Dissociative Symptomatology in Posttraumatic Stress Disorder and Disorders of Extreme Stress

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ABSTRACT. The present study was designed to assess differences in dissociative symptoms in adults with Posttraumatic Stress Disorder (PTSD) vs. PTSD plus Disorders of Extreme Stress Not Otherwise Specified (DESNOS). This study was done for two reasons: (1) to better understand the clinical profile of DESNOS clients in order to inform more effective treatment, and (2) to further empirical research on the validity of the DESNOS construct. To assess severity of dissociative symptoms, the authors administered the Dissociative Experiences Scale (DES) to 155 participants with PTSD. Using the Structured Interview for Disorders of Extreme Stress (SIDES), participants were divided into two groups: those who also met criteria for DESNOS and those who did not. DES means are provided for the two groups. Participants with PTSD plus DESNOS scored higher than participants with only PTSD on the measure of dissociative symptomatology, particularly on the DES scales

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that tap absorption/fantasy and depersonalization/derealization. The two groups did not differ on the amnesia subscale of the DES. Findings support the construct validity of the DESNOS concept and further delineate the clinical profiles of community-based PTSD with and without DESNOS, thus contributing to the knowledge base on the assessment of complex adaptations to trauma.

KEYWORDS. DES, PTSD, DESNOS, dissociation, trauma

The Dissociative Experiences Scale (DES; Bernstein & Putnam, 1986) is one of the most psychometrically sound and commonly used measures of dissociation in trauma research. The DES is a 28-item self-report measure of the frequency of individuals' normative and pathological dissociative experiences. The validity and reliability of the DES have been established in previous studies (Bernstein & Putnam, 1986; Carlson & Putnam, 1993), and studies have provided normative data for a variety of clinical and non-clinical samples, including patients with anxiety disorders (Bernstein & Putnam, 1986; Ross, Norton, & Anderson, 1988), Posttraumatic Stress Disorder (PTSD) (Bernstein & Putnam, 1986; Coons, Bowman, Pellow, & Schneider, 1989; Branscomb, 1991; Bremner et al., 1992), Dissociative Disorder Not Otherwise Specified (DDNOS) (Coons et al., 1989; Frischholz et al., 1990), and Dissociative Identity Disorder (DID) (Bernstein & Putnam, 1986; Ross et al., 1988; Coons et al., 1989; Frischholz et al., 1990). This paper will provide additional normative data for the DES that will also be relevant to clinical issues associated with complex adaptations to trauma.

The *Diagnostic and Statistical Manual, Fourth Edition* (DSM-IV; American Psychiatric Association [APA], 1994) diagnosis of PTSD is comprised of three key features: persistent re-experiencing of the traumatic incident, avoidance of reminders of the trauma, and chronic physiological arousal. The symptoms of PTSD include dissociative experiences such as amnesia for aspects of the trauma and dissociative flashback episodes. Lending support to the construct validity of the DES is that patients with dissociative disorders score the highest on this scale, patients with PTSD score slightly lower than dissociative disor-

der groups, and both groups score more than three times as high as individuals with non-trauma-specific anxiety disorders and those in the general population. Mean DES scores in samples of general population adults have ranged from 3.7 to 7.8 and from 3.9 to 10.4 in samples of adults with general anxiety disorders (Carlson & Putnam, 1993). In contrast, studies of adults who met criteria for DDNOS found mean DES scores of 38.3 (Coons et al., 1989) and 40.8 (Frischholz et al., 1990). In samples with DID, mean DES scores ranged from 40.7 (Ross et al., 1988) to 57.1 (Bernstein & Putnam, 1986).

