Review of Trauma Screening Tools for Children and Adolescents

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This document describes eleven screening tools designed to provide information about trauma in children and adolescents. The descriptions review their intended purposes, administration formats, administration requirements, age ranges, samples on which they have been validated, and available evidence of their psychometric reliability and validity. The reviews were completed in 2015 at the Law and Psychiatry Program, University of Massachusetts Medical School.

Screening tools are brief measures designed to indicate that further assessment is recommended. To qualify as a trauma "screening tool," an instrument had to be described as allowing for administration and scoring within 20 minutes. Tools were included when they reported an administration time longer than 20 minutes as long as they described a time range that was consistent with the above (e.g., if the tool was said to require "15-30 minutes"). The tool had to be designed specifically as a stand-alone measure, not a scale within a multi-scaled instrument.

The first document offers a table of brief information about each of the eleven tools. *Click here for the table.* It shows that the eleven tools have been classified into three categories as follows. *Click on each tool to obtain its comprehensive review.*

Exposure Measures: Tools that screen for degree and/or type of exposure to events that have the potential to be traumatizing

- Juvenile Victimization Questionnaire (JVQ)
- Survey of Children's Exposure to Community Violence (SCECV)
- Traumatic Events Screening Inventory (TESI)
 * In addition, the Massachusetts Youth Screening Instrument-Version 2 (MAYSI-2), a brief mental health screening tool for adolescents, contains a scale for *Traumatic*

Experiences among its seven scales. *Click here for a comprehensive review of the MAYSI-2.*

<u>PTSD Symptom Measures</u>: Tools screening for symptoms of Post-Traumatic Stress Disorder

- Child PTSD Symptom Scale (CPSS)
- Los Angeles Symptoms Checklist (LASC)
- Structured Trauma-Related Experiences and Symptoms Screener (STRESS)
- University of California at Los Angeles Posttraumatic Stress Disorder Reaction Index (UCLA PTSD-RI)

<u>*Trauma-Related Symptom Measures:*</u> Tools that screen for a range of symptoms often associated with trauma, but not specifically for the cluster of symptoms associated with Post-Traumatic Stress Disorder as a psychiatric diagnostic construct

- Adolescent Dissociative Experiences Scale (A-DES)
- Child and Adolescent Psychiatric Assessment (CAPA)
- Child Report of Post-Traumatic Symptoms (CROPS) and Parent Report of Post-Traumatic Symptoms (PROPS)
- Trauma Symptom Checklist for Children (TSCC)

	Target demographics	Administration time	Administration format	Demographic Differences	Costs	Qualifications	JJ Samples	Child welfare samples	Reading Level	Based on <i>DSM</i> criteria	tInterrater/ Internal Consistency	Test-retest
Exposur	e Meas	ures				·						
JVQ	8-17	15-20 mins	Youth- & parent- reports	Gender and age norms	Free	Training in assmt	No	No*	UNK	n/a	Total scores: α = .80 Aggregate scores: α = .3564	Module K's = .22 – 1 (<i>M</i> = .63) (1-4 weeks)
TESI	8-18	10-30 min	Parent & youth reports	None	Free	Licensed MHP w/ exper. in child trauma	Yes	No*	5 th	n/a	κ = 0.73-1.00 (interview) r = .4291 (parent-child agree)	$\kappa = 0.50-0.70$ Youth report: $\kappa = -$ 0.07-0.83 (based on trauma type)
SCECV	6-18	5-15 mins	Parent & youth reports	Gender & age effects	Free	None	Yes	No*	UKN	n/a	Total score: $\alpha = 0.76 - 0.93$ Subscale scores: $\alpha = 0.51 - 0.90$ $r = .30/ \kappa < .40$ (parent-child agree)	Total score: $\kappa = .97$ (2 weeks) Subscales: $\kappa = .4785$ (1 week)
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CPSS	8-18	10-20 mins	Self- & parent- report	Age effect	Free	MHP with assmt experience	No	NO*	8 th	Yes	l otal & subscales: $\alpha = .6791$ Impairment scores: $\alpha = .7583$	l otal score: r = .84 Subscales: r = .6385 Impairment: r = .6070 84% diagnostic agreement over 1- 2 weeks
LASC	Unspe c-ified	10-20 mins	Self- report	Gender effect	Free	МНР	Yes	No*	UNK	Yes	Total score: α = .9495 PTSD Index: α = .8890	In adult sample (2 week): Total score: <i>r</i> = .90 PTSD index: <i>r</i> = .94

	Target demographics	Administration time	Administration format	Demographic Differences	Costs	Qualifications	JJ Samples	Child welfare samples	Reading Level	Based on <i>DSM</i> criteria	tInterrater/ Internal Consistency	Test-retest
STRESS	7-18	UKN	Self- report	None	UKN	UNK	No	Yes	UNK	Yes	Total score: $\alpha = .92$ Subscale scores: $\alpha =$.7782	Not established
UCLA PTSD-RI	7-18	15-30 mins	Youth- & parent- report	None	Free	MHP with trauma assmt experience	Yes	Yes	5 th	Yes (with additi ons)	Exposure: $\kappa = 0.12 - 0.58$ (parent-child agree) Total symptom: $\alpha = 0.90$ Symptom subscale $\alpha = 0.61 - 0.86$	<i>r</i> = 0.73 – 0.84 (6-28 days, total and subscale scores)
Trauma-	Relate	d Symp	tom Meas	ures								
ADES	11- 17	10-15 mins	Self- report	Slight gender effect	Free	None	Yes	No*	5 th	In part	Total score: α = .9094 Subscales: α = .6485	r = .77 (2 week, nonclinical youth)
САРА	8-18	20-70 mins ≤1.5 hr to score	Parent- & youth- report	None	Yes	Certification required (≤\$600/pp)	No	Yes	n/a (inter- view)	In part	Interview: $\kappa = 0.40-1.0$ $\kappa = 0.22 - 0.64$ (parent-child agree) $\kappa = 0.40 - 0.79$ (parent-child agree PTSD)	κ = 0.52 – 0.95 κ = 0.16 – 0.84 (PTE exposure)
CROPS	5-18	5 mins	Self- report	Possible age effect	Yes	MHP (to interpret)	Yes	No*	3 rd	In part	$\alpha = .80 \text{ to } .93$ $\alpha = 0.92$ (in JJ sample)	r = 0.80 (4-6 wks, community sample) r = 0.70 (6 months in JJ sample)
TSCC	8-17	10-20 mins	Self- report	Gender & age norms	Yes	Specialized training required	Yes	Yes	3 rd - 5 th	In part	Total score: $\alpha = .77 .97$ Subscales: $\alpha = .5891$	<pre>r = 0.51 to 0.81 (Guidelines for interpreting change over time)</pre>

Validity Evidence			
Exposure Measure	25:		
JVQ	·Youth who report more exposure tend to exhibit more mental health problems, including trauma-related symptoms		
TESI	·In sample of detained youth, those with more extensive exposure reported more severe PTSD symptoms and psychosocial		
	impairment		
	·Ability of TESI to predict PTSD is equivocal		
SCECV	·Youth with higher scores tend to report higher levels of family violence and maltreatment		
	·Higher scores related to indicators of poor psychological outcomes		
	·Elevated scores related to higher incidences of PTSD ($r = .35$)		
PTSD Symptom M	easures		
CPSS	·Higher scores related to more trauma exposure and functional impairment		
	•Total scores discriminate diagnostic groups (<i>d</i> =0.86-1.19)		
	·Correlations with K-SADS ($r = .54$ 80) and clinician diagnosis ($\kappa = .43$).		
LASC	·Higher scores related to more extensive trauma exposure		
	·Convergent validity with SCID (sensitivity \geq 74%, specificity \geq 77% and an overall classification accuracy \geq 75.6%)		
STRESS	·Accurately identified 70% of youth meeting probably PTSD criteria		
UCLA PTSD-RI	·Scores correlated with TSCC ($r = 0.75$), K-SADS ($r = 0.49 - 0.70$), CAPS-CA ($r = 0.82$) and high incidence of trauma exposure		
	·Higher scores related to behavioral problems across settings and attachment issues		
Trauma-Related Sy	ymptom Measures		
ADES	·Scores related to psychiatric impairment (but not necessarily PTSD diagnostic status)		
САРА	·CAPA-DISC agreement for presence of any anxiety disorder: $\kappa = 0.29$		
	·Youth identified as vulnerable often report higher rates of exposure, more PTS sx and are more often diagnosed with PTSD		
CROPS	Scores correlated with PTS sx ($r = 0.60$), TSCC scores ($r = 0.70$), clinician ratings ($r = .48$ 60)		
	In JJ sample, correlated with TSCC total score ($r = .85$)		
	Predictive validity largely unstudied		
TSCC	·Elevated scores correlated with history of exposure		
	Youth with diagnosed PTSD tend to score higher than undiagnosed youth		
	PTS: strong correlations with other measures of internalizing sx (e.g., Children's Impact of Traumatic Events-Revised, SCL-90-R		
	anxiety)		
	Predictive validity not thoroughly studied		
	Ability to predict diagnosis inconsistently supported		
	Score may predict youths' psychiatric functioning in early adulthood (van Vugt et al., 2014)		

Juvenile Victimization Questionnaire (JVQ)

Authors:	JVQ-R2: Hamby, Finkelhor, Ormrod, & Turner, 2005 Several versions exist with slightly different authorship
Administration Time:	Administration: 15-20 minutes for versions including follow up questions Scoring: varies based on scoring algorithm used
Purpose:	The JVQ was developed to be a comprehensive evaluation of a range of childhood victimization experiences. Goals of the developers included creating a measure that assessed multiple forms of juvenile victimization that would also allow for the study of overlap among these. Versions of the JVQ allow for assessment of victimization exposure over a youth's lifetime or the past year. The JVQ is appropriate for use in clinical, community and research settings.
Administration Procedures:	The JVQ can be administered in an interview or questionnaire format to youth and caregivers. There is also a computer-assisted interview version. The JVQ should be administered as an interview to youth with poor reading abilities. The measure can be administered in a group setting but steps should be taken to ensure others cannot see or hear youths' responses. The JVQ can be administered in its entirety or modules can be administered in isolation. Administrators may find it helpful to communicate to youth that many of the items on the JVQ are commonly experienced by many adolescents. This may promote youths' comfort in disclosing exposure to sensitive events. Administrators should also address issues regarding confidentiality of youths' responses prior to completing the measure (see also measure directions below). Given the nature of JVQ items, measure developers recommend that youth have access to resources to assist in the event that a youth is in danger.
Target Demographics:	Questionnaire can be administered to youth ages 12 to 17. The interview format is appropriate for youth 8-12. The caregiver interview can be used for children ages 0-17; however it is preferable to use the self-report for children over 10. Only adults who have acted as the primary caregivers for youth throughout the preceding year should be used as parent reporters.
Description:	Development of JVQ items was multifaceted. Authors relied on the National Crime Victimization Survey and experience with the types of maltreatment typically investigated by child protection agencies to develop items. Specific efforts were taken to translate clinical and legal concepts (such as "psychological abuse" and "aggravated assault") into language understood by children and parents. Items were then reviewed by experts in victimization for content and developmental appropriateness. Focus groups were conducted with parents and youth to collect feedback on language, comprehensibility and ways to increase the relevancy of item content. (Hamby et al., 2005). Developers also worked to phrase questions using behaviorally-specific wording so as to increase reporting of sensitive information (Finkelhor, Hamby, Ormrod, & Turner, 2005). Interviews were also conducted with a

small number of youth involved in measure development to ensure understanding of item content and reporting accuracy (Hamby et al., 2005). Results of these interviews led to content changes to increase item comprehension in younger youth.

