

## RESEARCH INVOLVING TRAUMA TREATMENT

# Treating Multitraumatized, Socially Marginalized Children: Results of a Naturalistic Treatment Outcome Study

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*Although early-onset, repeated trauma is relatively common in socially marginalized populations and related to numerous negative outcomes, most empirically validated interventions are not especially well tailored to meet the complex and individualized needs of child and adolescent trauma survivors in such contexts. Integrative treatment of complex trauma (ITCT) was developed as a specialized treatment that is empirically informed, culturally sensitive, extendable beyond the short term, and customized to the specific social and psychological issues of each child. This article examines the potential effectiveness of ITCT in assisting 151 traumatized children living in an economically deprived environment. Results indicate significant reductions in anxiety, depression, posttraumatic stress, anger, dissociation, and sexual concerns as a function of time in treatment.*

**KEYWORDS** *adolescents, child maltreatment, children, complex trauma, ITCT, poverty, therapy, treatment*

Multiple and severe traumas are especially common for children in high-risk communities, where many report exposure to extreme violence, such as assaults with weapons or witnessing homicides (e.g., Bell & Jenkins, 1993; Gladstein, Slater Rusonis, & Heald, 1992; Singer, Anglin, Song, & Lunghofer, 1995). This article examines the potential effectiveness of a structured treatment approach, Integrative Treatment of Complex Trauma (ITCT; Lanktree & Briere, 2008b), in assisting socially marginalized children and adolescents suffering from the effects of repeated interpersonal traumas.

The need for such an intervention is clear. Recent findings from a national sample of 1,467 youth, for example, suggest 80% have experienced a traumatic event (e.g., sexual abuse, physical assault, or threats), with an average of 3.7 types of victimization per individual (Finkelhor, Ormrod, & Turner, 2009). Such traumatic experiences, especially if they first occur in childhood within the context of a relationship, are increasingly referred to as *complex trauma* (Cook et al., 2005; Herman, 1992). For many children and youth, including those in this study, this might involve some combination of childhood sexual and physical abuse, emotional abuse and neglect, witnessed family violence, peer assaults, community violence, serious illness or injury, and loss or separation from a caretaker or other significant family member. When early maltreatment is involved, trauma is often associated with, and further complicated by, insecure attachments to primary caretakers (Lyons-Ruth & Jacobovitz, 1999), and can be exacerbated or augmented by environmental or social conditions such as inadequate social

support (Charuvastra & Cloitre, 2008), economic deprivation (Vogt, King, & King, 2007), stigmatization associated with certain traumas (e.g., Lebowitz & Roth, 1994), and experiences of social marginalization and discrimination (Kubiak, 2005).

A growing number of studies indicate that complex trauma exposure is associated with a range of symptoms and problems that can involve, but extend beyond, criteria for posttraumatic stress disorder (PTSD; American Psychiatric Association, 2000). These include low self-esteem; helplessness or hopelessness; dissociation; impulsivity; self-injurious or self-endangering behavior such as suicidality or self-mutilation; excessive or inappropriate sexual behavior; substance abuse; and various difficulties involving problems with identity or self-functioning, affect regulation, and capacity to form positive relationships (see reviews by Cook et al., 2005; van der Kolk, 2005). Together, these multiple sequels of trauma are sometimes referred to as *complex PTSD* (Herman, 1992) or *developmental trauma disorder* (van der Kolk, 2005).

Surprisingly, although complex outcomes are relatively common in clinical contexts, there are fewer empirically informed psychotherapies available for children and adolescents with multiple trauma issues (Amaya-Jackson & DeRosa, 2007). Instead, most currently available intervention approaches were developed for children with less complex clinical presentations. In this regard, the most commonly studied form of trauma therapy for children is trauma-focused cognitive behavioral therapy (TF-CBT; Cohen, Mannarino, & Deblinger, 2006). TF-CBT has been tested primarily with sexually abused children, where it has demonstrated efficacy in reducing PTSD, internalizing, and externalizing symptoms in a number of randomized control trial (RCT) studies (e.g., Cohen, Deblinger, Mannarino, & Steer, 2004; Cohen, Mannarino, & Knudsen, 2005; Deblinger & Heflin, 1996). However, it is not clear whether therapies developed to treat PTSD following a specific trauma (i.e., sexual abuse), in screened research samples, are equally helpful in treating clinically presenting children with multiple traumas, greater socioeconomic stress, and a wider range of symptoms.

