

An Evaluation of Cognitive Processing Therapy for the Treatment of Posttraumatic Stress Disorder Related to Childhood Sexual Abuse

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This study compared the effectiveness of cognitive processing therapy for sexual abuse survivors (CPT-SA) with that of the minimal attention (MA) given to a wait-listed control group. Seventy-one women were randomly assigned to 1 of the 2 groups. Participants were assessed at pretreatment and 3 times during posttreatment: immediately after treatment and at 3-month and 1-year follow-up, using the Clinician-Administered Posttraumatic Stress Disorder (PTSD) Scale (D. Blake et al., 1995), the Beck Depression Inventory (A. T. Beck, R. A. Steer, & G. K. Brown, 1996), the Structured Clinical Interview for the *DSM-IV* (R. L. Spitzer, J. B. W. Williams, & M. Gibbon, 1995; M. B. First et al., 1995), the Dissociative Experiences Scale-II (E. M. Bernstein & F. W. Putnam, 1986), and the Modified PTSD Symptom Scale (S. A. Falsetti, H. S. Resnick, P. A. Resick, & D. G. Kilpatrick, 1993). Analyses suggested that CPT-SA is more effective for reducing trauma-related symptoms than is MA, and the results were maintained for at least 1 year.

Keywords: PTSD, child sexual abuse, cognitive therapy, trauma, treatment

Several therapies have been introduced over the past 20 years for the treatment of psychological symptom responses to interpersonal violence, for example, cognitive processing therapy, stress inoculation training, and prolonged exposure. Most of this research has focused on rape survivors, demonstrating that cognitive-behavioral interventions that include some type of reprocessing of the traumatic event are highly effective in reducing symptoms of posttraumatic stress disorder and other trauma related sequelae (Foa, Keane, & Friedman, 2000). In addition, the significant amount of research comparing the efficacy of different types of cognitive-behavioral interventions for rape survivors has allowed investigators to identify which personal or event-based characteristics could make someone a better candidate for one treatment over another (e.g., Resick, Nishith, Weaver, Astin, & Feuer, 2002; Riggs, Rukstalis, Volpicelli, Kalmanson, & Foa, 2003). Unfortunately, less attention has been given to the treatment of adult survivors of childhood sexual abuse, perhaps due to the impact that the abuse can have on the development and creation of enduring schemas and personality characteristics that are more difficult to address in therapy.

Initial studies on the treatment of childhood sexual abuse survivors often did not use treatment manuals, have a solid theoretical

paradigm, and typically did not examine the impact of treatment interventions on the symptom responses most commonly associated with abuse, including posttraumatic stress disorder (PTSD) (e.g., Alexander, Neimeyer, Follette, Moore & Harter, 1989). The *Diagnostic and Statistical Manual* (4th ed, *DSM-IV*; American Psychiatric Association, 1994) field trials (Roth, Newman, Pelcovitz, van der Kolk, & Mandel, 1997) reported that PTSD is the most commonly prevalent lifetime Axis I disorder seen in child abuse samples, with rates ranging from 20% (PTSD only) to 53% (PTSD and complex PTSD). However, additional studies have documented the cooccurrence of other disorders or symptoms that can make treatment very difficult, including depression and dissociation, not to mention personality disorders (Johnson, Pike, & Chard, 2001; Zlotnick et al., 1994). In addition, child abuse survivors can have attachment, communication, sexual intimacy, and social adjustment issues that may not be as prevalent in rape survivors. These differences need to be accounted for in treatment protocols under examination.

More recent forays into the treatment of abuse survivors have used theoretically based manuals adapted from rape survivor studies, with some initial success (e.g., Skills Training in Affect and Interpersonal Regulation/Prolonged Exposure, STAIR-PE; Cloitre, Koenen, Cohen, & Han, 2002). Unfortunately, some of these authors have reported high dropout rates in their treatment protocols even with the addition of coping skills building exercises, such as the Dialectical Behavioral Therapy affect regulation module (Linehan, 1993). Thus, researchers are still trying to identify efficacious treatment models for adult survivors that are associated with statistically and clinically significant results, as well as high levels of treatment completion.