The JVQ includes both screening and in-depth versions that assess youths' history of exposure to a range of victimization experiences. The 34-item screening version contains five modules that address exposure to Conventional Crime (8 items), Maltreatment (4 items), Peer and Sibling Victimization (6 items), Sexual Victimization (7 items) and Witnessing Violence/Indirect Victimization (9 items). Items address experiences including being a victim of theft, property damage, physical assault, threats, kidnapping, hate crimes, physical abuse, emotional abuse, neglect, unwanted sexual contact, bullying, dating violence and exposure to domestic and community violence. Although endorsement of some items is rare, several are reported to be experienced by a majority of American youth, including events many do not typically conceptualize as crimes (Hamby et al., 2005; Finkelhor, Ormrod, Turner & Hamby, 2005a).

JVQ directions for items 1 through 9 read, "Now we are going to ask you about some things that might have happened in your [child's] life/in the last year." For items 10 through 34, directions read, "Next, we are going to ask about grown-ups who take care of you[r child]. This means parents, babysitters, adults who live with you[r child], or others who watch you[r child]. Before we begin, I want to remind you that your answers will be kept totally private. If there is a particular question that you don't want to answer, that's O.K. But it is important that you be as honest as you can so that we can get a better idea of the kinds of things that kids your [child's] age sometimes face." [NOTE: systems may need to amend the directions to correspond with confidentiality policies.] For the screening version, all items are answered in Yes/No format. More intensive versions include follow-up questions asked for each event a youth endorsed. These allow interviewers to identify overlap in exposure to potentially traumatic events (i.e., being victimized in two ways during the same event, such as a theft and an assault occurring together) and gather information regarding the number of times the youth has been victimized, who victimized the youth, whether the youth was hurt, and questions specific to the victimization reported (e.g., the value of items stolen). Items are presented in order of increasing sensitivity. Developers' use of simple language and behaviorally specific questions was intended to more clearly define for children the types of incidents that should be reported for each item.

<u>Scoring</u>: The JVQ can be scored using several methods allowing for administrators to rescore episodes into categories in which they conceptually belong, even if the exact screening question was not endorsed by youth (Finkelhor, Hamby et al., 2005). *Item level scores* can be used to classify youth as victims of a specific type of victimization. This is the simplest scoring strategy and may be of the greatest value when the identification of poly-victimized youth is a goal of screening (Finkelhor, Ormrod, Turner & Hamby, 2005). *Module scores* can be created by combining responses to screening items within each module. Because of potential overlap among items, it is recommended that users NOT use frequency counts in arriving at modules scores. Rather, these scores are used dichotomously to identify youth reporting at least one form of victimization within the module. Possible module scores include: Any Conventional Crime, Any Child Maltreatment, Any Peer or Sibling Victimization, Any Sexual Victimization, Any Witnessing or Indirect Victimization.

	 <i>Composite/Aggregate scores</i> can be created by combining responses on items referring to similar conduct that are spread across modules (i.e., one could create a physical assault composite using items related to assault experiences from modules including Conventional Crime, Peer/Sibling Victimization, etc.). These are also scored dichotomously. Possible composite/aggregate scores include: Property Crime Composite, Physical Assault Composite, Sexual Assault Composite, Peer & Sibling Assault Composite. Test materials also indicate that users are free to develop other composite/aggregate scores that are of interest to them. Although not applicable to cases in which the screening version alone is used, the manual includes directions for addressing <i>re-scored items</i>. This strategy is only applicable when users have administered follow-up questions. Regardless of the scoring algorithm used, measure developers caution that JVQ scores should never be used as the sole basis for clinical diagnosis, treatment decisions or child protection determinations. 		
Ownership and Purchase	The JVQ & JVQ-R2 are available at no cost.		
Information:	Many resources can be accessed at: <u>http://www.unh.edu/ccrc/jvq/index_new.html</u> <u>http://www.unh.edu/ccrc/jvq/available_versions.html</u> (For available versions)		
Examiner Qualifications & Training Requirements:	JVQ was designed for use by individuals with training in psychological and epidemiological assessment. Paraprofessionals and those without mental health training should administer the JVQ only under supervision. Administrators should be familiar with JVQ questions and prepared to discuss these topics without anxiety. Administrators should also be familiar with resources to assist youth in need.		
	Interpretation of JVQ results requires a professional familiarity with the psychometric properties of the test and knowledge of juvenile victimization.		
Samples studied:	Data have been collected primarily from studies examining rates of exposure to victimization, including:		
	• Developmental Victimization Survey (Finkelhor, Hamby et al., 2005)		
	 Nationwide telephone survey of 2,030 mainly Caucasian youth ages 2-17 and their caregivers, Youth Internet Safety Survey (Finkelhor, Mitchell & Wolak, 2000; Mittchell, Finkelhor & Wolak, 2001) Non-representative sample of 1500 youth ages 10 to 17 who identified as 		

Psychometric Evidence:	Note: JVQ manual does not present any psychometric data. All data below was gathered from other sources.
	Acceptability: Studies indicate youth are willing to disclose victimization experiences on the JVQ. In spite of the sensitive nature of some items, few youth refuse to respond and the average rate of endorsement in community youth is 2.63 events (Finkelhor, Hamby et al., 2005).
	Demographic differences: Research on gender differences in JVQ scores has resulted in separate gender and age group norms (Finklehor, Turner, Ormrod & Hamby, 2009); however these indicate only how a youth's victimization history compares to that of a typical youth. There are no data to suggest racial/ethnic differences.
	<u>Internal consistency:</u> Although research supports good internal consistency for total scores ($\alpha = .80$; Cuevas, Finkelhor, Turner & Ormrod, 2007; Finkelhor, Hamby et al., 2005), alphas for aggregate scores were moderate to weak ($\alpha = .3564 =$ Finkelhor, Hamby et al., 2005). Measure developers have argued internal consistency is not central to the functioning of the measure since differing types of victimization are not necessarily related to one another (Finkelhor, Hamby et al., 2005).
	<u>Test-retest reliability:</u> Data on JVQ test-retest reliability suggest a mean kappa of .63 (range .22 – 1.00 for the modules) for the youth-report version over periods of less than one month (Cuevas et al., 2007; Finkelhor, Hamby et al., 2005).
	Parent-child agreement: The high degree of similarity in the wording of the caregiver and youth-report versions allows for direct comparison of results. Results suggest that data from one usually supports the other for younger children. There are no published data examining continuity of reporting for youth over age 10 (Finkelhor, Hamby et al., 2005).
	<u>Construct/Concurrent/Predictive validity:</u> According to measure developers, the JVQ has undergone one of the most exhaustive conceptual screens of any victimization questionnaire (Finkelhor, Hamby, Ormrod, & Turner, 2005). Data reported by Finkelhor and colleagues (2007) indicate that youth who report exposure to more potentially traumatic events on the JVQ tend to exhibit more mental health problems, including trauma-related symptoms. Cuevas et al (2007) reported a correlation of $r = .52$ between the total number of victimization experiences and delinquency acts endorsed by youth, suggesting that JVQ scores may be useful in identifying subgroups of youth at high risk for serious delinquency.
	<u>Alternate Forms</u> : A reduced 12-item version of the JVQ has been developed to include the most frequently endorsed items. Initial research indicates promising psychometric properties. For example, the abbreviated version performed similarly to lengthier versions in predicting trauma symptoms (Finkelhor, Ormrod, Turner & Hamby,

	2005). However, this version does not provide administrators with a youths' full victimization profile or details regarding the circumstances of victimization experiences.
Pros:	 Wide range of victimization experiences Separate Age and gender norms
Cons:	 Many studies utilizing the JVQ are epidemiological in nature and do not consistently pair it with a symptom/diagnostic tool. Research has mainly used longer versions Assessment of victimization severity and chronicity require use of the long form

References *denotes key citation ^tdenotes inclusion of juvenile justice sample

- Cuevas, C. A., Finkelhor, D., Turner, H. A., & Ormrod, R. K. (2007). Juvenile delinquency and victimization: A theoretical typology. *Journal of Interpersonal Violence*, 22, 1581-1602. doi:10.1177/0886260507306498.
- Finkelhor, D., Hamby, S. L., Ormrod, R., & Turner, H. (2005). The Juvenile Victimization Questionnaire: Reliability, validity, and national norms. *Child Abuse & Neglect*, 29, 383-412. doi:10.1016/j.chiabu.2004.11.001.
- Finkelhor, D., Mitchell, K. & Wolak, J. (2000). On-line victimization: A report on the nation's youth. Washington, D.C.; National Center for Missing and Exploited Children, Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice.
- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007). Poly-victimization: A neglected component in child victimization. *Child Abuse & Neglect*, *31*, 7-26. doi:10.1016/j.chiabu.2006.06.008.
- Finkelhor, D., Ormrod, R. K., Turner, H. A., & Hamby, S. L. (2005). Measuring poly-victimization using the Juvenile Victimization Questionnaire. *Child Abuse & Neglect*, 29, 1297-1312. doi:10.1016/j.chiabu.2005.06.005.
- Finkelhor, D., Ormrod, R., Turner, H., & Hamby, S. L. (2005a). The victimization of children and youth: A comprehensive, national survey. *Child Maltreatment*, 10, 5-25. doi:10.1177/1077559504271287.
- Finkelhor, D., Turner, H. & Hamby, S. (2011). Questions and answers about the National Survey of Children's Exposure to Violence. *Juvenile Justice Bulletin*, 1-4. Washington, DC: U.S. Government Printing Office.
- Finkelhor, D., Turner, H., Hamby, S., & Ormrod, R. (2011). Poly-victimization: Children's exposure to multiple types of violence, crime, and abuse. *Juvenile Justice Bulletin*, 1-12, Washington, DC: U.S. Government Printing Office.
- Finkelhor, D., Turner, H., Ormrod, R., & Hamby, S. L. (2009). Violence, abuse, and crime exposure in a national sample of children and youth. *Pediatrics*, 124, 1411-1423. doi:10.1542/peds.2009-0467.
- Hamby, S.L., & Finkelhor, D. (2001). Choosing & using child victimization questionnaires. Juvenile Justice Bulletin – NCJ186027 (pgs. 1-15). Washington, DC: US Government Printing Office.
- Hamby, S.L., Finkelhor, D., Ormrod, R.K., & Turner, H.A. (2004). The Juvenile Victimization Questionnaire (JVQ): Administration & Scoring Manual. Durham, NH: Crimes against Children Research Center.
- *Hamby, S. L., Finkelhor, D., Ormrod, R. & Turner, H. (2005). *The Juvenile Victimization Questionnaire* (*JVQ*): Administration and Scoring Manual. Durham, NH: Crimes Against Children Research Center.
- *Hamby, S., Finkelhor, D., Turner, H., & Kracke, K. (2011). The Juvenile Victimization Questionnaire toolkit. Retrieved from http://www.unh.edu/ccrc/jvq/index_new.html.
- Little, L. (2002). Middle-class mothers' perceptions of peer and sibling victimization among children with Asperger's syndrome and nonverbal learning disorders. *Issues in Comprehensive Pediatric Nursing*, *25*(1). 43-57.
- Mitchell, K. J., Finkelhor, D., & Wolak, J. (2001). Risk factors for and impact of online sexual solicitation of youth. *Journal of the American Medical Association*, 285, 3011-3014. doi:10.1001/jama.285.23.3011.
- Turner, H. A., Finkelhor, D., & Ormrod, R. (2006). The effect of lifetime victimization on the mental health of children and adolescents. *Social Science & Medicine*, 62, 13-27. doi:10.1016/j.socscimed.2005.05.030.