Empirically validated treatment packages for traumatized children are often tested in highly structured, manual-based, controlled trials, with multiple exclusion criteria. For example, some of these studies exclude children reporting or exhibiting suicidal thoughts or behaviors, an absence of specific memory for the traumatic event, acute or severe behavioral or psychosocial problems, unstable or fragmented family and caregiver support systems, substance abuse in the child or caretaker, aggression toward others, psychotic symptoms, mental retardation and pervasive developmental disorder, and sexual behavior problems (e.g., Cohen et al., 2004; Cohen et al., 2005; Layne et al., 2008; see Ford & Cloitre, 2009, for further discussion). Although exclusion criteria allow researchers to control for extraneous sources of

variance, they also eliminate many clients with complex trauma who are in need of treatment and who might be more representative of trauma survivors typically seen in clinical settings (Bradley, Green, Russ, Dutra, & Westen, 2005).

The screened samples examined in most empirically validated child trauma therapies reflect, in part, the logistics and difficulties entailed in conducting treatment outcome studies in which there are multiple symptoms and comorbidities that must be targeted over the course of treatment. It is likely that any therapy developed to treat the panoply of symptoms associated with complex trauma will be difficult to study, especially because the duration of treatment might need to be extended or adjusted differently to the particular needs of each child to have a significant impact on multiple symptom clusters (Lanktree & Briere, 1995). Apropos of this, the child trauma treatment outcome literature is noteworthy for the relatively small number of sessions (typically 12–16) provided in most cases (e.g., Cohen et al., 2004; Cohen et al., 2005), even though many clinically presenting children have experienced years of abuse and neglect, with, in many cases, attendant parent–child attachment problems and other environmental stressors.

Although childhood trauma often involves attachment disruption and interpersonal violence in the context of primary relationships, relational difficulties are often overlooked by shorter term interventions—both as outcome variables and as phenomena that potentially impact the therapeutic process. Many empirically validated treatment packages do not particularly emphasize the importance of the therapeutic relationship (Amaya-Jackson & DeRosa, 2007), despite the likelihood that interpersonal problems might require a therapeutic relationship that both activates these difficulties and provides the context for their processing and resolution (Briere, 2002; Ford & Cloitre, 2009).

Finally, there is a particular dearth of treatment outcome studies focused specifically on socially marginalized and impoverished children and adolescents, even though such populations are common and greatly in need of service (Cohen, Deblinger, Mannarino, & de Arellano, 2001; McKay, Lynn, & Bannon, 2005). The daily experience of many inner city or urban children is characterized not only by frequent exposure to traumatic events (Breslau, Wilcox, Storr, Lucia, & Anthony, 2004; Singer et al., 1995), but also poverty, diminished social resources, racial discrimination, and chaotic living conditions (Jones, Hadder, Carvajal, Chapman, & Alexander, 2006; Schneir et al., 2007). Treatment outcome studies that underrepresent such individuals run the risk of generating conclusions about treatment efficacy that might not generalize to a majority of the nation's most adversely affected and underserved children and youth.