Studies to date that have examined DES scores in adults who meet criteria for PTSD have focused on clinical samples of veterans or civilians receiving either inpatient or outpatient treatment for PTSD. For example, in a small sample of 10 veterans with PTSD, the mean DES score was 31.3 (Bernstein & Putnam, 1986). A second study of 35 veterans with PTSD in an inpatient stress reduction treatment program found a DES mean score of 41.1 (Branscomb, 1991). In a third study, 19 male veterans who were being treated in a hospital outpatient clinic who met criteria for PTSD obtained a mean DES score of 23.6, while seven adult females being treated in various inpatient and outpatient treatment facilities scored a mean of 32.7 (Coons et al., 1989). A final study found a mean DES score of 27.0 in 53 Vietnam veterans receiving treatment for PTSD (19 inpatient, 34 outpatient) (Bremner et al., 1992). These variations in mean DES scores in PTSD samples may be due to differences in DES administration (e.g., whether accuracy of high scores was queried) and sample differences (e.g., inpatient vs. outpatient, level and type of trauma exposure).

The PTSD diagnosis seems to provide an adequate picture of the symptomatology of individuals who have experienced single-incident, non-interpersonal traumas, yet research and clinical observations alike have linked exposure to early trauma, multiple traumas, chronic trauma, and interpersonal victimization to Complex PTSD or Disorders of Extreme Stress Not Otherwise Specified (DESNOS) symptomatology (Luxenberg, Spinazzola, & van der Kolk, 2001). In the DSM-IV, DESNOS is not recognized as a distinct disorder, but its symptomatology is presented as the "associated features of PTSD." The DESNOS symptom profile has been identified in many clinical research studies (e.g., Newman, Orsillo, Herman, Niles, & Litz, 1995; van der Kolk et al., 1996; Ford & Kidd, 1998; Ford, 1999) and has received widespread attention in the trauma field in recent years. The DSM-IV PTSD taskforce identified alterations in six domains of functioning as necessary for the diagnosis of DESNOS: (1) regulation of affect and im-

pulses; (2) attention or consciousness; (3) self-perception; (4) interpersonal relationships; (5) somatization; and (6) systems of meaning (Pelcovitz et al., 1997). Research is needed to systematically document differences between PTSD groups and PTSD with DESNOS groups on each of the six domains of functioning in order to empirically validate the concept of DESNOS.

One of the DESNOS domains, alterations in attention or consciousness, includes amnesia, transient dissociative episodes, and depersonalization. The DES contains items that tap each of these experiences, but it has not yet been used to study the DESNOS concept, and no DES norms have been established for DESNOS patients. The present study was designed to provide DES means for adults with PTSD with and without DESNOS and to assess differences in these two groups' dissociative symptoms. We hypothesized that the PTSD with DESNOS group would endorse a higher level of dissociative symptomatology. This study was done for two reasons: (1) to better understand the clinical profile of DESNOS clients in order to inform more effective treatment, and (2) to further empirical research on the validity of the DESNOS construct.

METHOD

Participants

Participants in the current study were those who were assessed during the pretreatment phase of a randomized clinical trial of EMDR, Fluoxetine and pill placebo in the treatment of PTSD (van der Kolk et al., 2005). For that study, adults with current PTSD and mixed trauma exposure at least one year prior to intake were recruited via newspaper ads, the Internet, and solicitation from medical and mental health professionals. A total of 229 participants were assessed at pretreatment after signing written, informed consent. Of these, 155 met PTSD criteria, completed the baseline assessment, and thus were included in the current study.

The majority of participants (81%) were female, and the sample ranged in age from 18 to 66 ($M = 35$, $SD = 12.9$). Most were Caucasian (66.9%), 13% were African American, 6.5% were Latino, 2.6% were Asian, 1.3% were Native American, and 9.7% identified as mixed or other ethnicity. Most (60%) were never married, 16.9% were married/partnered/engaged, and 20.3% were divorced, separated, or wid-

owed. Educational level of the sample varied: 20% completed post-college education, 64.6% attended some or completed college, and 15.5% had a high school degree or below. Most were employed on either a full-time (32.2%) or part-time basis (30.3%), 26.3% were unemployed, 9.9% were students, and 1.3% were retired.