In the past, treatments for survivors of interpersonal violence have used either a group or an individual treatment modality (Foa et al., 2000). Recently, more focus has been on individual interventions that allow recapitulation of the traumatic event and re-

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move the risk of secondary traumatization caused by hearing the detailed histories of other trauma survivors in a group setting. Although individual therapy can provide ample opportunity for processing and challenging cognitions, it cannot provide the same normalizing, universalizing, and useful social dynamics as group therapy. The combination of group and individual therapy may help to decrease the number of dropouts by providing clients with individual time to process, as well as cohesion, normalizing, and universalizing with other women in the group milieu. In individual therapy, clients are able to talk at length about the abuse while building a therapeutic relationship with one of the group coleaders. Individual therapy also offers the survivor the opportunity to more fully integrate group materials, through the process of repetition. Thus, in group therapy, clients may talk about homework assignments, current important issues, and symptom experiences and practice new tools to aid in their recovery. I was unable to identify any literature evaluating a combined group and individual treatment model for abuse survivors that addressed PTSD, depression, dissociation, and related symptom disturbances in the format of a brief manual. The following randomized controlled study was conducted to examine the utility of a combined group and individual cognitive-behavioral intervention that was specifically designed to address issues salient for abuse survivors.

Method

Participants

Participants were recruited through community advertising, letters to physical and mental health professionals, and presentations at local mental health facilities. Eighty-seven women were formally assessed for inclusion in the study. Sixteen of these individuals were judged inappropriate or changed their minds about participating in the study. Inclusion criteria for entry into the study included a diagnosis of PTSD, at least one incident of child sexual abuse as defined by state law, and at least one memory of the abuse. Exclusionary criteria included current trauma, substance dependence, suicidal intent, or other impeding medical conditions (e.g., undiagnosed seizure disorder). Individuals taking prescription medication were accepted into the study if they were stable on the medication for at least 3 months before treatment. Participants with a history of substance dependence were included in the study if they maintained sobriety for 3 months following a detoxification treatment. Seventy-one women entered into the study (36 in the active treatment group and 35 in the minimal attention (MA) wait-listed control group). Ten individuals who completed MA chose to enroll in active treatment after completion of the MA condition. Eight individuals (6 with treatment only and 2 with treatment after MA) dropped out of the treatment condition (18%), and 7 dropped out of the MA condition (21%).

No differences were found between individuals assigned to treatment and the wait-listed control group, so aggregate data were reported. The mean age of the women at treatment was 32.77 years ($SD = 8.87$) with a range from 18 to 56 years. The educational level ranged from 8 to 20 years, with a mean of 13.83 years ($SD = 2.39$). Forty-one percent reported an income below \$10,000, 52% below \$30,000, and 3.5% above \$50,000. Ethnicity of this sample was as follows: 14% were African American ($n = 12$), 81.4% were White ($n = 70$), 3.5% were Hispanic, Latin, or Mexican American ($n = 3$), and 1% identified as "other" ($n = 1$). The following abuse characteristics were found in the sample. The participants reported the average age at onset of abuse was 6.4 years ($SD = 2.78$); and 21% indicated that there were between 1 and 5 incidents of abuse, 12% reported between 6 and 10 incidents, and 10% reported between 11 and 30 incidents; 57% reported more than 100 abuse incidents. Thirty-five percent of

the sample indicated having had only 1 abuser, 63% more than 2 abusers, and 2% innumerable perpetrators. Forty-eight percent indicated they were abused by a relative, 16% by a nonrelative, and 36% by a relative and a nonrelative. Finally, 94% reported kissing and fondling, 58% indicated oral sexual contact, and 57% reported penetration. Also of note was the finding that 40% of the participants met criteria for current major depression.

Assessments

Participants were initially screened using a phone survey designed to rule out individuals who met the exclusionary criteria. After the phone screen, eligible women were asked to take part in a 3–5 hr assessment session including both interviews and self-report scales. All participants who attended the assessment session gave informed consent to be in the study using institutional review board–approved measures and procedures. All therapy and assessments were conducted at the Center for Traumatic Stress Research, a university-based clinic focusing on the research and treatment of PTSD. Research assistants blind to the assigned condition of the subject conducted all interviews, and treatment completers were asked not to mention having been in therapy at posttreatment assessments. Participants were paid \$50 for each assessment session. The following measures were included in analyses for this article.