Despite the general lack of treatments available for children with complex posttraumatic outcomes, there are several promising interventions

recently described or currently in development, including Seeking Safety, adapted for adolescents (Najavits, Gallop, & Weiss, 2006), Trauma Affect Regulation: Guide for Education and Therapy (TARGET; Ford & Russo, 2006), Structured Psychotherapy for Adolescents Responding to Chronic Stress (SPARCS; DeRosa & Pelcovitz, 2008), the Attachment, Self-Regulation and Competency therapy framework (ARC; Blaustein & Kinniburgh, 2010), Child-Parent Psychotherapy (for young children; Lieberman & Van Horn, 2011), and ITCT. Outcome data and anecdotal reports suggest each of these approaches might be helpful in addressing complex posttraumatic outcomes. In each case, however, further research is needed to fully elucidate their effectiveness in treating complex trauma.

### THIS STUDY

Given the early state of development of treatments for complex trauma, the goal of this study was to examine the effectiveness of one existing treatment for multiply traumatized children and youth, ITCT. This structured approach was applied to a sample of multiply traumatized, inner-city children and adolescents with a range of symptoms and problems. It was hypothesized that complex trauma symptoms would be significantly reduced as a function of time in treatment with ITCT.

### METHOD

Data for this study were generated from a record review of 151 consecutive clients at a specialized child trauma center in Long Beach, California (Miller Children's Abuse and Violence Intervention Center-University of Southern California [MCAVIC-USC] Child and Adolescent Trauma Program) for which there were test data available from at least two assessment periods. This joint project of MCAVIC and USC was funded from 2001 to 2009 by the Substance Abuse and Mental Health Administration (SAMHSA), through the National Traumatic Stress Network (NCTSN), and the UniHealth Foundation, to develop, field test, and disseminate innovative treatments for multiply traumatized children and adolescents. After approval from the Institutional Review Board of the Memorial Health Services Research Council, archival data were collected on client demographics, trauma history, psychological testing, and number of months spent in psychotherapy. Months in therapy were indexed by time from first to last available assessment data. Treatment outcome was indexed by changes in Trauma Symptom Checklist for Children (TSCC; Briere, 1996) scores from first to last testing period. Because different children remained in treatment for different periods of time, the number of sessions per client was variable.

## Participants

Clients were referred by parents, other agencies, or clinics, or were identified and recruited in the context of MCAVIC–USC outreach activities in the public school system. Clients were also referred by physicians and medical social workers at local hospitals for medically related trauma typically involving life-threatening disease or injury, or exposure to invasive medical procedures. All lived in Long Beach, California, or surrounding communities. In Long Beach, 78% of children and youth are ethnic or cultural minorities and approximately one third live below the poverty line (“Study estimates 1/3 of state families living in poverty,” 2001). To be admitted to the clinic, potential clients had to report exposure to at least one traumatic event from which they suffered significant psychological symptoms, and had to be able to read English at a level that permitted psychological testing.

## Assessment

When possible, psychological testing was performed at intake, at three- to four-month intervals, and at termination, per the ITCT protocol, and involved the administration of several psychological measures, including the TSCC. Some additional assessment measures involved parent or caretaker report, such as the Child Behavior Checklist (CBCL; Achenbach, 1991) and the Trauma Symptom Checklist for Young Children (TSCYC; Briere, 2005), but were not always collected, given variable parental participation. Because of significant missing data for the parent report measures, only the TSCC, a child-report measure, was used in this study.

## TSCC

The TSCC is the most widely used, standardized and normed test of trauma-related symptomatology in children (Elhai, Gray, Kashdan, & Franklin, 2005). It is psychometrically reliable and valid (Plake & Impara, 2001; Lanktree & Briere, 2008a) and has been used in a number of trauma treatment outcome studies (e.g., Cohen et al., 2005; Lanktree & Briere, 1995). The full version consists of 54 items, which are scored into six scales: Anxiety, Depression, Anger, Posttraumatic Stress, Dissociation, and Sexual Concerns. There is an alternate form of the TSCC, the TSCC–A, which contains all of the TSCC items except those tapping sexual issues. The TSCC–A is often used in schools, or when parents do not approve of their children reading assessment items with sexual content. In five instances, the TSCC–A was used in lieu of the TSCC in this study. As a result, analyses involving the Sexual Concerns scale reduced the available sample size from 151 to 146.