Measures

Clinician Administered PTSD Scale, DSM-IV Version (CAPS) (Blake et al., 1995). The CAPS is a structured interview of PTSD symptoms. For this study, PTSD diagnostic status was defined as meeting full DSM-IV diagnostic criteria, using the following CAPS scoring rules: (a) total severity > 50; (b) per-item frequency of at least one and intensity of at least two; and (c) per-item total severity of at least four (Weathers, Ruscio, & Keane, 1999). Evaluators were primarily postdoctoral-level clinicians who received extensive training and ongoing supervision in administration of study measures. Interrater reliability on the CAPS was established prior to the start of the study based on coding of live and video-taped interviews. Interrater reliability for PTSD diagnosis, based on Cohen's kappa, was very good (kappa = .82; percent agreement = .92).

Structured Interview for Disorders of Extreme Stress (SIDES) (Pelcovitz et al., 1997). The SIDES is a structured interview for disorders of extreme stress that assesses the six domains of DESNOS that were presented in the introduction. The interview version of the SIDES was used to determine DESNOS classification. Participants received a DESNOS classification if they met criteria for all six SIDES scales. The SIDES interview has demonstrated good interrater reliability (kappa = .81) and internal consistency (alpha = .96) (Pelcovitz et al., 1997), as well as good construct validity (Zlotnick & Pearlstein, 1997). The SIDES is currently the only validated instrument for evaluating DESNOS, and the interview version has the most psychometric support.

Dissociative Experiences Scale (DES) (Bernstein & Putnam, 1986). The DES was described in the introduction. On the DES, individuals rate the percentage of time that they experience each item, ranging from zero to 100 percent, in increments of 10. The DES yields a mean of scored items (range = 0-100), which is the DES score. Response inquiry was conducted to ensure that participants understood the items. The DES has demonstrated good test-retest reliability (r = .79 to .96) and internal reliability (split-half r = .83-.93; Cronbach's alpha = .95). Studies of the convergent and discriminant validity of the DES have also sup-

ported its construct validity (for a review of the psychometric properties of the DES, see Bernstein & Putnam, 1986; Carlson & Putnam, 1993). Factor analytic studies of the DES have identified three factors that account for a large part of the variance among item scores (Carlson & Putnam, 1993). The first factor has been termed amnesia and includes items 3-6, 8, 10, 25, and 26. The second factor reflects absorption and fantasy and consists of items 2, 14-18, 20, 22, and 23. The third factor corresponds to experiences of depersonalization and derealization and includes items 7, 11-13, 27, and 28.

RESULTS

Participants classified as PTSD only (n = 130) and PTSD plus DESNOS (n = 25) did not differ on any of the following demographic variables (see Table 1): age, $F(1, 153) = 2.68$, $p = .10$; current marital status, $\chi^2(1, N = 148) = .001$; lifetime marital status (never married), $\chi^2(1, N = 148) = .78$; ethnic background (minority status), $\chi^2(1, N = 154) = .02$; and educational level (beyond high school), $\chi^2(1, N = 155) = .46$. Participants classified as DESNOS also did not differ significantly from those who met only PTSD criteria in the age at which they experi-

TABLE 1. Demographic Characteristics and Trauma History of Participants Classified by PTSD Diagnosis and DESNOS

Measure	PTSD+ DESNOS− (n = 130)	PTSD+ DESNOS+ (n = 25)	Statistical Test[a]
Age in years ($M \pm$ SD)	36 ± 13	31 ± 11	*ns*
Age at the time of index trauma ($M \pm$ SD)	23.5 ± 13	18 ± 9	*ns*
% currently married/partnered	17	17	*ns*
% never married	61	71	*ns*
% ethnic minority	33	32	*ns*
% education level higher than high school	85	80	*ns*

Notes: PTSD = Posttraumatic Stress Disorder; DESNOS = Disorder of Extreme Stress, Not Otherwise Specified; PTSD+ = diagnosed PTSD; DESNOS+ = classified DESNOS; DESNOS– = not classified DESNOS

