roth, S., Pelcovitz, D., Mandel, F., & Spinazzola, J. (2005). Disorders of Extreme Stress: The empirical foundation of complex adaptation to trauma. *Journal of Traumatic Stress* *18*(5), 389-399.

Table 1: Descriptive statistics for the SIDES self-report instrument (SIDES-SR) based on a clinical sample of 70 trauma-focused outpatient therapy clients with diverse trauma history profiles.

SIDES Scale	Mean:	Standard deviation:	Minimum:	Maximum:	Number of items:	Absolute range:
Affect regulation	18.44	8.94	2	39	19	0-57
Amnesia and dissociation	6.77	3.81	0	14	5	0-15
Alterations in self-perception	8.76	4.37	0	17	6	0-18
Alterations in relations with others	6.06	3.21	0	12	5	0-15
Somatization	3.77	4.10	0	15	5	0-15
Disruptions in systems of meaning	5.79	3.61	0	15	5	0-15
Full scale:	49.59	22.52	5	93	45	0-135

Table 2: Descriptive statistics for the SIDES self-report instrument (SIDES-SR) based on a research sample of 63 adult trauma-focused clinical research participants with diverse trauma history profiles.

SIDES-SR Scale	Mean:	Standard deviation:	Minimum:	Maximum:	Number of items:	Absolute range:
Affect regulation	12.63	7.20	0	28	19	0-57
Amnesia and dissociation	4.40	3.35	0	13	5	0-15
Alterations in self-perception	6.19	3.86	0	15	6	0-18
Alterations in relations with others	4.45	3.44	0	14	5	0-15
Somatization	2.37	2.29	0	9	5	0-15
Disruptions in systems of meaning	3.84	3.03	0	11	5	0-15
Full scale:	33.62	19.12	0	74	45	0-135

Table 3: Descriptive statistics for the SIDES clinical interview measure based on a research sample of 84 adult trauma-focused clinical research participants with diverse trauma history profiles.

Descriptive statistics for the SIDES interview measure based on a research sample of 84 subjects with diverse history of trauma.	Mean:	Standard deviation:	Minimum:	Maximum:	Number of items:	Absolute range:
SIDES Scale						
Affect regulation	12.94	6.49	1	27	19	0-57
Amnesia and dissociation	4.39	3.11	0	12	5	0-15
Alterations in self-perception	6.33	3.35	0	14	6	0-18
Alterations in relations with others	4.83	2.62	0	11	5	0-15
Somatization	3.86	2.80	0	15	5	0-15
Disruptions in systems of meaning	4.24	3.00	0	11	5	0-15
Full scale:	36.60	15.34	6	76	45	0-135

SIDES Data Entry Sheets

Instructions

A. Translate raw scores from the SIDES into scores on this sheet by circling the appropriate choice, according to the following scoring system:

1. For all “Yes” and “No” answers on the SIDES, circle the same on this sheet. (For items 36-40, only one of the somatic symptom types must be circled for a “Yes.”)
2. For all scores of 0 or 1 or on the SIDES, circle 0 on this sheet.
3. For all scores of 2 or 3 on the SIDES, circle the same number on this sheet.
4. For all scores of “Not Applicable” on the SIDES, circle * on this sheet.

1	Yes No	11	Yes No	21	Yes No	31	Yes No	41	Yes No
I. a.	0 2 3 *	I. e.	0 2 3 *	II. b.	0 2 3 *	IV. a.	0 2 3 *	VI. a.	0 2 3 *
2	Yes No 0 2 3 *	12	Yes No 0 2 3 *	22	Yes No 0 2 3 *	32	Yes No 0 2 3 *	42	Yes No 0 2 3 *
3	Yes No 0 2 3 *	13	Yes No 0 2 3 *	23	Yes No 0 2 3 *	33	Yes No 0 2 3 *	43	Yes No 0 2 3 *
4	Yes No 0 2 3 *	14	Yes No 0 2 3 *	24	Yes No 0 2 3 *	34	Yes No 0 2 3 *	44	Yes No 0 2 3 *
I. b.	0 2 3 *		0 2 3 *		0 2 3 *	IV. b.	0 2 3 *	VI. b.	0 2 3 *

5	Yes No 0 2 3 *	15	Yes No 0 2 3 *	25 III. a.	Yes No 0 2 3 *	35 IV. c.	Yes No 0 2 3 *	45	Yes No 0 2 3 *
6	Yes No 0 2 3 *	16	Yes No 0 2 3 *	26 III. b.	Yes No 0 2 3 *	36 V. a.	Yes No 0 2 3 *		
7	Yes No 0 2 3 *	17	Yes No 0 2 3 *	27 III. c.	Yes No 0 2 3 *	37 V. b.	Yes No 0 2 3 *		
8 I. c.	Yes No 0 2 3 *	18	Yes No 0 2 3 *	28 III. d.	Yes No 0 2 3 *	38 V. c.	Yes No 0 2 3 *		
9	Yes No 0 2 3 *	19	Yes No 0 2 3 *	29 III. e.	Yes No 0 2 3 *	39 V. d.	Yes No 0 2 3 *		
10	Yes No 0 2 3 *	20 II. a.	Yes No 0 2 3 *	30 III. f.	Yes No 0 2 3 *	40 V. e.	Yes No 0 2 3 *		