## DETERMINATION OF TRAUMA EXPOSURE

Clients' history of trauma exposure was determined at intake through use of the Core Clinical Characteristics (CCC) forms (NCTSN–CCDS), a structured series of items developed by the NCTSN and augmented by MCAVIC–USC staff to include additional traumatic stressors reported by the child, caretaker(s), or child welfare social workers. Traumas assessed were child sexual abuse, child physical abuse, witnessing domestic violence, community violence, traumatic loss of a family member or friend, medical trauma, and “other” traumatic events. Events were categorized as present if the client or his or her caretaker(s) endorsed the relevant CCC item. In some cases, the child disclosed additional traumas during the process of ongoing treatment, at which time they were added to his or her clinical record.

## Treatment

ITCT is an empirically informed, multimodal therapy that integrates treatment principles from the complex trauma literature (e.g., Cook et al., 2005; Courtois & Ford, 2009), attachment theory (Bowlby, 1988), the self-trauma model (Briere, 2002; Briere & Scott, 2012), and components of TF-CBT. It involves structured protocols and interventions that are customized to the specific issues of each client, as complex posttraumatic outcomes are notable for their variability across different individuals. See Briere and Lanktree (2008, 2011) and Lanktree and Briere (2008b) for the complete ITCT treatment guides.

A key aspect of ITCT is its regular and continuous monitoring of treatment effects over time. This involves initial and periodic psychometric and interview-based evaluation of the child's symptomatology in a number of different areas, as well as assessment of his or her ongoing level of support systems and coping skills, family and caretaker relationships, attachment issues, and functional self-capacities. The client's social and physical environment is also monitored for evidence of increased stressors or potential danger from revictimization or broader community violence. Formal assessments take place at intake and at three- to four-month intervals throughout treatment, and are coded and organized based on an Assessment-Treatment Flowchart (ATF) that allows the therapist to review information regarding therapy- and environmentally based changes in symptomatology or problems over time (Briere & Lanktree, 2011). Typical ATF domains are environmental safety, caretaker support, depression, anger, low self-esteem, posttraumatic stress, attachment insecurity, suicidality, problematic sexual behavior, and grief, each of which can increase or decrease from one assessment period to the next. Successful treatment, for example, might reduce the child's posttraumatic stress symptoms; yet, his or her problematic sexual behavior might be unaffected or might even increase for some reason (e.g., a new stressor in the child's environment or a new instance of sexual

abuse). On such occasions, ITCT formally encourages “midcourse corrections,” wherein the clinician shifts from, for example, therapeutic exposure to an increased focus on safety and the affect regulation difficulties that might underlie the client’s need to distract or self-soothe with problematic or self-endangering behavior.

Based on information from the ATF, the therapist uses a Problems-to-Components (PTC) grid to customize the client’s specific treatment, applying specific empirically supported treatment components (e.g., psychoeducation, affect regulation training, therapeutic exposure, relational processing, and trigger identification), as well as different therapeutic modalities (play, family, and group therapy; caretaker education and support) as needed. The pace of treatment is guided by consideration of the “therapeutic window” (Briere, 2002), a concept that stresses the need to provide both (a) therapeutic exposure to implicit and explicit trauma memories, and yet, (b) careful attention to the exposure process so that it does not lead to overly activated emotional states that might overwhelm the child’s affect regulation and tolerance capacities and lead to avoidance or retraumatization. Treatment typically involves collateral sessions with caretakers to address their own traumatic reactions, improve their parenting skills, and address attachment issues. Family and group therapy sessions are included when indicated.