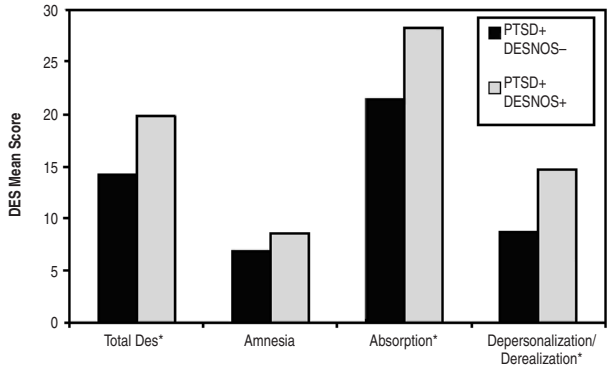
[a] Age was compared using analysis of variance; all other measures were compared using chi-square procedures

enced their index trauma (i.e., the trauma identified as the primary source of PTSD symptoms), $F(1, 146) = 3.44$, $p = .07$. There was, however, a nonsignificant trend toward those with DESNOS having been younger at the time of their trauma.

Comparisons between the PTSD only and PTSD plus DESNOS groups revealed differences in their DES profiles. Figure 1 provides the DES total and subscale means for the groups, and Figure 2 shows the distributions of Total DES scores in the PTSD only and PTSD plus DESNOS groups. Across the full PTSD sample, including those with and without DESNOS, the DES total mean score was 15.10 (*SD* = 7.85). When broken down by DESNOS classification, the DES total mean score was 14.20 (*SD* = 7.68) in the PTSD only group and 19.81 (*SD* = 7.14) in the PTSD plus DESNOS group. Overall, the PTSD plus DESNOS group endorsed significantly more dissociative symptomatology that the PTSD only group, $F(1, 153) = 11.44$, $p = .001$.

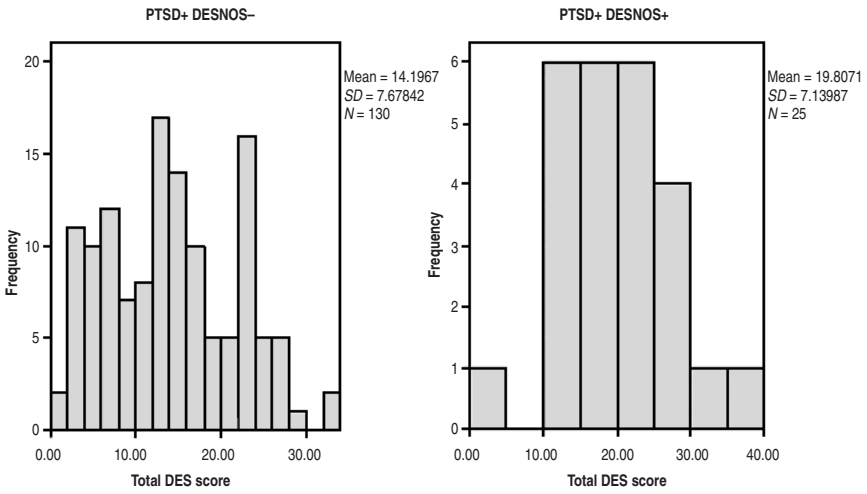
When subscale-level analyses were run, the two groups differed on two of the three DES subscales. The PTSD group that was classified as DESNOS scored significantly higher than those not meeting criteria for DESNOS on both the Absorption/Fantasy and Depersonalization/Derealization subscales, $F(1, 153) = 7.78$, $p < .01$ and $F(1, 153) = 8.56$, $p < .01$, respectively. The two groups did not differ significantly on the Amnesia subscale, $F(1, 153) = 1.17$, $p = .28$.

FIGURE 1. Comparison of Group DES Mean Scores



*p < 01.

FIGURE 2. Distribution of Total DES Scores in the PTSD With and Without DESNOS Groups