Clinician-Administered PTSD Scale. The Clinician-Administered PTSD Scale for *DSM-IV*: One-Week Symptom Status Version (CAPS-SX; Blake et al., 1995) is a 30-item interview measure used to assess the frequency and intensity of specific PTSD symptoms during the past week and the impact these symptoms have had on social and occupational functioning and to provide a global scale score of PTSD severity for diagnostic purposes (Blake et al., 1990). Symptom frequency is rated on a 5-point continuum that ranges from *never* (0) to *daily or almost every day* (4). Intensity is similarly measured and ranges from *no experiencing of the symptom* (0) to *extreme experiencing of the symptom* (4) (Blake et al., 1995). The test was found to have excellent psychometric properties and has been used extensively in PTSD treatment outcome studies.

Structured Clinical Interview for DSM-IV Non-Patient Versions-I and II (SCID-I; Spitzer, Williams, & Gibbon, 1995; SCID-II, First et al. 1995). The SCID is a diagnostic interview developed to assess *DSM-IV* disorders. The SCID has been used in multiple studies of PTSD and victimization and when used by a trained staff has adequate interrater reliability and test-retest reliability (Maffei et al., 1997).

Standardized Trauma Interview (Resick, Jordon, Girelli, Hutter, & Marhofer-Dvorak, 1988). This standardized structured interview was adapted from the version previously used by its creators in a cognitive processing therapy study involving rape victims. The measure included the following topics: information about the sexual abuse, information on PTSD Criterion A events and/or potentially stressful events, within-crime reactions, social support, and treatment history. At the follow-up assessment, the modified version of the interview included questions regarding any treatment received since the posttreatment assessment and any other significant life events.

Sexual Abuse Exposure Questionnaire, Part 1 (SAEQ; Rowan, Foy, Rodriguez, & Ryan, 1994). The SAEQ Part 1 is a 10-item self-report measure designed to assess sexual acts experienced before the age of 16. Researchers have found that individual items exhibit moderate to high test-retest reliability (from .73 to .94) with an overall kappa coefficient of .88.

Modified PTSD Symptom Scale (MPSS; Falsetti, Resnick, Resick, & Kilpatrick, 1993). The MPSS is a 17-item self-report measure of post-traumatic stress disorder used to assess PTSD levels every other session during therapy as well as at all other assessment points. In accordance with the *DSM-III*, the 17 test questions are clustered into reexperiencing, avoidance, and arousal symptoms. Foa, Cashman, and Jaycox (1997) found the measure to have an internal consistency of .91, and test-retest reliability of .74. Good concurrent validity has been shown with the following

measures: Impact of Event Scale (IES; Horwitz, Wilner, Alvarez, 1979) avoidance subscale, .53, IES intrusion subscale, .81; Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), .80; Reduced Array Selection Test (RAST; Margolis, 2000), .81; State Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, & Lushene, 1970) trait, .56; STAI state anxiety, .52. They also reported good convergent validity, with sensitivity reaching 62% and specificity reaching 100%.

Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996). The BDI-II is a 21-item self-report test measuring severity of depression. Test questions are intended to correspond with criteria in the *DSM-IV* for depression. Beck et al. (1996) report internal consistency for outpatient populations at .92 and test-retest reliability for outpatients to be .93. This measure has been frequently used in treatment outcome studies for survivors of interpersonal violence.

Dissociative Experiences Scale-II (DES-II; Bernstein & Putnam, 1986). The DES-II is a 28-item self-report scale that quantifies the frequency and intensity of a wide range of experiences that are indicative of absorption, dissociation, derealization, amnesia, and depersonalization. Factor analyses (Carlson & Putnam, 1993) supported only factors representing general dissociative tendencies. Subjects respond on a scale from 0 to 100, with increments of 10. The DES-II score is an index of the average frequency of dissociative experiences (range 0–100).

Design and Treatment Overview

The study was conducted over a 3-year period to allow time for 3-month and 1-year follow-up data to be collected. Eligible participants were randomly assigned to the CPT-SA (active treatment condition) group or the MA (control condition) group after completion of the assessment procedures. Both conditions lasted 17 weeks and after completion of the post-assessment, individuals in the MA condition were offered inclusion in the active treatment protocol. Six groups were conducted, each by two female therapists, with group members randomly assigned to one of the group therapists for completion of the individual therapy sessions at the same time.