ITCT especially focuses on social and cultural issues. Attention is given to the use of culturally appropriate examples and treatment resources (e.g., play therapy toys and games, books, psychoeducation materials), and treatment is adapted to the cultural milieu in which the child is embedded (Lanktree, 2008). Also taken into account are cultural phenomena that can assist the client’s progress in therapy, such as use of the extended family as a physical, psychological, and social support system. ITCT is available in two forms: ITCT for Children (ITCT–C; Lanktree & Briere, 2008b) and ITCT for Adolescents (ITCT–A; Briere & Lanktree, 2011), the former making more use of play, sand tray, and other less verbal techniques, and the latter employing more verbal psychotherapy and cognitive interventions. Both ITCT–C and ITCT–A have been applied in outpatient child trauma clinics, public school settings, and inner-city “alternative education” schools (Lanktree, 2008).

Unlike most structured trauma treatment approaches for children and adolescents, ITCT does not have a preestablished set number of sessions to be applied for every client. Instead, therapy can range from several months to a year or more, although most clients appear to require an average of approximately six to eight months of treatment.

### Absence of Comparison Group

Because of the severity of the clinical needs of many presenting clients, the absence of other specialized complex trauma treatment programs for children in the Long Beach area, and SAMHSA’s funding requirement for



treatment development and testing, but not randomized control studies, it was not possible to include a wait list or alternative treatment comparison group to evaluate treatment effects. As a result, the findings presented in this article should be seen as exploratory only, as improvement in symptomatology might be due, at least in part, to the mere passage of time, rather than a specific treatment effect.

## RESULTS

### Participants

The mean age of children in this study was 11.43 years ( $SD = 2.69$ , range = 8–17), 35% ( $n = 53$ ) were male and 65% ( $n = 98$ ) were female, and race or ethnicity was 48% ( $n = 73$ ) Hispanic, 25% ( $n = 38$ ) Black or African American, 14% ( $n = 21$ ) non-Hispanic White, and 13% ( $n = 19$ ) Asian or other. Trauma exposure was extensive and varied in this sample, with 52% ( $n = 79$ ) having experienced sexual abuse, 27% ( $n = 41$ ) physical abuse, 17% ( $n = 26$ ) community violence, 32% ( $n = 48$ ) traumatic loss, 15% ( $n = 22$ ) medical trauma, 39% ( $n = 59$ ) some other traumatic event (e.g., neglect, psychological abuse), and 31% ( $n = 47$ ) witnessing domestic violence between caretakers. Most (62%,  $n = 92$ ) had experienced at least two different types of trauma, and 14% ( $n = 21$ ) had experienced four or more types. Mean age at first trauma exposure was 8.23 years ( $SD = 3.71$ ), and the mean amount of time that had passed since first exposure to the onset of treatment was 3.76 years ( $SD = 3.83$ ).

Most (67%) clients were in treatment for 3 to 8 months ( $M = 6.79$  months,  $SD = 4.76$  months). In this study, clients' last TSCC score, regardless of when treatment ended, was carried forward to the time of the longest treatment interval for any client (9 months or more). This procedure, last observation carried forward, provides a conservative estimate of overall treatment effects, and has been used in other child trauma treatment outcome studies (e.g., Cohen et al., 2005).

### Symptomatology as a Function of Demographics and Pre- Versus Posttreatment Status

Within-subjects analyses of variance (ANOVAs) revealed no effects of sex or age (8–11 years vs. 12–17 years), or interactions between sex, age, and pre–post assessment period, on TSCC scale scores. However, as indicated in Table 1, clients' scores on each of the TSCC scales (Anxiety, Depression, Anger, Posttraumatic Stress, Dissociation, and Sexual Concerns) decreased significantly from pre- to posttreatment. Posttreatment status was

**TABLE 1** TSCC Scale Scores at Pre- Versus Posttreatment

TSCC Scale	<i>N</i>	Pretreatment		Posttreatment		<i>F</i>	<i>p</i> <	Partial $\eta^2$
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Anxiety	151	9.11	6.04	5.06	4.63	44.04	.001	.23
Depression	151	9.13	6.30	5.18	4.53	44.73	.001	.23
Anger	151	8.96	6.71	6.07	5.39	26.21	.001	.15
Posttraumatic Stress	151	11.74	6.76	6.48	5.20	59.20	.001	.29
Dissociation	151	9.20	6.59	6.09	4.88	28.54	.001	.16
Sexual Concerns	146	4.79	4.85	2.88	3.53	18.68	.001	.12

*Note.* Within groups, controlling for age and gender. TSCC = Trauma Symptom Checklist for Children.

most associated with reductions in posttraumatic stress (partial  $\eta^2 = .29$ ) and least with reductions in sexual concerns (partial  $\eta^2 = .12$ ).