DISCUSSION

The data provide additional DES norms for PTSD in a sample of adults with mixed trauma histories who sought trauma-focused outpatient treatment. The mean DES score of 15.1 found in our sample was considerably lower than that found in previous studies of adults with PTSD. Two primary explanations may account for this discrepancy. First, when the evaluators administered the DES in our sample, they conducted inquiry on items rated at the 30% or higher level to ensure that participants understood the questions and were responding accurately. This screening procedure is suggested by Carlson and Putnam (1993) but may not have been followed in previous studies, leading to artificially elevated scores. A second explanation for our lower DES scores may be related to our sample. Previous studies utilized clinical samples of adults who were receiving ongoing inpatient or outpatient treatment for PTSD. In contrast, our participants had all self-referred for evaluation for inclusion in an outpatient treatment study, and none were receiving ongoing PTSD treatment at the time of enrollment. Our sample, therefore, may provide a more realistic portrayal of dissociative symptom levels in trauma survivors with PTSD (with and without DESNOS) who are functioning in the community. A lower level of dissociative symptomatology would be expected in a self-referred out-

patient sample than in clinical samples, particularly compared to psychiatric inpatients with PTSD. An additional sample difference is that the majority of previous studies of DES levels in PTSD were specific to male combat veterans. In contrast, our sample represented a broader subset of individuals with PTSD, from those with single-incident traumas in childhood or adulthood to those with chronic histories of trauma beginning in early childhood. In addition to being more representative of the range of civilians with PTSD, our sample was also much larger, and thus the scores provided in the present study may serve as more useful preliminary norms for non-veteran, mixed-gender samples.

Participants with PTSD plus DESNOS scored significantly higher on the DES in overall dissociative symptomatology than did participants with PTSD who did not meet criteria for DESNOS. The DESNOS classification includes alterations in the domain of attention and consciousness which are tapped by the DES but are not required for a diagnosis of PTSD. Specifically, amnesia, transient dissociative episodes, and/or depersonalization are necessary components of DESNOS. The finding that the PTSD plus DESNOS group scored higher on the DES than the PTSD only group, therefore, provides evidence of the construct validity of the concept of DESNOS by further differentiating PTSD with DESNOS from PTSD without DESNOS in regard to the dissociative component of DESNOS.

Although the statistically significant difference in DES scores between the two groups may appear modest (5.61 points on the DES), these findings are not surprising given that DESNOS is not intended to represent a dissociative disorder. Rather, DESNOS is conceptualized as a disorder of self-regulation (Luxenberg et al., 2001). Specifically, DESNOS is increasingly understood by leading experts in the field to involve a chronic problem of state-dependent dysregulation that occurs in response to thematic cues that trigger a posttraumatic stress reaction (van der Kolk, 2005). Dysregulation occurs across *multiple* systems (i.e., affective, behavioral, somatic, dissociative, relational, and self-attributional) and is expressed through a wide and varying range of associated clinical impairments and behavioral disturbances. As expected, therefore, we found significantly higher levels of dissociative symptoms on the DES in individuals with PTSD plus DESNOS, but not levels as high as those that have been observed in full-criterion dissociative disorder samples. Finally, it should be noted that previously reported group differences in DES severity across other disorder types have often fallen within a similar range. For example, a study comparing DES severity in multiple disorders found that an eating disorder group scored

less than seven DES points higher than an affective disorders group, and in turn that a Borderline Personality Disorder group scored less than seven points higher than the eating disorders group (Coons et al., 1989).

When subscale-level analyses were run, the two groups did not differ on the Amnesia subscale of the DES, but the PTSD plus DESNOS group scored higher on the Absorption/Fantasy and Depersonalization/Derealization subscales. This finding makes sense given that amnesia is included in the criteria C (avoidance) symptoms of PTSD (APA, 1994), and the whole sample met PTSD criteria. In contrast, items on the Absorption/Fantasy and Depersonalization/Derealization scales of the DES are more consistent with DESNOS symptomatology. These findings have important clinical and treatment implications. DESNOS patients' greater use of fantasy/absorption suggests that they tend to retreat inwards, and their higher level of depersonalization/derealization suggests that they may be more clinically impaired than individuals with PTSD alone. Overall, these findings may be indicative of DESNOS patients' previously reported over reliance on dissociative coping, which is likely to lead to problems with emotional engagement (Luxenberg et al., 2001).

