

# MEASUREMENT AND ASSESSMENT TOOLS

## Measuring Post-Traumatic Stress Disorder: The Children's Impact of Traumatic Events Scale- Revised

—Vicky Veitch Wolfe

To enhance our understanding of sexual abuse sequelae, researchers and clinicians require reliable, valid assessment tools that are theoretically meaningful and tap abuse-specific symptoms. Research has identified two symptom clusters specifically linked to sexual abuse: post-traumatic stress disorder (PTSD) and sexuality problems (Wolfe & Birt, 1996), highlighting the need for adequate assessment strategies in these areas.

The Children's Impact of Traumatic Events Scale-Revised (CITES-R; Wolfe & Gentile, 1991) was developed to assess abuse-specific PTSD symptoms, sexuality problems, abuse-related attributions, and abuse-related social support. Designed for children aged 8 to 16, the 78-item scale yields 11 scales in four areas: PTSD (Intrusive Thoughts, Avoidance, Hyperarousal, Sexual Anxiety); Eroticism; Social Reactions (Social Support, Negative Reactions from Others); and Attributions (Self Blame/Guilt, Dangerous World, Personal Vulnerability, Empowerment). Because children are asked to recall their abuse experiences and answer questions accordingly, the CITES-R is only appropriate for children who have reported an abuse experience. Items are written as first-person statements ("I have dreams or nightmares about what happened"), with response options ("very true, somewhat/sometimes true, or not true"). Though structured interview is the preferred administration format, older children with good reading skills can complete the form independently.

Two psychometric evaluations have been conducted on the CITES-R. The first evaluation included a factor analysis and a multitrait-multimethod (MTMM) investigation of the original 54-item scale (Wolfe, Gentile, Michienzi, Sas, & Wolfe, 1992). The MTMM analysis reflected adequate concurrent and discriminant validity when compared with other parent-and-child-reported PTSD, sexuality, attributional, and social support measures. The second analysis was conducted with the 78-item CITES-R and included 350

sexually abused children and adolescents from six research and treatment programs across the United States and Canada. The sample ranged in age from 8 to 16 ( $X = 11.72$ ;  $SD = 3.2$ ) and 71% were female.

Two primary factors were identified: PTSD and Mediating Variables (primarily Social Reaction and Attributional items). Eroticism items also fell on the Mediating Variables factor, due to high correlations with Self Blame/Guilt items. Despite the two-factor solution, the 11-scale structure was also supported, and was retained for conceptual and reliability purposes. Alpha values range from .68 (Personal Vulnerability) to .89 (Negative Reactions from Others); the PTSD composite score has an alpha value of .91.

Research with the CITES-R corresponds well to general PTSD theory. In line with other PTSD research, individual differences in CITES-R PTSD symptomatology relate to three variables: severity of trauma, trauma-related attributions, and social support. Previous research has linked CITES PTSD symptoms with abuse severity (Wolfe, Gentile, & Wolfe, 1989; Wolfe, Sas, & Wekerle, 1994). CITES-R PTSD symptoms are related to CITES-R measures of social support and attributional style. The Intrusive Thoughts, Hyperarousal, and Sexual Anxiety scales all correlate positively with the Negative Reactions by Others, Self Blame/Guilt, and Personal Vulnerability scales. The Avoidance scale correlates positively with the Dangerous World scale. Concurrent validity of the CITES-R is supported by significant correlations between the Child Behavior Checklist PTSD scale (Wolfe et al., 1989) and all four CITES-R PTSD scales, and a significant correlation between the CBCL Sex Problems (Achenbach, 1991) scale

and the CITES-R Eroticism scale. The CBCL Sex Problems scale does not correlate significantly with the CITES-R PTSD scales, and the CBCL PTSD scale does not correlate

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significantly with the CITES-R Eroticism scale, suggesting good discriminant validity.

The CITES-R taps all symptom dimensions required for a PTSD diagnosis (Diagnostic and Statistical Manual-IV; American Psychiatric Association, 1994; reexperiencing, avoidance, and hyperarousal). Based upon the DSM-IV PTSD diagnostic criteria of one reexperiencing symptom, three avoidance symptoms, and two hyperarousal symptoms, 75% of the 350 sexually abused children and adolescents referred to earlier met PTSD diagnostic criteria, when "somewhat or sometimes true" served as the standard for symptom endorsement. When "very true" served as the criteria for symptom endorsement, 32% met DSM-IV PTSD symptom criteria for diagnosis.

In conclusion, the CITES-R provides a conceptually relevant tool for assessing PTSD and sexuality symptoms with sexually abused children aged 8 to 16. The CITES-R also assesses abuse-related attributions and social support, which appear to mediate PTSD symptomatology. The scales demonstrate adequate internal consistency and concurrent and discriminant validity. The CITES-R provides a useful clinical and research tool for quantifying PTSD, and can also be used to generate information for DSM-IV-defined DSM-IV diagnosis.

CITES-R forms and related materials are available from the author at the address below. Alternate versions of the CITES-R are available for nonabused children and children who have witnessed family violence; research is currently underway examining differences between sexually abused and nonabused children's responses to identified stressful events.

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