To identify possible mediators of outcome, pre–post change scores for each of the TSCC scales were averaged and correlated with relevant variables. Average pre–post change scores did not vary as a function of client gender ( $r = .04, p = .60$ ), age ( $r = .01, p = .97$ ), or number of traumas ( $r = .07, p = .40$ ). Similarly, an ANOVA of average change scores across client ethnicity was nonsignificant,  $F(3, 142) = 0.66, p = .58$ . As would be expected from the within-subjects findings, ANOVA with polynomial contrasts indicated there was a linear, but not quadratic, relationship between number of months in treatment (3–5, 6–8, or 9 or more) and mean improvement in TSCC scores,  $F(1, 143) = 6.24, p = .01$ .

Also analyzed was the relationship between average extent of symptomatology at the initiation of therapy and number of months of therapy ultimately provided to the child. ANOVA with polynomial contrasts indicated there was a linear, but not quadratic, relationship between the mean of pretreatment TSCC scores and the number of months in treatment (3–5, 6–8, or 9 or more),  $F(1, 143) = 5.62, p = .019$ , indicating that those children with more severe symptomatology were seen for longer periods of time in treatment.

## DISCUSSION

This study provides preliminary data on the potential effectiveness of ITCT in a sample of inner-city, socially marginalized children and adolescents. Although the absence of a control group limits definitive conclusions, it appears exposure to this treatment was associated with reductions in anxiety, depression, posttraumatic stress, and, to a slightly lesser extent, anger, dissociation, and sexual issues. Further, this decrease was dose-dependent: The longer a child was in therapy, the greater his or her symptomatic improvement.

The finding that longer term treatment was associated with greater symptom reduction than shorter term therapy is of interest, as it replicates research suggesting that some traumatized children require more than three or four months to achieve significant symptom remission (Lanktree & Briere, 1995). Although shorter periods of ITCT were seemingly effective for some children, those with the greatest pretreatment symptomatology were deemed by their therapists to require the longest time in therapy and evidenced the greatest clinical improvement. These findings reinforce the notion that some children, especially those with more initial symptomatology, might be better served by treatment approaches that are extendable beyond the short term (Amaya-Jackson & DeRosa, 2007; Najavits et al., 2004).

Significantly, the apparent effects of treatment were not influenced by client age, sex, ethnicity, or extent of trauma exposure: Improvement during ITCT treatment was equivalent across all of these variables, suggesting, for example, that this intervention was as helpful for Hispanic or African American children as it was for non-Hispanic White ones, and for those with complex traumatic histories as much as for those with fewer traumas. In contrast, the treatment literature indicates that outpatient trauma therapy can be more efficacious for White children than those of other ethnic and cultural groups (e.g., Cohen & Mannarino, 1998) and hypothesizes that therapy might be more challenging for those with more complex trauma exposure relative to those with fewer traumas (Ford & Cloitre, 2009). These findings suggest that ITCT's focus on complex posttraumatic outcomes, and its sensitivity to cultural and racial issues, might have been effective in eliminating these potential treatment disparities.