The treatment outcome literature has shown that lower emotional engagement predicts worse outcome in exposure-based treatment for PTSD (e.g., Jaycox, Foa, & Morral, 1998). Our findings, then, suggest that exposure-based treatment for PTSD may be insufficient to address the problems of individuals with DESNOS. Further, our findings lend support to the clinical consensus that techniques addressing dissociative symptoms (e.g., grounding, development of non-dissociative coping skills, enhancing emotional engagement) should be incorporated early on in a phase-oriented treatment approach for individuals with DESNOS in order to increase clients' capacity to engage with traumatic affect and tolerate exposure (Luxenberg, Spinazzola, Hidalgo, Hunt, & van der Kolk, 2001; van der Kolk, 2002). The limited research on phase-oriented approaches is consistent with this recommendation. In their studies of a phase-based, cognitive-behavioral treatment for PTSD that targets the development of emotion management and interpersonal skills, Cloitre and colleagues (Cloitre, Koenen, Cohen, & Han, 2001; Cloitre, Stovall-McClough, & Miranda, 2004) found that building negative mood regulation skills in Phase 1 of treatment predicted Phase 2 exposure success in reducing PTSD. Similarly, a report from two single-case studies of individuals who met criteria for DESNOS showed positive effects of using resource development in the initial stabilization phase of treatment (Korn & Leeds, 2002).

One limitation of this study was the use of a self-report measure of dissociative symptomatology (DES), whereas validated diagnostic clinical interviews (i.e., CAPS and SIDES) were used to establish PTSD and DESNOS classifications. The intent of this study, however, was to measure dissociative symptoms, not to establish a dissociative disorder diagnosis. Furthermore, our purpose was to compare the level of dissociative symptoms in PTSD and PTSD plus DESNOS samples to those reported for other disorders, the literature of which has relied almost exclusively on the DES. The DES was chosen, therefore, as the most appropriate measure of dissociative symptomatology in comparison to previously published research.

Findings from the present study further delineate the clinical profiles of community-based PTSD with and without DESNOS, and thus contribute to the knowledge base on the assessment of complex adaptations to trauma. When evaluating traumatized individuals, the DES is a useful clinical and diagnostic tool for assessing dissociative symptomatology. The present data suggest that individuals with PTSD may score lower on the DES than would be expected based on previous norms for this diagnostic group, although their scores will still tend to be higher than those with non-trauma-based, general anxiety disorders. Additionally, adults who are demonstrating the complex adaptational pattern characteristic of DESNOS tend to score higher on the DES than those who meet criteria for PTSD alone. In particular, they may experience more absorption/fantasy-based dissociation and depersonalization/derealization. Future studies that aim to differentiate PTSD with DESNOS from PTSD without DESNOS in the other five domains of DESNOS will both provide further empirical support for the construct validity of DESNOS and advance our understanding of the range of clinical adaptation to traumatic events.

REFERENCES

American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders*, (4th ed.). Washington, DC: American Psychiatric Association.

Bernstein, E.M., & Putnam, F.W. (1986). Development, reliability, and validity of a dissociation scale. *Journal of Nervous and Mental Disease*, *174*(12), 727-735.

Blake, D.D., Weathers, F.W., Nagy, L.M., Kaloupek, D.G., Gusman, F.D., Charney, D.S., & Keane, T.M. (1995). The development of a clinician-administered PTSD scale. *Journal of Traumatic Stress*, *8*(1), 75-90.

Branscomb, L. (1991). Dissociation in combat-related post-traumatic stress disorder. *Dissociation*, *4*(1), 13-20.

Bremner, J.D., Southwick, S., Brett, E., Fontana, A., Rosenheck, R., & Charney, D.S. (1992). Dissociation and posttraumatic stress disorder in Vietnam combat veterans. *American Journal of Psychiatry*, *149*, 328-333.

Carlson, E.B., & Putnam, F.W. (1993). An update on the dissociative experiences scale. *Dissociation*, *6*(1), 16-27.

Cloitre, M., Koenen, K., Cohen, L.R., & Han, H. (2001). Skills training in affective and interpersonal regulation followed by exposure: A phase-based treatment for PTSD related to childhood abuse. *Journal of Consulting and Clinical Psychology*, *70*(5), 1067-1074.