B. Calculate Lifetime Presence and Current Severity scores from the data above for each subscale of each domain.

1. Calculate Lifetime Presence for each subscale according to the criteria listed below, and write “Yes” or “No” for each subscale:

2. Calculate Current Severity scores for each subscale by averaging scores for all *non-zero* items of each subscale (exclude N/A items from calculations):

For example, if a client endorses a “1” for Item #1, an N/A For Item #2, and a “2” for Item #3, they would receive an average item score of 2 divided by 1 = 2 for subscale I.a., as the “1” would be recoded as “0” and the N/A item dropped.

I.a.	2 of items 1-3	_____	average of items 1-3	_____
I.b.	2 of items 4-7	_____	average of items 4-7	_____
I.c.	1 of items 8-10	_____	average of items 8-10	_____
I.d.	item 11	_____	score for item 11	_____
I.e.	1 of items 12-18	_____	average of items 12-18	_____
I.f.	item 19	_____	score for item 19	_____
II.a.	item 20	_____	score for item 20	_____
II.b.	1 of items 21-24	_____	average of items 21-24	_____
III.a.	item 25	_____	score for item 25	_____
III.b.	item 26	_____	score for item 26	_____
III.c.	item 27	_____	score for item 27	_____
III.d.	item 28	_____	score for item 28	_____
III.c.	item 29	_____	score for item 29	_____
III.d.	item 30	_____	score for item 30	_____
IV.a.	1 of items 31-33	_____	average of items 31-33	_____
IV.b.	item 34	_____	score for item 34	_____
IV.c.	item 35	_____	score for item 35	_____
V.a.	item 36	_____	score for item 36	_____

V.b.	item 37	_____	score for item 37	_____
V.c.	item 38	_____	score for item 38	_____
V.d.	item 39	_____	score for item 39	_____
V.e.	item 40	_____	score for item 40	_____
VI.a.	1 of items 41-43	_____	average of items 41-43	_____
VI.b.	1 of items 44 or 45	_____	average of items 44-45	_____

C. Calculate the overall Current Severity for each domain (I-VI) by averaging the all the subscale scores for that domain. Then write the scores Current Severity score for each domain on the corresponding line below.

CURRENT

SEVERITY / PRESENCE

I.	_____	_____	(Scores of 2 or higher on A and 1 of B-F)
II.	_____	_____	(Scores of 2 or higher on A or B)
III.	_____	_____	(Scores of 2 or higher on 2 of A-F)
IV.	_____	_____	(Scores of 2 or higher on 1 of A-C)
V.	_____	_____	(Scores of 2 or higher on 2 of A-E)
VI.	_____	_____	(Scores of 2 or higher on A or B)

D. Calculate overall Current Presence for each domain by applying the criteria parenthetically stated above. Then write “Yes” or “No” for the Current Presence for each domain on the corresponding line above.

E. Copy scores from this page to the corresponding places on the SIDES Score Report Sheet.

SIDES Score Report Sheet

Scores of 2 or higher are clinically significant.

LIFETIME PRESENCE **CURRENT SEVERITY / PRESENCE**

I. ALTERATIONS IN REGULATION OF AFFECT AND IMPULSES

(A and one of B-F required)

A. Affect Regulation	_____	_____
B. Modulation of Anger	_____	_____
C. Self-destructive	_____	_____
D. Suicidal Preoccupation	_____	_____
E. Difficulty Modulating Sexual Involvement/Preoccupation	_____	_____
F. Excessive Risk Taking	_____	_____

II. ALTERATIONS IN ATTENTION OR CONSCIOUSNESS

(A or B required)

A. Amnesia	_____	_____
B. Transient Dissociative Episodes and Depersonalization	_____	_____

III. ALTERATIONS IN SELF-PERCEPTION

(Two of A-F required)

A. Ineffectiveness	_____	_____
B. Permanent Damage	_____	_____
C. Guilt and Responsibility	_____	_____
D. Shame	_____	_____
E. Nobody Can Understand	_____	_____
F. Minimizing	_____	_____

IV. ALTERATIONS IN RELATIONSHIPS WITH OTHERS

(One of A-C required)

A. Inability to Trust

B. Revictimization

C. Victimizing Others

V. SOMATIZATION

(Two of A-E required)

A. Digestive System

B. Chronic Pain

C. Cardiopulmonary Symptoms

D. Conversion Symptoms

E. Sexual Symptoms

VI. ALTERATIONS IN SYSTEMS OF MEANING

(A or B required)

A. Despair and Hopelessness

B. Loss of Previously Sustaining Beliefs