Survey of Children's Exposure to Community Violence

Authors:	Richters, J.E., & Saltzman, W. (1990). Survey of Exposure to Community Violence, Self-report Version. Rockville, MD: National Institute of Mental Health
Administration Time:	Administration: 5-15 minutes Scoring: 5-15 minutes
Purpose:	The SCECV was developed to assess the frequency of youths' exposure to 20 forms of violence and violence-related activities in the community. Exposure is defined as experiencing direct victimization or witnessing or hearing about the victimization of others. Although the measure was developed to assess lifetime violence exposure, it can be easily amended to reflect only more recent exposure.
Administration Procedures:	The SCECV is administered in paper-and-pencil format. It can be administered to youth individually or in small groups. A parent-report version also exists. Required reading level to complete the questionnaire is unknown.
Target Demographics:	The SCECV has been studied with youth ages 6 through early adulthood (i.e., university students)
Description:	The SCECV was adapted from Richter and Martinez's "Things I've Seen and Heard scale. It asks youth to indicate the various kinds of violence and violence-related events they "may have experienced, seen or head about." They are specifically directed to <i>exclude</i> from their answers events they saw or heard about only on television, radio, the news or in the movies. Items cover exposure to 18 different types of events, including exposure to weapons, shootings, stabbings, sexual assaults, muggings, threats of serious physical harm, actual physical harm by family and nonfamily members, gang activity, drug deals, arrests, and murders. Item wording varies slightly to reflect differing levels of exposure. For example, questions are phrased to reflect direct experience (i.e., personal victimization), witnessed experience or experience through second hand knowledge (i.e., having "heard about" the event, or vicarious victimization). Youth are directed to circle the letter of the response category that best describes their experiences. The typical response format is a 9-point Likert scale reflecting frequencies of exposure ranging from "never" to "almost every day" with intermediate responses reflecting a number of times the youth was exposed (e.g., 2 times, 5 or 6 times, etc.). For each item the youth endorses, follow up questions gather information on (1) where the event occurred (near home, in the home, near school, in school, other); (2) the youth's relationship to the perpetrator; (3) who, if not the youth has been exposed (same scale as initial item). The scale also contains items that describe being the perpetrator of physical and/or sexual violence. The exact directional set, item content and response format often vary as researchers commonly amend the scale.

	<u>Scoring:</u> The measure is scored by summing across endorsed items. This results in indices reflecting exposure to direct, witnessed and vicarious victimization. These indices can also be summed to create a summary exposure index. Higher scores reflect greater exposure to violence.
Ownership and Purchase Information:	The SCECV is available at no cost. A PDF copy is available for download at <u>http://www.fordham.edu/images/academics/graduate_schools/gsss/history%20of%20t</u> <u>rauma%20exposure%202a.pdf</u>
Examiner Qualifications & Training Requirements:	There are no published recommendations regarding examiner qualifications for use of the SCECV.
Samples studied:	 Psychiatric in- and outpatients (Fehon, Grilo & Lipschitz, 2001; Scott, 2007) School-based samples (Ceballo, Dahl, Aretakis & Ramirez, 2001; Foy et al., 1997; Richters, & Martinez, 1993; Rosario, Salzinger, Feldman & Ng-Mak, 2003; Scarpa, 2001) Community-based samples (Feigelman, Howard, Li & Cross, 2000; Zimmerman, & Farrell, 2013) Primary care samples (Kliewer & Sullivan, 2008; Suglia, Ryan, Bellinger, Enlow & Wright, 2011; Suglia, Ryan, Laden, Dockery & Wright, 2008; Suglia, Ryan & Wright, 2008; Thomson, Roberts, Curran, Ryan & Wright, 2002) Incarcerated youth (Wood, Foy, Goguen, Pynoos & James, 2002) Many studies include significant portions of Latino and African-American youth. The measure has also been tested internationally and in both rural and urban samples.
Psychometric Evidence:	 <u>Demographic Differences:</u> In many studies, boys were found to endorse higher rates of exposure to almost all forms of violence than girls (Ceballo et al., 2001; Richters & Martinez, 1993; Scarpa, 2001; Thomson et al., 2002; Wood et al., 2002; Zimmerman & Farrell, 2013). This pattern was true in a sample of incarcerated youth (Wood et al., 2002). Some research suggests the predictive validity of SCECV scores varies by gender (e.g., Scarpa, 2001; Wood et al., 2002). There is no evidence of racial/ethnic differences in endorsement of violence exposure on the SCECV (Ceballo et al., 2001; Martin et al., 2013; Rosario et al., 2003). However, acculturation status may be related to rates of exposure in minority youth, with less acculturated youth endorsing higher levels of exposure (Marshall & Orlando, 2002; Thomson, et al., 2002). There is some evidence to suggest that age may be positively correlated with subscale scores such that older youth report more extensive exposure (Ceballo et al., 2001; Scarpa, 2001). Although Ceballo and colleagues (2001) reported that younger age was associated with higher concordance rates between parent and child reports of violence exposure, Richters and Martinez (1993) argued that, at the group level, parents can be

accurate reporters of older youths' exposure.
<u>Internal consistency</u> : The SCECV is generally described as demonstrating at least adequate internal consistency for total ($\alpha = 0.76$ to 0.93) and subscale scores ($\alpha = 0.51$ to 0.90; Ceballo et al., 2001; Fehon et al., 2001; Fincham, Altes, Stein & Seedat, 2009; Martin, Revington & Seedat, 2013; Scarpa, 2001; Zimmerman & Farrell, 2013).
<u>Test-retest reliability</u> : Research on test-retest reliability is limited. Thomson and colleagues (2002) reported excellent reliability ($\kappa = .97$) for total scores over two weeks in a small random sample of youth recruited from a primary care setting. Fehon et al. (2001) reported reliability for violence categories in the range of $\kappa = .47$ to .85 over one week in a psychiatric inpatient sample. Unpublished data also indicate moderate-to-substantial agreement for violence categories ($\kappa = 0.47$ to 0.85; Martin et al., 2013, secondary Lipschitz, Grilo & Fehon, 2000).
<u>Parent-child agreement:</u> Data indicate that parents tend to underestimate their children's exposure to community violence and that parent reports of their child's personal victimization experiences correlate only moderately with youth reports of victimization (<i>rs</i> in the range of .30; $\kappa < .30$; Ceballo et al., 2001; Richters & Martinez, 1993; Suglia et al., 2011; Zimmerman & Farrell, 2013). Thomson et al (2002) reported particularly low agreement ($\kappa < .40$) for exposure to less severe events and events that occurred outside of the home. In addition to low concordance for event exposure and type, Suglia et al., 2011 suggested that caretakers generally report lower levels of youth distress stemming from exposure to violence than is reported by children. Available data suggest that significant parental underestimation of youth's exposure to violence can predict negative psychological and delinquency outcomes (Zimmerman & Farrell, 2013). Parental ratings of youth's exposure and distress have been found to be weaker predictors of posttraumatic symptomology than child self-reports (Suglia et al., 2011).
<u>Factor structure</u> : Only one study to date has evaluated the factor structure of the SCECV. Martin and colleagues (2013) proposed a three-factor structure that accounted for 38.7% of the variance in their data. Factor 1 contained items related to witnessing general violence/criminal acts, Factor 2 contained items reflecting direct experience and witnessing of family and non-family violence and threats of physical harm, and Factor 3 contained items reflecting direct experience with non-family sexual abuse and general feelings of unsafety. Six items did not load onto any factor. Internal consistency for these proposed factors ranged from moderate to excellent ($\alpha = 0.68$ to 0.89).
<u>Concurrent/Predictive validity:</u> Higher SCECV scores have also been related to a number of poor outcomes in youth, including poorer physical health (Suglia, Ryan, Laden, et al., 2008), higher rates of drug use (Fehon et al., 2001), general internalizing and externalizing symptoms (Ceballo et al., 2001; Kliewer & Sullivan, 2008; Osofsky, Wewer, Hann & Fick, 1993; Zimmerman & Farrell, 2013), depressive symptoms (Lorian & Saltzman, 1993; Scarpa, 2001), and aggressive and delinquent behavior (DuRant & Treiber, 1996; Fehon et al., 2001; Feigelman et al., 2000; Rosario et al., 2003; Scarpa, 2001; Zimmerman & Farrell, 2013). CSECV scores have also repeatedly demonstrated correlations with rates of PTSD and posttraumatic stress symptomology (Ceballo et al., 2001; Fehon et al., 2001; Fincham et al., 2009; Martin

	et al., 2013; Singer & Anglin, 1995). Some research (e.g., Ceballo et al., 2001; Suglia, Ryan, Laden, et al., 2008; Suglia, Ryan & Wright, 2008) suggests that the relationship between SCECV scores and PTSD symptomology holds even after accounting for a range of socioeconomic and demographic variables. However, the relationship may be based on a dose-response effect where more significant and/or severe forms of exposure contribute to more consistent posttraumatic stress symptomology (Foy et al., 1997; Marshall & Orlando, 2002). Youth with higher SCECV scores tend to report higher levels of family violence (Rosario et a., 2003) and are more likely to have a history of childhood maltreatment (Fehon et al., 2001). They are also more likely to associate with delinquent peers (Rosario et a., 2003) and exhibit a tendency to interpret nonthreatening stimuli as threatening (Kliewer & Sullivan, 2008). Additionally, Rosario and colleagues (2003) reported that indices reflecting direct and indirect victimization were moderately correlated ($r = .66$) in a community sample of youth ages 9 to 15.
Pros:	 Widely used in research Researched in a range of racial and ethnic groups (mostly African American and Hispanic)
Cons:	 Many studies with the SCECV are epidemiological in nature and it is not consistently paired with a symptom/diagnostic tool. The measure is frequently amended to meet the particular constraints/demands of a study (i.e., some amend the response scale, omit or change items, or differentially include exposure to vicarious victimization). Several studies cited here used samples of younger (elementary school age) children Although it can be amended to reflect only more recent exposure, the scale has not been extensively researched using such a directional set.
General comments:	 Even in samples not considered high-risk, rates of endorsement of lifetime exposure to community violence can be quite high 82-96% in a sample of university students; Scarpa, 2001). 52-61% of psychiatric inpatients (Fehon et al., 2001).