Cloitre, M., Stovall-McClough, C.K., & Miranda, R. (2004). Therapeutic alliance, negative mood regulation, and treatment outcome in child abuse-related Posttraumatic Stress Disorder. *Journal of Consulting and Clinical Psychology*, *72*(3), 411-416.

Coons, P.M., Bowman, E., Pellow, T.A., & Schneider, P. (1989). Post-traumatic aspects of the treatment of victims of sexual abuse and incest. *Psychiatric Clinics of North America*, *12*, 235-335.

Ford, J.D. (1999). Disorders of extreme stress following war-zone military trauma: Associated features of posttraumatic stress disorder or comorbid but distinct syndromes? *Journal of Consulting and Clinical Psychology*, *67*(1), 3-12.

Ford, J.D., & Kidd, P. (1998). Early childhood trauma and disorders of extreme stress as predictors of treatment outcome with chronic posttraumatic stress disorder. *Journal of Traumatic Stress*, *11*(4), 743-761.

Frischholz, E.J., Braun, B.G., Sachs, R.G., Hopkins, L., Schaeffer, D.M., Lewis, J., Leavitt, F., Pasquotto, M.A., & Schwartz, D.R. (1990). The dissociative experiences scale: Further replication and validation. *Dissociation*, *3*(3), 151-153.

Jaycox, L.H., Foa, E.B., & Morral, A.R. (1998). Influence of emotional engagement and habituation on exposure therapy for PTSD. *Journal of Consulting and Clinical Psychology*, *66*(1), 185-192.

Korn, D.L., & Leeds, A.M. (2002). Preliminary evidence of efficacy for EMDR resource development and installation in the stabilization phase of treatment of Complex Posttraumatic Stress Disorder. *Journal of Clinical Psychology*, *58*(12), 1465-1487.

Luxenberg, T., Spinazzola, J., Hidalgo, J., Hunt, C., & van der Kolk, B.A. (2001). Complex trauma and disorders of extreme stress (DESNOS), Part Two: Treatment. *Directions in Psychiatry*, *21*(26), 395-414.

Luxenberg, T., Spinazzola, J., & van der Kolk, B.A. (2001). Complex trauma and disorders of extreme stress (DESNOS) diagnosis, Part One: Assessment. *Directions in Psychiatry*, *21*(25), 373-392.

Newman, E., Orsillo, S.M., Herman, D.S., Niles, B.L., & Litz, B.T. (1995). Clinical presentation of disorders of extreme stress in combat veterans. *The Journal of Nervous and Mental Disease*, *183*(10), 628-632.

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*(1), 3-16.

Ross, C.A., Norton, G.R., & Anderson, G. (1988). The dissociative experiences scale: A replication study. *Dissociation*, *1*(3), 21-22.

van der Kolk, B.A. (2005). Developmental trauma disorder. *Psychiatric Annals*, *35*, 401-408.

van der Kolk, B.A. (2002). The assessment and treatment of complex PTSD. In R. Yehuda (Ed.), *Treating trauma survivors with PTSD*. Washington, DC: American Psychiatric Press, Inc.

van der Kolk, B.A., Pelcovitz, D., Roth, S., Mandel, F.S., McFarlane, A., & Herman, J.L. (1996). Dissociation, somatization, and affect dysregulation: The complexity of adaptation to trauma. *American Journal of Psychiatry*, *153*(7), 83-93.

van der Kolk, B.A., Spinazzola, J., Blaustein, M., Hopper, J., Hopper, E., Korn, D., & Simpson, W. (2005). A randomized clinical trial of EMDR, Fluoxetine and Pill Placebo in the treatment of PTSD: Treatment effects and long-term maintenance. *Manuscript submitted for publication*.

Weathers, F.W., Ruscio, A.M., & Keane, T.M. (1999). Psychometric properties of nine scoring rules for the clinician-administered posttraumatic stress disorder scale. *Psychological Assessment*, *11*(2), 124-133.

Zlotnick, C., & Pearlstein, T. (1997). Validation of the Structured Interview for Disorders of Extreme Stress. *Comprehensive Psychiatry*, *38*, 243-247.

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