CPT-SA. CPT-SA is an adaptation of Resick and Schnicke's (1993) cognitive processing therapy for rape victims and was designed to focus on the areas of trauma symptom response that appear to be commonly found in child abuse survivors. CPT-SA is based on a broad treatment model combining information processing (Lang, 1977), developmental (Cole & Putnam, 1992; Finkelhor, 1988), and self-trauma theories (Briere, 2002), thereby addressing the roles that fear processing, attachment, cognitions, and development play in the creation and maintenance of symptoms.

The CPT-SA treatment consisted of 17 weeks of manual-based group and individual therapy, with participants attending a 90-min group each week and a 60-min individual therapy session for the first 9 weeks and the 17th week. This format has a couple of advantages. First, clients can process their traumatic events with the sole attention of the individual therapist. This focus increases the amount of time given to working through the traumatic memory and finding the clients disruptive cognitions, while decreasing the likelihood of vicarious traumatization by removing event recounting from the group sessions. Second, when the individual sessions stop at Week 9, the group members are forced to rely less on the therapists and more on the group to work through their reactions to the homework. This allows for a more approximate recreation of social interactions, giving the clients a better opportunity to process their thoughts and feelings with someone other than their therapist.

The following is a brief review of the treatment sessions. During Week 1, the clients are educated about PTSD, given the rationale for the treatment, begin establishing rapport with the other group members, and are introduced to the concept of "rules" or beliefs. For homework, they are asked to write down rules that they use to organize their life. In Week 2, clients discuss their developmental history and examine rules that developed within the context of their childhood. For homework, they are asked

to write an impact of event statement identifying ways in which the abuse has affected their beliefs about self-other and the world. In Week 3, the clients review the impact statement for rules and begin to discuss the relationship among events, thoughts, and feelings. During Week 4, the clients further examine the impact of thoughts on feelings and for homework, they begin the exposure portion of the treatment by writing an account of the most traumatic incident of childhood sexual abuse. During Weeks 5–8, the exposure component is continued by having the client read additional written narratives to the therapist in the individual sessions and process the experience of doing the homework in the group sessions. During Weeks 8 and 9, the clients are taught the Challenging Questions and the Disruptive Thinking Patterns (Chard, 1997) as a way to examine their unhealthy cognitions that may have resulted from the abuse or other subsequent traumatic events. The core challenging of cognitions is completed in Weeks 10–16 when the clients use the Challenging Beliefs Worksheet (Chard, 1997) to examine their rules about safety, trust, power/control, self-esteem, communication, intimacy, and social support. Finally, in Week 17, the clients meet with the individual therapist again to review their new impact of event statement and to plan for possible problems in the future.

Although many of the central tenets of CPT-SA are borrowed from CPT, several significant changes make CPT-SA more appropriate for child sexual abuse survivors (see Chard, Weaver, & Resick, 1997). Unlike CPT's focus on schema-discrepant beliefs, CPT-SA focuses on schema-discrepant and schema-congruent beliefs, because many of these beliefs are created during childhood and the abuse context. The addition of the Developmental Session 2 allows the clients time to discuss their family of origin, developmental interruptions, and the ways in which their schemas were established and reinforced during childhood. Second, in CPT-SA, sessions on assertiveness/communication, sexual intimacy, and social support have been added. All three of these areas seem to present relevant topics that many sexual abuse survivors struggle with and need to address in treatment.

MA. Individuals in the MA wait-listed control group received a 5–10 min telephone call once a week during the 17 weeks. Clients were assessed for their current emotional state and were given supportive, nondirective, brief counseling if they were experiencing a crisis. Clients who called in distress during the 17 weeks were offered the same supportive counseling unless the symptom severity was so high that they needed to be referred for immediate therapy (these individuals are included in the MA dropout numbers).