References *denotes key citation ^tdenotes inclusion of juvenile justice sample

- *Ceballo, R., Dahl, T. A., Aretakis, M. T., & Ramirez, C. (2001). Inner-city children's exposure to community violence: How much do parents know?. *Journal of Marriage and Family*, 63, 927-940. doi:10.1111/j.1741-3737.2001.00927.x
- DuRant, R. H., & Treiber, F. (1996). Intentions to use violence among young adolescents. *Pediatrics*, 98(6), 1104-1108.
- Fehon, D. C., Grilo, C. M., & Lipschitz, D. S. (2001). Correlates of community violence exposure in hospitalized adolescents. *Comprehensive Psychiatry*, 42, 283-290. doi:10.1053/comp.2001.24580.
- Feigelman, S., Howard, D. E., Li, P., & Cross, S. I. (2000). Psychosocial and environmental correlates of violence perpetration among African-American urban youth. *Journal of Adolescent Health*, 27, 202-209. doi:10.1016/S1054-139X(99)00124-X.
- Fincham, D. S., Altes, L., Stein, D. J., & Seedat, S. (2009). Posttraumatic stress disorder symptoms in adolescents: Risk factors versus resilience moderation. *Comprehensive Psychiatry*, 50, 193-199. doi:10.1016/j.comppsych.2008.09.001.
- Ford, J. (1996). Psychometric review of Survey of Children's Exposure to Community Violence. In B. H. Stamm (Ed.). *Measurement of Stress, Trauma, and Adaptation*. Lutherville, MD: Sidran Press.
- Foy, D. W., Wood, J. L., King, D. W., King, L. A., & Resnick, H. S. (1997). Los Angeles Symptom Checklist: Psychometric evidence with an adolescent sample. *Assessment*, 4(4), 377-384.
- Kliewer, W. N. & Sullivan, T. N. (2008). Community violence exposure, threat appraisal, and adjustment in adolescents. *Journal of Clinical Child & Adolescent Psychology*, *37*(4), 860-873.
- Lipschitz, D. S., Grilo, C. M. Fehon, D. C. (2000). Psychometric study of the Child's Exposure to Violence Checklist. West Haven: National Center for PTSD. Unpublished manuscript.
- Lorion, R. P., & Saltzman, W. (1993). Children's exposure to community violence: Following a path from concern to research to action. *Psychiatry: Interpersonal and Biological Processes*, *56*(1), 55-65.
- Marshall, G. N., & Orlando, M. (2002). Acculturation and peritraumatic dissociation in young adult Latino survivors of community violence. *Journal of Abnormal Psychology*, 111, 166-174. doi:10.1037/0021-843X.111.1.166.
- *Martin, L., Revington, N., & Seedat, S. (2013). The 39-item Child Exposure to Community Violence (SCECV) Scale: Exploratory factor analysis and relationship to PTSD symptomatology in trauma-exposed children and adolescents. *International Journal of Behavioral Medicine*, 20, 599-608. doi:10.1007/s12529-012-9269-7.
- *Martinez, P., & Richters, J. E. (1993). The NIMH Community Violence Project: II. Children's distress symptoms associated with violence exposure. *Psychiatry: Interpersonal and Biological Processes*, *56*(1), 22-35.
- Osofsky, J. D., Wewers, S., Hann, D. M., & Fick, A. C. (1993). Chronic community violence: What is happening to our children?. *Psychiatry: Interpersonal and Biological Processes*, 56(1), 36-45.
- *Richters, J. E., & Martinez, P. (1993). The NIMH Community Violence Project: I. Children as victims of and witnesses to violence. *Psychiatry: Interpersonal and Biological Processes*, 56(1), 7-21.
- Rosario, M., Salzinger, S., Feldman, R. S., & Ng-Mak, D. S. (2003). Community violence exposure and delinquent behaviors among youth: The moderating role of coping. *Journal of Community Psychology*, 31(5), 489-512.
- *Scarpa, A. (2001). Community violence exposure in a young adult sample: Lifetime prevalence and socioemotional effects. *Journal of Interpersonal Violence*, 16, 36-53. doi: 10.1177/088626001016001003.
- Scott, S. T. (2007). Multiple traumatic experiences and the development of posttraumatic stress disorder. *Journal of Interpersonal Violence*, 22(7), 932-938.

- Singer, M. I., & Anglin, T. (1995). Adolescents' exposure to violence and associated symptoms of psychological trauma. *JAMA: Journal of the American Medical Association*, 273(6), 477-482.
- Strand, V. C., Pasquale, L. E., & Sarmiento, T. L. (2006). Child and adolescent trauma measures: A review. Retrieved from <u>http://www.ncswtraumaed.org/wp-content/uploads/2011/07/Child-and-Adolescent-Trauma-Measures_A-Review-with-Measures.pdf</u>
- Suglia, S., Ryan, L., Bellinger, D. C., Enlow, M., & Wright, R. J. (2011). Children's exposure to violence and distress symptoms: Influence of caretakers' psychological functioning. *International Journal* of Behavioral Medicine, 18, 35-43. doi:10.1007/s12529-010-9090-0.
- Suglia, S., Ryan, L., Laden, F., Dockery, D. W., & Wright, R. J. (2008). Violence exposure, a chronic psychosocial stressor, and childhood lung function. *Psychosomatic Medicine*, 70, 160-169. doi:10.1097/PSY.0b013e318160687c.
- Suglia, S., Ryan, L., & Wright, R. J. (2008). Creation of a community violence exposure scale: Accounting for what, who, where, and how often. *Journal of Traumatic Stress*, 21, 479-486. doi:10.1002/jts.20362.
- Thomson, C., Roberts, K., Curran, A., Ryan, L., & Wright, R. J. (2002). Caretaker-child concordance for child's exposure to violence in a preadolescent inner-city population. *Archives of Pediatrics & Adolescent Medicine*, *156*(8), 818-823.
- ^tWood, J., Foy, D. W., Goguen, C. A., Pynoos, R., & James, C. (2002). Violence exposure and PTSD among delinquent girls. *Journal of Aggression, Maltreatment & Trauma, 6*(1), 109-126.
- Zimmerman, G. M., & Farrell, A. S. (2013). Gender differences in the effects of parental underestimation of youths' secondary exposure to community violence. *Journal of Youth and Adolescence*, 42, 1512-1527. doi:10.1007/s10964-012-9897-x.

Traumatic Events Screening Inventory (TESI)

Authors:	Developed by Child Trauma Research Group at Dartmouth Medical School - Ford & Rogers, 1997
	 Original citations: Ford, J. P., Thomas, J., Rogers, K., Racusin, R., Ellis, C. G., Schiffman, J., Daviss, W. B., & Friedman, M. J. (1996) Assessment of children's <i>PTSD following abuse or accidental trauma</i>. Paper presented at the 12th annual meeting of the International Society for Traumatic Stress Studies, San Francisco Ford, J. D. & Rogers, K. (1997, November). <i>Empirically-based assessment of trauma and PTSD with children and adolescents</i>. Paper presented at the annual meeting of the International Society for Traumatic Stress Studies, Montreal, Quebec.
Administration Time:	10-30 minutes for questionnaire; 20-30 for interview format –based on number of traumatic experiences endorsed
Purpose:	The TESI was developed as a brief measure to screen for lifetime exposure to potentially traumatic events in psychiatric outpatient populations. Its use has since been expanded to include youth at-risk for PTSD seen in clinical, educational, juvenile justice, and research settings.
Administration Procedures:	The TESI is available in parent- and child-report forms. The child-report can be administered as either a staff-assisted paper-and-pencil questionnaire or semistructured clinical interview. The parent-report form is available only in questionnaire format. A computer-assisted version of the self-report also exists.
Target Demographics:	The self-report (TESI-SRR) is appropriate for use in children ages 8 to 18. The parent-report (TESI-PRR) is recommended for children under ages 4 to 7. The questionnaire requires at least a fifth grade reading level.
Description:	Potentially traumatic events selected for inclusion were based on a contemporary literature review of the breadth of potentially traumatic experiences in childhood. Item wording was informed by research on children's responses to linguistic cues (Edwards & Rogers, 1997). Test length varies based on format. The interview format is composed of 15 items, the self-report form of 26 items. In both formats, respondents are asked about the youth's exposure to potentially traumatizing events including exposure to (including witnessing of) accidents, natural disasters, serious injury/illness, interpersonal losses, physical and emotional abuse, domestic violence, community violence and sexual abuse. Experiences are presented in order of increasing levels of intimacy involved in the victimization (i.e., accidents first,

	sexual abuse last). Response options include "Yes," "No," and "Pass" for the self-report form and "Yes," "No," "Unsure," "Refused," and "Questionable validity" for the interview format. Affirmative and unsure responses are followed up with questions to elicit details about the event including age of onset and offset, frequency, relationship of others involved to the victim, consequences of event and appraisals of objective physical threat and fear, helplessness or horror. Based on these responses, experiences are classified as traumatic according to the specifications of <i>DSM-IV</i> PTSD criteria A-1 (experiencing) and A-2 (subjective fear/helplessness/horror) based on either the child <u>or</u> the parent's report (both are not necessary). Any event endorsed as involving an extreme emotional reaction is rated as meeting Criterion A2. <u>Scoring:</u> The measure can be scored by totaling the number of experiences consistent with Criterion A. Alternatively, scores can be combined to yield various summary indices. For example, scores can yield indices describing exposure to nonviolent (i.e., assaults, community or family violence, abuse). Scores can also be organized into indices representing exposure to accident/disaster/illness trauma, physical maltreatment and sexual maltreatment.
Ownership and Purchase Information:	The measure is available at no cost from <u>ncptsd@ncptsd.org</u> . Additional information about the measure can be obtained from Julian Ford at <u>jford@uchc.edu</u> .
Examiner Qualifications & Training Requirements:	Given that the TESI involves utilizing clinical judgment in assessing objective physical threat and subjective experiences of threat, it is intended for use only by qualified mental health professionals who are (a) licensed for independent practice in child assessment and psychotherapy, and (2) who have supervised experience in assessment and psychotherapy with child trauma survivors and their families. The measure may also be used by advanced trainees or juvenile services professionals under the supervision of a person meeting the aforementioned criteria. Developers caution that the measure is intended only to develop hypotheses about a youth's experiences and all data should be confirmed with independent sources.
Samples studied:	Child psychiatric (outpatient) Pediatric injury/trauma patients Juvenile-justice-involved youth
Psychometric Evidence:	<u>Demographic Differences</u> : At present there are no indications of systematic age, gender, or cultural/ethnic score differences on the TESI.
	<u>Interrater reliability</u> : Interrater agreement (assessed by independent ratings of taped interviews) ranges from $\kappa = 0.73$ to 1.00 based on type of traumatic event (Daviss, Racusin, et al., 2000). Ford et al., (1996) reported agreement ratings of 0.85 and 0.81 for decisions regarding Criterion A1 and A2 thresholds, respectively.