An inherent problem with studying assessment-driven, multimodal therapies like ITCT is that no child receives exactly the same treatment. For example, one child or youth might present primarily with PTSD, and thereby receive treatment focused more on titrated exposure and cognitive processing, whereas another child might have more difficulties with externalizing or self-destructive behaviors, and thus might receive interventions focused especially on affect regulation or trigger identification and intervention. As a result, the finding that ITCT was associated with significant clinical improvement might be more complex than it appears at first glance; in actuality, ITCT represents different treatments for different children, and thus "fidelity" to a specific treatment model is harder to define or monitor. Studies of ITCT and other components-based therapies, therefore, are as much a test of the validity of tailored treatment—of whether an approach that customizes interventions according to a child's clinical needs is an effective strategy—as they are of the efficacy of a specific treatment model. Additional research on ITCT might probe this issue further, for example, by determining whether this treatment is as useful when applied to clients with one problem (e.g., posttraumatic stress or anxiety) as opposed to clients with other difficulties (e.g., sexual acting out or attachment issues). The results presented here

offer hints in this regard: As was generally found by Lanktree and Briere (1995), sexual concerns, dissociation, and anger appear to be somewhat less responsive to ITCT than, for example, posttraumatic stress, anxiety, or depression. At the same time, it appears sexual problems and dissociative symptomatology are more resistant to standard treatment in children (Friedrich, 2007; Putnam, 1997); and, hence, the slightly decreased effectiveness of ITCT in these areas might reflect specific treatment resistance rather than the specific impact of this treatment approach, *per se*.

A weakness of this study is the absence of a comparison group. This is a common issue for research in real-world treatment settings, where, based on funding restrictions or humanitarian concerns, clinically presenting, traumatized children cannot (or should not) be assigned on a random basis to wait list, "treatment as usual," or non-trauma-focused conditions that might provide substantially less (or no) intervention, or avoid the trauma-related issues that often were the child's initial presenting concern or complaint. In fact, evidence that intervention approaches such as therapeutic exposure to trauma memories, cognitive processing or restructuring, and affect regulation techniques are specifically helpful for abused or traumatized children (e.g., Cohen et al., 2006; Deblinger, Mannarino, Cohen, & Steer, 2006) suggests that it might no longer be appropriate, or even ethical, to deprive children of these components as a control condition in treatment outcome studies.

In the absence of a non-trauma-treatment comparison group, the best question might be, "Is the improvement seen in this ITCT outcome study equivalent to, or greater than, the amount of improvement found in RCT studies?" In other words, the extent of improvement required by a given RCT study to exceed changes found in their comparison group might serve as a rough indicator of how effective ITCT would have to be in order to be considered potentially significant. To examine this possibility, mean TSCC scale pre-post change scores from a randomized control group treatment outcome study of TF-CBT (Cohen et al., 2005) can be compared to the score trajectory of a subset of clients ( $n = 54$ ) in this study whose treatment terminated at approximately the same point in time (3–4 months). In this regard, mean pre-post TSCC scale improvement in the ITCT group at three to four months (2.7 raw score points) were at least equivalent to those reported by Cohen et al. (2005) at three months (1.7 points). When children were treated for more than nine months of ITCT ( $n = 41$ ), the improvement was even greater (5.3 points). This comparison is suggestive only, however, because it cannot be known how much (if at all) a comparison group from the same geographic locale as the ITCT study would have improved without trauma-specific treatment. As well, client demographics in this study differ from those of the Cohen et al. study (e.g., 60% of the Cohen et al. sample were White, as opposed to only 14% in this study), and thus the differential role of culture and other social variables on treatment outcome cannot be

controlled for. To further probe these issues, future studies of ITCT should, in fact, include a comparison group, ideally using an actual trauma-focused treatment such as TF-CBT or SPARCS, rather than merely assigning comparison group children to a wait list, treatment-as-usual, or non-trauma-focused intervention.

In summary, this study provides naturalistic, noncontrolled data in support of the use of ITCT in multitraumatized, multicultural, inner-city children. More generally, it points to the potential utility of using empirically based treatment components that are customized according to each child's specific presenting symptomatology. Given these initial findings, further research is indicated to validate ITCT against another trauma-focused intervention, and to determine the relative efficacy of specific treatment components for specific problems and symptoms.

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