Therapist Training

The therapy groups were run by seven therapists, including the principal investigator and six graduate students in psychology with a background in cognitive-behavioral interventions. All sessions were videotaped, and the principal investigator provided weekly adherence supervision. In addition, all staff members were required to attend at least one of the 2-day supervisory workshops performed by Patricia Resick during the first and second years of the study. Before running a group, each therapist watched two training tapes and conducted individual CPT-SA with two pilot study clients. An independent rater trained in cognitive-behavioral interventions as well as in CPT-SA rated the therapists on adherence and competence for the study. This rater had no affiliation with this study other than to complete the ratings. Ratings were performed using checklist forms adapted from Patricia Resick's prior CPT study (Resick, 2002) that included unique requirements for each session (Chard, 1997). A random selection of participant videotapes and sessions was made so that the reviewer could code 10% of the sessions conducted. The therapists were all judged to be competent at performing CPT-SA, and the mean adherence rating was 98%.

Results

Initial Treatment Effects

Before outcome analyses were conducted, the six treatment groups were compared for differences pre- and posttreatment to rule out group differences or therapist effects. The six groups did not differ significantly on any of the demographic or outcome measures. Subsequently, the treatment completers ($N = 28$) were compared to the minimal attention wait-listed controls ($n = 27$) on symptom changes from pretreatment to posttreatment. The results of four ANCOVAs revealed significant main effects for PTSD, depression, and dissociation. With the pretreatment scores on the same measures partitioned out as control variables, the treatment group showed significantly greater improvement than the MA group on the CAPS-SX, $F(1, 54) = 95.96, p < .001$; MPSS, $F(1, 54) = 121.35, p < .001$; BDI-II, $F(1, 54) = 71.18, p < .001$; and DES-II, $F(1, 52) = 68.76, p < .001$. Paired t tests showed that the MA group had no significant changes from pretreatment to posttreatment on any of the assessment measures. Means and standard deviations for both groups are presented in Table 1.

Effect Size

Two separate effect sizes were computed. The Cohen's d statistic (1992) was first computed to compare differences between treatment participants and wait-listed participants at posttreatment, without controlling for pretreatment scores. The CAPS-SX ($d = 1.52$), MPSS ($d = 1.55$), BDI-II ($d = 1.42$), and DES-II ($d = .91$) all revealed effect sizes that were considered to be "large" (see Cohen, 1988). Eta-square was subsequently computed after the pretreatment scores were controlled. The CAPS-SX ($\eta^2 = .65$), MPSS ($\eta^2 = .70$), BDI-II ($\eta^2 = .58$), and DES-II ($\eta^2 = .32$) again indicated strong effect sizes.

Follow-Up Analyses

Pairwise t tests were conducted to assess maintenance of treatment gains at 3-month and 1-year follow-ups. Assessment data

Table 1
Scores of CPT-SA Treatment Group versus MA Group at Pre- and Posttreatment

Measure and group	Pretreatment		Posttreatment	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
CAPS-SX				
CPT-SA	65.46	26.39	9.00	11.04
MA	68.30	23.67	62.96	30.68
MPSS				
CPT-SA	57.57	22.85	7.54	9.51
MA	57.52	24.74	57.70	27.47
BDI-II				
CPT-SA	24.43	10.81	3.26	4.75
MA	24.52	11.55	22.41	12.57
DES-II				
CPT-SA	18.17	12.68	6.47	6.77
MA	20.83	17.04	18.29	15.39

Note. CPT-SA = cognitive processing therapy for sexual abuse ($n=28$); MA = minimal attention ($n=27$); CAPS-SX=Clinician-Administered Post-Traumatic Stress Disorder (PTSD) Scale, 1-Week Symptom Status Version; MPSS = Modified PTSD Symptom Scale; BDI-II = Beck Depression Inventory-II; DES-II = Dissociative Experiences Scale-II.

were obtained for 28 of the 36 treatment participants at 3-month follow-up and for 27 of the participants at 1-year follow-up. This sample included participants who after completing the MA condition chose to enter treatment. Comparisons were made between scores at posttreatment and 3-month follow-up and between scores at 3-month follow-up and 1-year follow-up. There was a significant difference between scores on the CAPS-SX at posttreatment and at 3-month follow-up ($t = 2.43, p = .02$), suggesting that participants continued to show improvement of PTSD symptoms 3 months posttreatment. No other measures showed significant change from posttreatment to 3-month follow-up, indicating that the positive effects of treatment remained stable for other symptoms as well. No significant difference on CAPS scores was seen from 3-month to 1-year follow-up, indicating that treatment improvements made from posttreatment to 3-month follow-up were maintained through 1-year follow-up. There were no significant differences between all other measures from 3-month follow-up to 1-year follow-up, suggesting that treatment gains measured at posttreatment were maintained for other symptoms as well. Means and standard deviations are presented in Table 2.