	<u>Parent-child agreement:</u> Researchers have variably considered data on parent- child agreement as evidence of reliability or validity. Overall, findings are mixed. Correlations between parent and child reports of the presence of trauma exposure range from $r = 0.42$ to 0.91 and vary based on the type of trauma (Carlson, 1997). Ford et al (1999) reported levels of agreement ranging from κ = 0.64 to 0.79. Where discrepancies exist, trends indicate it is youth who report greater exposure (e.g., Daviss, Racusin et al., 2000; Edwards & Rogers, 1997).
	<u>Test-retest reliability:</u> Test-retest reliability data vary widely based on the traumatic event in question. In one group of 24 parent-child dyads assessed after a 4 week interval, Daviss, Racusin, et al. (2000) reported marginal to poor agreement for reports of exposure to natural disasters ($\kappa = -0.07$), witnessing an accident ($\kappa = 0.25$), verbal abuse ($\kappa = 0.40$) and accidents/medical procedures ($\kappa = 0.41$). The same study reported fair to good agreement for reports of witnessing another's death or serious injury ($\kappa = 0.49$), physical abuse ($\kappa = 0.51$), domestic violence ($\kappa = 0.56$), family arguments ($\kappa = 0.69$) and sexual abuse ($\kappa = 0.83$). Measure developers reported test-retest reliability for summary scores in the range of $\kappa = 0.50$ to 0.70 in pediatric injury patients assessed over a 2- to 4-month period (Ford et al., 1999, secondary Ford & Rogers, 1997).
	<u>Convergent and Discriminant Validity:</u> Published research examining the validity of the TESI is, at this time, not available. However, Basharpoor et al. (2011) indicates the TESI has demonstrated "good correlations with other trauma events screening measures" which are unnamed in the manuscript.
	Predictive validity: Evidence regarding the ability of the TESI to predict PTSD diagnosis is equivocal. Some authors have reported that exposure to TESI-measured maltreatment and accident/illness-related traumatic events predicted PCL-measured PTSD symptomology in youth with externalizing behavior disorders (ADHD and ODD; Ford et al., 2000). In a large sample of detained youth (ages 10 to 17, mostly male), youth who endorsed histories involving more extensive exposure to PTEs reported more severe PTSD symptoms and psychosocial impairment than youth with histories of less extensive trauma exposure (Ford, Grasso, Hawke & Chapman, 2013). However, in another sample of juvenile-justice-involved youth, only select events (neglect, community violence, domestic violence and psychological traumas) predicted elevates scores on the UCLA-PTSD-RI and PTSD diagnoses (Ford et al., 2008). Finally, using a translated and adapted version of the TESI, van Doorn and colleagues (2012) found significantly higher rates of PTSD in Dutch female psychiatric inpatients than female detainees (20% versus 62%), despite similar rates of exposure to PTEs.
Pros	-Quick screening measure that allows for assessment of exposure to a wide array of potentially traumatic events using <i>DSM</i> criteria as a guide -Can be used with adolescent report only or combined with parent report -Provides youth with a "pass" option for questions they may not wish to answer.

Ι

	-Validated for assessment of traumatic stress and complex trauma (Ford et al., 2012)
Cons	 -Psychometric data from measure development are not published -Several different versions exist and not all have been empirically tested -Recent work suggests possible indications of cross-cultural differences in endorsement of traumatic experiences on the TESI which have not yet been well researched (Ford et al., 2008). -Most studies employing the TESI used it to screen out children with a history of trauma exposure for purposes of other analyses, rather than examining the measure itself.
General comments	-Although not provided in any of the materials describing the TESI, the following is from another of Ford's articles defining traumatic stressors: "events that involve a threat, or the actual occurrence, of an untimely death or severe physical injury that could be life threatening, or a violation of bodily integrity (such as with sexual assault) -A Spanish language translation is available for the parent form.

References

^tdenotes key citations ^tdenotes inclusion of juvenile justice sample

- Basharpoor, S., Narimani, M., Gamarigive, H., Abolgasemi, A., & Molavi, P. (2011). Effect of cognitive processing therapy and holographic reprocessing on reduction of posttraumatic cognitions in students exposed to trauma. *Iranian Journal of Psychology*, 6(4), 138-144.
- Carlson, E. B. (1997). Trauma assessments: A clinician's guide. Guildford Press: New York.
- ^{*}Daviss, W. B., Mooney, D., Racusin, R., Ford, J. D., Fleischer, A., & McHugo, G. (2000). Predicting post-traumatic stress after hospitalization for pediatric injury. *Journal of the American Academy of Child and Adolescent Psychiatry*, *39*, 576-583. doi: 10.1097/00004583-200005000-00011.
- Daviss, W. B., Racusin, R., Fleischer, A., Mooney, D., Ford, J. D., & McHugo, G. (2000). Acute stress disorder symptomatology during hospitalization for pediatric injury. *Journal of the American Academy of Child and Adolescent Psychiatry*, *39*, 569-575. doi: 10.1097/00004583-200005000-00010.
- Department of Veterans Affairs (2007, July 5). *Traumatic Events Screening Inventory (TESI)*. Retrieved from <u>http://www.ptsd.va.gov/professional/pages/assessments/tesi.asp</u>.
- Edwards, J. H., & Rogers, K. C. (1997). The Traumatic Events Screening Inventory: Assessing trauma in children. In G. Kantor, J. L. Jasinski (Eds.), *Out of darkness: Contemporary perspectives on family violence* (pp. 113-118). Thousand Oaks, CA US: Sage Publications, Inc.
- ^tFord, J. D., Chapman, J., Connor, D. F., & Cruise, K. R. (2012). Complex trauma and aggression in secure juvenile justice settings. *Criminal Justice and Behavior*, *39*, 694-724. doi:10.1177/0093854812436957.
- ^tFord, J. D., Grasso, D. J., Hawke, J., & Chapman, J. F. (2013). Poly-victimization among juvenile-justice involved youths. *Child Abuse and Neglect*, *37*, 788-800. doi: 10.1016/j.chiabu.2013.01.005.
- *^tFord, J. D., Hartman, J. K., Hawke, J., & Chapman, J. (2008). Traumatic victimization, posttraumatic stress disorder, suicidal ideation, and substance abuse risk among juvenile justice-involved youths. *Journal of Child and Adolescent Trauma*, *1*, 75-92. doi: 10.1080/19361520801934456.
- Ford, J. D., Racusin, R., Davis, W. B., Ellis, C. G., Thomas, J., Rogers, K., ... Sengupta, A. (1999) Trauma exposure among children with oppositional defiant disorder and attention deficithyperactivity disorder. *Journal of Consulting and Clinical Psychology*, 67, 786-789. doi: 10.1037/0022-006X.67.5.786.
- ^{*}Ford, J. D., Racusin, R. Ellis, C. G., Daviss, W. B., Reiser, J., Fleischer, A., & Thomas, J. (2000). Child maltreatment, other trauma exposure, and posttraumatic symptomatology among children with oppositional defiant and attention deficit hyperactivity disorders. *Child Maltreatment*, *5*, 205-217. doi: 10.1177/1077559500005003001.
- Gray, M. J., & Slagle, D. M. (2006). Selecting a potentially traumatic event screening measure: Practice and psychometric considerations. *Journal of Trauma Practice*, 5, 1-19. doi: 10.1300/J189v05n02_01.
- National Center for PTSD & Dartmouth Child Trauma Research Group (2011, June 16). *An interview for children: Traumatic Events Screening Interview (TESI-C)*. Retrieved from http://www.ptsd.va.gov/professional/pages/assessments/assessment-pdf/TESI-C.pdf.
- Newman, E. (2002). Assessment of PTSD and Trauma Exposure in Adolescents. *Journal of Aggression, Maltreatment & Trauma*, 6(1), 59-77.
- Osterberg, L., Jensen-Doss, A., Cusack, K. J., & Arellano, M. (2009). Diagnostic practices for traumatized youths: Do clinicians incorporate symptom scale results?. *Community Mental Health Journal*, 45, 497-507. doi:10.1007/s10597-009-9258-8.

- Ribbe, D. (1996). Psychometric review of Traumatic Event Screening Instrument for Children (TESI-C). In B. H. Stamm (Ed.) *Measurement of Stress, Trauma, and Adaptation*. Lutherville, MD: Sidran Press.
- Strand, V. C., Sarmiento, T. L., & Pasquale, L. E. (2005). Assessment and screening tools for trauma in children and adolescent: A review. *Trauma, Violence & Abuse*, 6, 55-78. doi:10.1177/1524838004272559.
- ^tvan Doorn, S., Jansen, L. C., Vermeiren, R. M., Hamerlynck, S. J., & Doreleijers, T. H. (2012). Psychopathology of adolescent detained versus psychiatric inpatient females. *Psychiatry Research*, *195*, 129-133. doi:10.1016/j.psychres.2011.07.010.