Intent-to-treat analyses. Intent-to-treat (ITT) analyses were conducted using the last observation carried forward procedure (or LOCF) to account for drop outs from the study. Repeated measures MANOVAs performed across the four assessment points indicated that changes in treatment scores were still significant over time on the CAPS-SX (Pillai's Trace, $F(3, 39) = 26.72, p < .001$; MPSS (Pillai's Trace, $F(3, 39) = 23.68, p < .001$; BDI-II (Pillai's Trace, $F(3, 39) = 21.60, p < .001$; and DES-II (Pillai's Trace, $F(3, 39) = 9.72, p < .001$).

Clinical improvement. Kendall and Grove (1988) recommended evaluating clinical improvement as well as statistical change in treatment groups. One way to show clinical improvement is by reporting the diagnostic status of both groups at posttreatment. In the CPT-SA group, 7% met criteria for PTSD as assessed by the CAPS-SX compared with 74% of the MA group, $\chi^2(1, N = 55) = 25.7, p < .001$. This trend continued, with 3% meeting criteria at 3-month and 6% meeting criteria at 1-year follow-up. In addition, to examine good end-state functioning, I computed an index that combined scores on the MPSS and BDI-II using the same cutoffs as Foa et al. (1999) and Resick et al. (2002). Good end-state functioning was defined as an MPSS score of 20 or less and a BDI score of 10 or less. At the postassessment, 79% of the CPT-SA participants achieved good end-state functioning, compared with 4% of the wait-listed control group, $\chi^2(1, N = 55) = 31.7, p < .001$. At 3-month follow-up, 73% of the treatment group met criteria for good end-state functioning, and at 1-year follow-up, this trend continued with 75% meeting criteria. This analysis was also performed using the LOCF treatment sample, which showed that at postassessment, 60% of the treatment group met criteria for good end-state functioning; 62.8% met such criteria at 3-month follow-up and 60.5% at 1-year follow up.

Symptom worsening. To account for those individuals who may have had an adverse reaction to the therapy experience, I compared the posttreatment CAPS-SX total severity score with baseline scores. No participants reported that their symptoms had become worse from pre- to posttreatment.

Dropout prediction. Further analyses of participants revealed that the treatment dropouts had significantly higher pretreatment PTSD scores (CAPS-SX; $p = .047$) than individuals who com-

Table 2
Scores of Treatment Group at 3-Month and 1-Year Follow-Up

Measure	3 months		1 year	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
CAPS-SX	12.67	14.05	13.54	15.19
MPSS	12.23	16.56	13.15	15.99
BDI-II	4.96	7.29	6.23	6.88
DES-II	8.09	11.04	6.51	10.25

Note. At 3-month follow-up, $n = 28$; 1-year follow-up, $n = 27$. CAPS-SX = Clinician-Administered Post-Traumatic Stress Disorder (PTSD) Scale, 1-Week Symptom Status Version; MPSS = Modified PTSD Symptom Scale; BDI-II = Beck Depression Inventory-II; DES-II = Dissociative Experiences Scale-II.

pleted the study, although none of the other symptom and event characteristics differed between these two groups.

Discussion

The purpose of this study was to evaluate the efficacy of Resick and Schnicke's (1993) cognitive processing therapy in an adapted format for survivors of childhood sexual abuse. These initial findings suggest that CPT-SA shows promise as an alternative form of treatment for this population, with clients reporting significant statistical and clinical gains on symptom measures of PTSD, depression, and dissociation from pretreatment to post-treatment. The treatment gains and effect sizes are as strong as those seen in other treatment studies of women who have suffered from interpersonal violence. For example, Cloitre et al. (2002) reported Cohen's d effect sizes for clients treated with STAIR-PE compared to clients who were wait-listed controls on the CAPS (1.30), BDI (1.24), and DES-II (.73). In addition, the CPT-SA treatment gains were maintained at 3-month and 1-year follow-ups, with some continued improvement on PTSD scores from immediately after treatment to 3-month follow-up. Also important is the fact that no clients who completed the treatment reported that their symptoms had gotten worse, and intent-to-treat analyses performed to account for treatment dropouts indicated that results were still statistically significant across all variables.