Authors:	Foa, E. B., Johnson, K. M., Feeny, N. C., & Treadwell, K. H. (2001). The Child PTSD Symptom Scale: A preliminary examination of its psychometric properties. <i>Journal of Clinical Child Psychology</i> , <i>30</i> (3), 376-384.
Administration Time:	10-15 minutes as a self-report; 20 minutes as an interview Scoring time: 5 minutes
Purpose:	The CPSS is a self-report measure developed to assess for the presence and frequency of PTSD symptoms during the past month in youth who have experienced a traumatic event. Symptoms on the measure directly mirror those in the <i>DSM-IV</i> . [Note: A <i>DSM-5</i> version was recently recreated and is currently being validated.] The measure yields a total Symptom Severity score as well as Reexperiencing, Avoidance and Hyperarousal subscale scores. Depending on the scoring method used, the tool may be used to quantify symptom severity or indicate a probable diagnosis of PTSD. It can also be used to monitor changes in symptoms over time. The CPSS can be used as a stand-alone quasidiagnostic tool or as part of a comprehensive assessment. The measure also includes a 7-item functional impairment scale which assesses the degree to which PTSD symptoms interfere with a youth's functioning.
Administration Procedures:	The CPSS was developed as a self-report paper-and-pencil measure. Adaptations have resulted in interview (e.g., Gillihan, Aderka, Conklin, Capaldi & Foa, 2013) and parent-report (e.g., Oransky, Hahn & Stover, 2013) formats. As a self-report, it can be administered individually or in a group format.
Target Demographics:	The CPSS was developed for use with youth ages 8-18 who have experienced a traumatic event. It is appropriate for use in both clinical and research settings. Sources cite required reading levels ranging from grade level 3 to 8.5.
Description:	The CPSS was developed as a downward extension of the Posttraumatic Diagnostic Scale (PTDS) for adults. In creating the CPSS, the language of the PTDS was modified to be sensitive to development and maximize youths' understanding of items. The scale consists of 17 items that correspond directly to <i>DSM-IV</i> PTSD diagnostic criteria and an additional 7 items that assess functional impairment resulting from symptoms. The latter items were selected based on face validity to represent major areas of youths' functioning (e.g., school, friends, etc.).
	In completing the scale, youth are first asked to write down their most distressing event and the length of time that has lapsed since that event occurred. Directions state, "Below is a list of problems that kids sometimes have after experiencing an upsetting event. Read each one carefully and circle the number that best describes how often that problem has bothered you." The directional set can be amended to reflect a different length of time – although one month is standard. Items go on to address each of the <i>DSM-IV</i> diagnostic criteria, including "Having

Child PTSD Symptom Scale (CPSS)

	bad dreams or nightmare," "Trying to avoid activities, people or places that remind you of the traumatic event," "Not feeling close to people around you," and "Having trouble falling or staying asleep." Youth respond to items using a 4-point frequency-anchored Likert scale (i.e., $0 = Not$ at all or only at one time; $1 = Once$ a week or less/once in a while; $2 = 2-4$ times a week/half the time; $3 = 5$ or more times a week/almost always). Following completion of the symptom- related questions, youth are directed to indicate if the problems they rated have "gotten in the way with any of the following areas of your life" during the same time frame. Youth respond to these items by circling Yes or No.
	Scoring The first 17 items contribute to the Total Symptom Severity score which is obtained by summing all items. Subscale scores are similarly calculated. The impairment items are summed separately and do not contribute to Total Severity or subscale score. Total scores range from 0 to 51 and impairment scores range from 0 to 7 with higher scores indicating more severe symptomatology or impairment. It is common practice to identify a youth as PTSD-probable if they endorse at least one reexperiencing, three avoidance and two arousal symptoms (consistent with the <i>DSM-IV</i> diagnostic threshold). Measure developers recommended a cut score of 11 for determining PTSD caseness, which reportedly yields sensitivity and specificity rates of 95 and 96%, respectively (Foa et al., 2001); however there is ongoing debate regarding the most appropriate cut score with recommendations ranging from 11 to 20 (discussed further below). Alternatively, the measure can be score dichotomously to yield diagnostic status (also see below).
Ownership and Purchase Information:	The CPSS is available at no cost by contacting Edna Foa at Center for the Treatment and Study of Anxiety 3535 Market Street, 6 th Floor Philadelphia, PA 19104 (215) 746-3327 <u>foa@mail.med.upenn.edu</u>
Examiner Qualifications & Training Requirements:	The CPSS was developed for use by mental health professionals with clinical training and diagnostic assessment experience.
Samples studied:	 Clinical samples (in- and outpatient, with and without PTSD) Aderka, Appelbaum-Namdar, Shafran & Gilboa-Schechtman, 2011; Aderka, Foa, Applebaum, Shafran & Gilboa-Schechtman, 2011; Cohen, Mannarino & Knudsen, 2004; Gillihan, Aderka, Conklin, Capaldi & Foa, 2013; Havens et al., 2012; Kohtr et al., 2011; Nixon et al., 2013; Nixon, Sterk & Pearce, 2012; Oransky, Hahn & Stover, 2013; Rachamim, Helpman, Foa, Aderka & Gilboa-Schechtman, 2011; Smith et al., 2007) Medical samples (Kassam-Adams, Marsac & Cirilli, 2010; Nixon et al., 2013)
	 School students (Foa, Johnson, Feeny & Treadwell, 2001; Gudiño & Rindlaub, 2014; Jaycox et al., 2002; Kataoka, et al., 2003; Stein et al., 2003)

Psychometric evidence:	Demographic differences: Age effects: Multiple studies have reported that the CPSS does not evidence age- related effects on total or subscale scores (Foa et al., 2001; Gudiño & Rindlaub, 2014; Havens et al., 2012; Jaycox et al., 2002). However, age may be related to differential reporting of functional impairment (Nixon et al., 2013; Oransky et al., 2013).
	<i>Ethnicity effects</i> : The CPSS has been used to assess PTSD in youth from various ethnic and cultural backgrounds (Gillihan et al., 2013). There is no evidence to suggest scores differ as a function of race/ethnicity.
	<i>Gender effects</i> : Although some authors have reported no gender differences (e.g., Havens et al., 2012; Nixon et al., 2013), others report that girls tend to receive higher total and subscale scores (Foa et al., 2001; Gudiño & Rindlaub, 2014; Jaycox et al., 2002; Oransky et al., 2013). Some data suggest gender may exert a moderate influence on ratings of functional impairment (Nixon et al., 2013; Oransky et al., 2013).
	<i>Other effects</i> : Some evidence indicates differences between child- and parent- report. Oransky et al. (2013) indicated that youth CPSS scores reflected significantly more symptoms than caregiver reports. They also reported low-to- moderate correlations between caregiver and youth ratings of symptom severity and functional impairment ($rs = .2736$).
	Internal consistency: In the initial validation study of the CPSS, Foa et al. (2001) reported strong-to- excellent internal consistency for total, subscale and functional impairment scores ($\alpha = .89$, .80, .73, .70. and .89 for total, reexperiencing, avoidance, arousal and functional impairment scales, respectively). Subsequent studies have reported similar findings, with alphas in the range of .84 to .91 for total scores and .67 to .83 for subscale scores (Balaban, 2009; Gudiño & Rindlaub, 2014; Havens et al., 2012; ISTSS, 2014; Jaycox et al., 2002; Kataoka et al., 2003; Kohtr et al., 2011; Oransky et al., 2013; Rachamim et al., 2011). However, some studies have reported slightly lower, although still acceptable, values for the functional impairment scale, with alphas in the range of .75 to .83 (Nixon et al., 2013; Oransky et al., 2013). Gudiño and Rindlaub (2014) recently examined a Spanish translation of the CPSS in Hispanic elementary school students and reported alphas of .92 for total scores and .76 to .86 for subscale scores. Finally, Oransky and colleagues (2013) examined CPSS scores obtained by youth- and parent-ratings and reported similar alpha values (child-report: $\alpha = .84$ total score, .82 functional impairment score; parent-report: $\alpha = .87$ total score, .82 functional impairment score). Preliminary analyses of the <i>DSM-5</i> version of the CPSS indicate excellent internal consistency for total self-report ($\alpha = .92$) and interview ($\alpha = .93$) scores as wall as fair to good internal consistency for total self-report and parent-ration scores.
	<u>Intercorrelations</u> : Most studies examining correlations between total and subscale scores have reported relationships in the range of $r = .73$ to .91. Reported correlations among

subscale scores are lower, although still strong ($rs = .4289$; Foa et al., 2001; Gudiño & Rindlaub, 2014; Nixon et al., 2013; Rachamim et al., 2011). Functional impairment scores have also demonstrated significant correlations with total ($r = .51 - 58$) and subscale ($rs = .2662$) scores (Kassam-Adams et al., 2010; Nixon et al., 2013).
Based on their original work with the CPSS, Foa et al., (2001) reported moderate-to-excellent test-retest coefficients for total and subscale scores ($r = .84$ for total score, .6385 for subscale scores). They also reported 84% agreement between CPSS-based diagnoses over a 1 to 2 week period, reflecting moderate agreement ($\kappa = .55$) for categorical classification of PTSD caseness. Several authors have subsequently evaluated the test-retest reliability of total and subscale scores. Most have considered continuous scores reassessed over brief periods (e.g., 1-2 weeks) and reported correlations in the moderate to excellent range (rs for total scores .8186; Balaban, 2009; Gillihan et al., 2013; ISTSS, 2014; Nixon et al., 2013; Rachamim et al., 2011). Kohtr and colleagues (2011) reported a similar finding ($r = .85$) for total scores resulting from their culturally adapted version of the CPSS. Reliability estimates for subscales scores are generally consistent with findings regarding total scores, with the exception of somewhat more variability in scores on the Avoidance subscale (rs Reexperiencing: .8085; Avoidance: .6181; Arousal: .76 – .89; Balaban, 2009; Foa et al., 2001; Gillihan et al., 2013; ISTSS, 2014; Nixon et al., 2013; Rachamim et al., 2011). In the only study to example a lengthier test-retest period, Nixon and colleagues (2013) reassessed youth 3 to 6 months post-trauma. Given expectations for naturally occurring changes in symptoms over time, authors reported "good" correlations for total scores ($r = .75$).
Only two studies have addressed test-retest reliability for the functional impairment scale. Foa et al (2001) reported "very good" reliability over a 1 to 2 week period ($r = .70$). Nixon and colleagues (2013) reported a slightly lower estimate over a period of 3 to 6 months ($r = .60$).
Preliminary analyses indicate good test-retest reliability for CPSS-5 self-report total scores ($r = 0.80$).
Construct Validity and Factor Structure The CPSS was developed to mirror the three-factor <i>DSM-IV</i> conceptualization of PTSD. To that end, each <i>DSM</i> diagnostic symptom is addressed as a separate item on the CPSS. Kassam-Adam et al. (2010) reported that in a large sample of mostly male youth ages 8 to 17 seeking medical care following an injury, a four- factor structure consistent with the Numbing model of PTSD arose as the best fit for the data. Subsequently, Gudiño and Rindlaub (2014) reported that the <i>DSM-IV</i> - based model provided a better fit for their data relative to a single-factor higher order distress model.
<u>Convergent and Discriminant Validity</u> Several studies have suggested that elevated CPSS scores are positively and significantly related to higher incidences of trauma exposure and functional impairment (Havens et al., 2012; Jaycox et al., 2002; Gudiño & Rindlaub, 2014).