This study examined both demographic and event-based characteristics that could have affected a client's participation or response to treatment. The dropout rate for CPT-SA has been lower than the rates that have been reported in other outcome studies on child abuse survivors, (e.g., Cloitre et al. in 2002 reported a 29% dropout rate) and rape survivors (e.g., Resick et al. in 2002 reported a 26.8% dropout rate for CPT and 27.3% for PE), suggesting that CPT-SA may offer an acceptable alternative treatment for sexual abuse clients who are typically already in a great deal of distress. In addition, no differences were found between treatment dropouts and treatment completers on any demographic or symptom measures. Because it appears that this is the first study to use a combined group and individual format, the extent of the role that the group process played in the treatment results is unknown, but anecdotal oral and written statements from the clients received at the completion of therapy suggest that the group component may have played a key role in reducing dropouts from the treatment. Future research should include a dismantling study that examines

the effects of combined CPT-SA with an individual therapy-only treatment protocol, in addition to examining the role of higher levels of PTSD in treatment dropouts.

In keeping with prior research results on CPT (Resick et al., 2002), no differences were found in this sample for treatment outcome response related to the age at onset of abuse, chronicity of abuse, time between last abuse and treatment, and relationship to the perpetrator (see Johnson et al., 2001). This is significant information in that these variables are often used by therapists to judge the type of therapy and readiness for therapy on behalf of the client. Instead, therapists may want to consider severity of PTSD or other variables reported in the literature, such as peritraumatic dissociation, when making treatment decisions. In addition, the findings that CPT-SA worked equally well for reducing PTSD and depression symptoms. Although current studies (e.g., Resick et al., 2002) of survivors of interpersonal violence have not reported high rates of depression diagnoses alone, some evidence seems to suggest that depression is one of the most frequent comorbid diagnoses with PTSD (Breslau, Davis, Peterson, & Schultz, 2000; Shalev et al., 1998). CPT-SA shows promise as a treatment that can alleviate symptoms in both of these symptom domains, perhaps because of the inclusion of cognitive techniques that have been shown to work well with depressed clients in other studies (DeRubeis, Gelfand, Tang, & Simons, 1999; Strunk & DeRubeis, 2001). Although CPT-SA also reduced the symptoms of dissociation, this effect was not as strong. In part, this may be due to the fact that fewer participants presented with elevated dissociation scores than with PTSD or depression, so the sample was smaller. However, there may also be treatment issues that a larger study could examine regarding individuals with high levels of pretreatment dissociation. Prior research has suggested that dissociation is one of the more persistent symptoms clusters (Roth et al., 1997; Zlotnick et al., 1994), calling for a need to investigate the efficacy of CPT on dissociation in a future study.

This study has several strengths: First and foremost is the adherence to the guidelines for gold standards of methodologically sound treatment outcome research outlined by Foa and Meadows (1997). There was a broad list of inclusionary criteria that allowed clients to enter the study even if they were on medication, met criteria for substance abuse or personality disorders, had experienced multiple traumas throughout their lifetime, had suicidal ideation, or were committing self-injurious behaviors that were not imminently fatal. Allowing clients such as these to participate resulted in the population in this study more closely approximating the type of clients that practitioners may see in a community mental health setting, thus, increasing the likelihood of generalizable results. Other strengths included the randomized design, the blind assessments, and the comprehensive assessment package.

The small sample size is one limitation of the study, thus reducing the generalizability of the sample. This concern also extends to the small number of minorities recruited for the study, which further limits any conclusions regarding the efficacy of this treatment with non-White populations. Because this study was conducted with a control group design, it is impossible to judge the efficacy of CPT-SA in relation to other brief treatments for survivors of child sexual abuse. Future studies might include direct treatment comparisons of therapies with the same time duration that use a different agent of change in their protocol, for example, prolonged exposure or personal construct therapy. Finally, future

studies using CPT-SA need to use updated assessments that more thoroughly evaluate guilt, anger, sexual intimacy, severity of abuse, and the possibility of complex PTSD because these have all been shown to be related to treatment outcome data.

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