Similarly, treatment-seeking samples tend to exhibit greater mean CPSS scores relative to non-treatment seeking samples (Nixon et al., 2013). Nixon et al. (2013) and Rachamim et al., (2011) reported that CPSS total scores effectively discriminated between youth with and without PTSD with effect sizes in the range of 0.86 to 1.19.

CPSS scores have demonstrated significant correlations with other established measures of PTSD, including the Child Post-Traumatic Stress Disorder Reaction Index (CPTSD-RI) and the K-SADS. In the initial validation sample, Foa and colleagues (2001) reported that 70% of children with high CPTSD-RI score were also classified as PTSD positive based on CPSS scores whereas only 17% of children with low CPTSD-RI scores were classified as such by the CPSS (correlation r = .80). In a sample of adolescent females seeking psychological treatment following sexual trauma, Gillihan et al. (2013) reported nearly 75% agreement between K-SADS and CPSS-based diagnoses. Rachamim et al. (2011) also reported a correlation of r = .54 between K-SADS diagnoses and total CPSS scores using a translated CPSS. CPSS scores also correlate with clinician-based PTSD diagnoses. In a sample of mainly minority youth ages 12 to 18 admitted for inpatient psychiatric care, Havens et al. (2012) reported fair to moderate concordance between CPSS- and psychiatrist-based PTSD diagnoses ($\kappa = .43$). Similarly, in a sample of Nepalese youth, children rated by counselors as more impaired [using the Global Assessment of Psychosocial Disability (GAPD)] also had higher mean scores on a culturally adapted version of the CPSS (Kohtr et al., 2011).

Comparisons of CPSS total scores with other measures of psychological functioning indicate stronger correlations with measures of internalizing problems (rs = .55 - .65 with BDI, Gillihan et al., 2013; rs = .65 and .74 with YSR anxiety and affective problems, respectively; Gudiño & Rindlaub, 2014) than externalizing problems (rs = .46 and .57 with YSR conduct and oppositional defiant problems, respectively, Gudiño & Rindlaub, 2014; rs .09 - .25 with STAXI-2, Gillihan et al., 2013). Relationships observed between CPSS scores and other measures of PTSD tend to be stronger than relationships observed between CPSS scores and measure of other psychological constructs (e.g., depression, anxiety; Aderka, Foa, et al., 2011; Foa et al., 2001).

The functional impairment scale of the CPSS also serves to differentiate between youth with and without PTSD. As expected, youth identified as meeting criteria for PTSD tend to endorse more functional impairment. For example, in the validation sample, 78% of youth identified as meeting diagnostic criteria for PTSD endorsed at least one functional impairment item compared to only 14% of youth without PTSD. Functional impairment scores were also correlated with total CPSS scores (r = .42; Foa et al., 2001).

<u>Interpretation Issues: Cut Scores and Classification Accuracy:</u> Measure developers recommend a cut score of 11 for determining PTSD caseness which reportedly yielded sensitivity and specificity rates of 95% and 96%, respectively. Even in the absence of total scores, authors reported that subscale scores correctly classified approximately 95% of youth (Foa et al., 2001). However, there is debate regarding the most appropriate cut score with recommendations ranging from 11 to 20. In their cross-cultural adaptation of the CPSS, Kohtr and colleagues (2011) recommended a cut score of at least 20 (sensitivity = .68; specificity = .74; positive predictive value = .35; negative predictive value = .92). Using this score, 72.2% of youth were correctly classified according to clinician-based PTSD status. Of misclassified youth, most were false positives. Only 5.6% of youth were misclassified as false. As a result, the authors suggested that when using a cut score of at least 20 the CPSS functions best as a screening tool.

Nixon and colleagues (2013) compared the utility of different dichotomizations of CPSS scores and impairment criteria for determining PTSD caseness. They reported that dichotomizing item ratings of 0 versus 1 through 3 without requiring reported impairment resulted in high sensitivity (95%) but low specificity (51%). When the impairment criterion was included, sensitivity decreased but specificity was improved (84% and 72%, respectively). They also reported that dichotomization of 0-1 versus 2-3 did not improve measure performance; without the impairment criterion sensitivity and specificity were 68% and 84%, respectively while including the impairment criteria resulted in a sensitivity and specificity of 58% and 88%. Ultimately they recommended a cut score of 16, which resulted in sensitivity between 84% and 93% and specificity of 83%.

Interview versus self-report format

Gillihan et al (2013) compared the CPSS administered as an interview (CPSS-I) and as a self-report (CPSS-SR) in a group of racially/ ethnically diverse adolescent females seeking treatment following sexual trauma. In terms of overall score patterns, Gillihan et al (2013) reported that age and race were not significantly correlated with total or subscale scores for either format. Scores at intake to treatment were similar (r = .80), although the CPSS-I resulted in slightly lower scores. Internal consistency data were generally similar to previously reported data (CPSS-SR: $\alpha = .83$ total, .74 reexperiencing, .71 avoidance, .58 arousal; CPSS-I: $\alpha = .81$ total, .74 reexperiencing, .67 avoidance, .50 arousal). Functional impairment scores were moderately reliability for both formats (CPSS-SR α = .73; CPSS-I α = .69) Correlations between total and subscale scores were largely consistent with previously reported data for both formats (rs for CPSS-SR total scores: .82 reexperiencing, .86 avoidance, .77 arousal; CPSS-I total scores: .80 reexperiencing, .84 avoidance, .80 arousal). Symptom severity scores were significantly correlated with functional impairment scores for both formats (CPSS-SR r = .60; CPSS-I r = .55). Both formats demonstrated good test-retest agreement for total and subscale scores as well as single item ratings ($\kappa = .87$ total score; .91 reexperiencing; .80 avoidance; .93 arousal; .61 – 1.00 for single items). Overall, authors indicated that the CPSS-SR was slightly (although not significantly) more reliable than the CPSS-I. They also reported 94% agreement between CPSS-SR and CPSS-I-based diagnoses, indicating that administration format appeared to influence responses for only a small number of items.

Developers have begun to compare results of the CPSS-5 self-report and interview formats. Preliminary analyses indicate the forms are highly correlated (r - 0.87; personal communication).

Pros:	 Developers are currently testing a <i>DSM-5</i> version (CPSS-5) Rated as an "A" by California Evidence Based Clearinghouse (CECB, 2011) Measure continues to function well over more than a decade of use. Items map directly onto DSM diagnostic criteria. Some authors (e.g., Nixon et al., 2013) support the use of the CPSS as a quasidiagnostic tool when resources do not allow for full diagnostic assessment. Functional impairment scale allows for assessment of extent of symptom interference – unique among PTSD screening measures Has demonstrated utility in tracking changes in symptoms resulting from participation in treatment and can be used for serial assessment – however there are no normative data to guide interpretation of change scores Validated for assessment of traumatic stress and complex trauma (Ford et al., 2012) Free and readily available Likert scale response format may result in increased sensitive to change than tools with dichotomous response sets
Cons:	 The validation sample was relatively small (75 youth), ethnically homogenous and unlikely to reflect demographic composition of youth served by juvenile justice and/or social services agencies. Research has focused largely on clinical and treatment-seeking samples with single-event traumas. Larger and more diverse samples are required to examine generalizability. No standard norms Still debate regarding cut score for determining PTSD caseness, particularly with various types of samples and screening aims. No juvenile justice studies
General comments:	 Interview form is not yet well-researched relative to self-report Translations available: Spanish, Korean, Russian, Armenian, Chinese, German, Hebrew, Norwegian, Polish, Swedish

References

*denotes key cite

^tdenotes inclusion of juvenile justice sample

- Aderka, I. M., Appelbaum-Namdar, E., Shafran, N., & Gilboa-Schechtman, E. (2011). Sudden gains in prolonged exposure for children and adolescents with posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 79, 441-446. doi:10.1037/a0024112.
- Aderka, I. M., Foa, E. B., Applebaum, E., Shafran, N., & Gilboa-Schechtman, E. (2011). Direction of influence between posttraumatic and depressive symptoms during prolonged exposure therapy among children and adolescents. *Journal of Consulting and Clinical Psychology*, 79, 421-425. doi:10.1037/a0023318.
- Balaban, V. (2009). Assessment of children. In E. B. Foa, T. M. Keane, M. J. Friedman, J. A. Cohen (Eds.), *Effective treatments for PTSD: Practice guidelines from the International Society for Traumatic Stress Studies (2nd ed.)* (pp. 62-80). New York, NY US: Guilford Press.
- California Evidence-Based Clearinghouse for Child Welfare (CEBC). (Aug 2011). Screening and assessment tools for child welfare: The Child PTSD Symptom Scale. Retrieved from http://www.cebc4cw.org/assessment-tool/child-ptsd-symptom-scale-cpss/.
- Cohen, J. A., Mannarino, A. P., & Knudsen, K. (2004). Treating childhood traumatic grief: A pilot study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 43, 1225-1233. doi:10.1097/01.chi.0000135620.15522.38.
- Cook-Cottone, C. (2004). Childhood Posttraumatic Stress Disorder: Diagnosis, Treatment, and School Reintegration. *School Psychology Review*, *33*(1), 127-139.
- Dyregrov, A., & Yule, W. (2006). A Review of PTSD in Children. *Child and Adolescent Mental Health*, *11*, 176-184. doi:10.1111/j.1475-3588.2005.00384.x.
- *Foa, E. B., Johnson, K. M., Feeny, N. C., & Treadwell, K. H. (2001). The Child PTSD Symptom Scale: A preliminary examination of its psychometric properties. *Journal of Clinical Child Psychology*, *30*(3), 376-384.
- Ford, J. D., Chapman, J., Connor, D. F., & Cruise, K. R. (2012). Complex trauma and aggression in secure juvenile justice settings. *Criminal Justice and Behavior*, 39, 694-724. doi:10.1177/0093854812436957.
- *Gillihan, S. J., Aderka, I. M., Conklin, P. H., Capaldi, S., & Foa, E. B. (2013). The Child PTSD Symptom Scale: Psychometric properties in female adolescent sexual assault survivors. *Psychological Assessment*, *25*, 23-31. doi:10.1037/a0029553.
- Gudiño, O. G., & Rindlaub, L. A. (2014). Psychometric properties of the Child PTSD Symptom Scale in Latino children. *Journal of Traumatic Stress*, 27, 27-34. doi:10.1002/jts.21884.
- Havens, J. F., Gudiño, O. G., Biggs, E. A., Diamond, U. N., Weis, J., & Cloitre, M. (2012). Identification of trauma exposure and PTSD in adolescent psychiatric inpatients: An exploratory study. *Journal* of Traumatic Stress, 25, 171-178. doi:10.1002/jts.21683.
- International Society for Traumatic Stress Studies (ISTSS). (2014). Assessing trauma: The Child PTSD Symptom Scale. Retrieved from http://www.istss.org/ChildPTSDSymptomScale.htm.
- Jaycox, L. H., Stein, B. D., Kataoka, S. H., Wong, M., Fink, A., Escudero, P., & Zaragoza, C. (2002). Violence exposure, posttraumatic stress disorder, and depressive symptoms among recent immigrant schoolchildren. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41, 1104-1110. doi:10.1097/00004583-200209000-00011.
- Kassam-Adams, N., Marsac, M. L., & Cirilli, C. (2010). Posttraumatic stress disorder symptom structure in injured children: Functional impairment and depression symptoms in a confirmatory factor analysis. *Journal of the American Academy of Child & Adolescent Psychiatry*, 49, 616-625. doi: 10.1097/00004583-201006000-00010.
- Kataoka, S. H., Stein, B. D., Jaycox, L. H., Wong, M., Escudero, P., Tu, W., & ... Fink, A. (2003). A school-based mental health program for traumatized Latino immigrant children. *Journal of the*

American Academy of Child & Adolescent Psychiatry, *42*, 311-318. doi:10.1097/00004583-200303000-00011.

- Kohtr, B. A., Jordans, M. J. D., Tol, W. A., Puitel, N. P., Maharjan, S. M. & Upadhaya, N. (2011). Validation of cross-cultural child mental health and psychosocial research instruments: adapting the Depression Self-Rating Scale and Child PTSD Symptom Scale in Nepal. *BMC Psychiatry*, 11, 127-143. doi:10.1186/1471-244X-11-127.
- Measurement Instrument Database for the Social Sciences (MIDSS). (n.d.). *The Child PTSD Symptom Scale (CPSS)*. Retrieved from <u>http://dx.doi.org/10.13072/midss.119</u>.
- National Child Traumatic Stress Network (NCTSN). (2012). *Child PTSD Symptom Scale (CPSS)*. Retrieved from <u>http://www.nctsn.org/content/child-ptsd-symptom-scale-cpss-0</u>.
- *Nixon, R. V., Meiser-Stedman, R., Dalgleish, T., Yule, W., Clark, D. M., Perrin, S., & Smith, P. (2013). The Child PTSD Symptom Scale: An update and replication of its psychometric properties. *Psychological Assessment*, 25, 1025-1031. doi:10.1037/a0033324.
- Nixon, R.V., Sterk, J., & Pearce, A. (2012). A randomized trial of cognitive behaviour therapy and cognitive therapy for children with posttraumatic stress disorder following single-incident trauma. *Journal of Abnormal Child Psychology*, 40, 327-337. doi:10.1007/s10802-011-9566-7.
- Oransky, M., Hahn, H., & Stover, C. (2013). Caregiver and youth agreement regarding youths' trauma histories: Implications for youths' functioning after exposure to trauma. *Journal of Youth & Adolescence*, 42, 1528-1542. doi:10.1007/s10964-013-9947-z.
- *Rachamim, L., Helpman, L., Foa, E. B., Aderka, I. M., & Gilboa-Schechtman, E. (2011). Validation of the child posttraumatic symptom scale in a sample of treatment-seeking Israeli youth. *Journal of Traumatic Stress*, 24, 356-360. doi:10.1002/jts.20639.
- Smith, P., Yule, W., Perrin, S., Tranah, T., Dalgleish, T., & Clark, D. M. (2007). Cognitive-behavioral therapy for PTSD in children and adolescents: A preliminary randomized controlled trial. *Journal* of the American Academy of Child & Adolescent Psychiatry, 46, 1051-1061. doi:10.1097/CHI.0b013e318067e288.
- Stein, B. D., Jaycox, L. H., Katoaka, S. H., Wong, M., Tu, W., Elliott, M. N., & Fink, A. (2003). A mental health intervention for schoolchildren exposed to violence. *Journal of the American Medical Association*, 290(5), 603-611.
- Strand, V. C., Pasquale, L. E., & Sarmiento, T. L. (2006). *Child and adolescent trauma measures: A review*. Retrieved from <u>http://www.ncswtraumaed.org/wp-content/uploads/2011/07/Child-and-Adolescent-Trauma-Measures_A-Review-with-Measures.pdf</u>

Los Angeles Symptoms Checklist (LASC)

Authors:	King, L. A., King, D. W., Leskin, G., & Foy, D. W. (1995). The Los Angeles Symptom Checklist: A self-report measure of posttraumatic stress disorder. <i>Assessment</i> , 2, 1-17.
Administration Time:	10-20 minutes to complete 10-15 minutes to score
Purpose:	The LASC was developed with the goal of creating an easily administered tool capable of providing both categorical and continuous measures of PTSD for purposes of diagnosis and assessment of symptom severity. The LASC also provides a measure of general psychological distress beyond PTSD-related symptoms. In its current form, LASC items correspond to <i>DSM-IV</i> PTSD symptom language, practically criteria B, C and D.
Administration Procedures:	The LASC is an interview-based self-report paper-and pencil measure. It is available in youth self-report form only.
Target Demographics:	The LASC was initially developed for use with adults and has been studied in veteran populations. Subsequent efforts have adapted the LASC to create a downward extension for adolescents (specific age range not specified).
Description:	The LASC is a measure of PTSD symptoms as well as general psychological distress. Phrasing for the PTSD items was originally developed to mirror <i>DSM-III</i> language but has since been updated to reflect changes in changes in the <i>DSM-III-R</i> and <i>DSM-IV</i> . General distress items were developed to reflect symptoms that, based on the authors' experience, are often associated with PTSD (e.g., alcohol abuse, excessive eating, relationship difficulties). PTSD and general distress items are comingled throughout the measure. The measure contains 43 items total, 17 of which create the PTSD index. Within this index there are 3 items that address reexperiencing/intrusion, 6 items that address avoidance/ numbing and 8 items covering hyperarousal. Each item is a brief phrase describing a symptom/problem (e.g., "nightmares," "difficulty concentrating," suicidal thoughts"). In development the adolescent version, the wording of select items was amended to refer to "school"). Directions guide respondents to indicate "how much of a problem" each of the symptoms are at the present time. Items are rated on a 5-point Likert scale with qualitative anchors ranging from "no problem" to "extreme problem." Youth are not cued to consider a specific event nor are items keyed to specific types of trauma. Results can be used to provide a global index of distress that may be

	related to trauma exposure. The 17 items that make up the PTSD index can also be summed to provide a continuous index of the severity of symptoms related to PTSD diagnostic criteria with scores of 21 or higher indicating a probable PTSD diagnosis. Finally, a categorical classification can be made to identify youth as PTSD positive, partial PTSD or PTSD negative based on their endorsement of the items on the PTSD index. To be considered PTSD positive, a youth would need to endorse (with a rating of two or higher on individual items) at least one reexperiencing/intrusion item, three avoidance/numbing items, and two hyperarousal items. A respondent meeting two of these three criteria is considered partial PTSD.
Ownership and Purchase Information:	The LASC is available at no cost Lynda King National Center for PTSD (116B-2) Boston DVA Medical Center 150 S. Huntington Ave Boston, MA 02130 Ph: 617-232-9500 ext 4938 <u>King.lynda@va.gov</u>
Examiner Qualifications & Training Requirements:	Although measure authors are willing to distribute information about the LASC to the general public, they recommend only "qualified mental health professionals and researchers" use the tool. The authors provide no more specific guidelines for determining qualification.
Samples studied:	High school students Juvenile-justice-involved youth Most available research has examined the LASC in adult samples.
Psychometric Evidence:	Demographic Differences: Findings regarding sociodemographic score differences are mixed. Briere and Elliott (1998) reported no differences in scores among racial/ethnic groups, however their sample was largely Caucasian. More recently, Bruce and Waeld (2008) reported no differences in LASC-measured trauma symptoms among ethnic groups in a sample of junior and senior high school students. In comparing scores across genders, Briere and Elliott (1998) and Foy et al. (1997) found no differences. Conversely, in their sample of incarcerated youth, Wood, Foy, Goguen, Pynoos and James (2002) reported that females scored significantly higher in terms of overall psychological distress and PTSD symptomology and were more likely to be categorized as PTSD positive (52% versus 28% of males). Finally, Foy, Wood, King, King and Resnik (1997) described a dose-response pattern of trauma exposure and PTSD symptomology (measured by the LASC) in female youth that was not evident in males.Item correlations: Research indicates generally strong item-total correlations for total LASC scores (rs range from .28 to .73; $M = .57$; $SD = .17$; King, King

	Leskin & Foy, 1995). In a subsequent study, Foy and colleagues (1997) reported correlations between PTSD index scores and the remaining 26 LASC items in the range of $r = .86$ in a sample of mixed gender, ethnically diverse high school students.
	<u>Internal consistency</u> : Published studies have consistently reported excellent internal consistency ($\alpha \ge .90$). In adolescent samples, reported alpha coefficients are in the range of $\alpha = .94$ 95 for the total scale and $\alpha = .88$ 90 for the PTSD index (Bruce & Waelde, 2008; Foy, Wood, King, King & Resnick, 1997; King, King, Leskin & Foy, 1995).
	<u>Test-retest reliability</u> : Only King (1996) has addressed test-retest reliability of the LASC, in which a two-week reliability coefficient of .90 for the full item set and .94 for the PTSD index was reported in a sample of adult veterans. There are no published data regarding test-retest reliability in youth.
	<u>Construct validity</u> : Studies indicate that youth who endorse more extensive or more recent exposure to traumatic events tend to have higher LASC scores (Foy, Wood, King, King & Resnick, 1997; King, King, Lesin & Foy, 1995; Scott, 2007). Scores are also higher in populations traditionally considered "high risk" (i.e., incarcerated youth and youth seen in clinical settings; Scott, 2007; Wood, Foy, Layne, Pynoos & James, 2002). The LASC has demonstrated convergence with SCID PTSD diagnoses with reported sensitivity \geq 74%, specificity \geq 77% and an overall classification accuracy \geq 75% (Foy, Wood, King, King & Resnick, 1997; King, 1996; King, King, Leskin & Foy, 1995). Furthermore, the LASC has demonstrated substantial correlations with the Impact of Events Scale (IES), a measure of PTSD symptomology (Briere & Elliott, 1998) and other self- report PTSD measures (<i>rs</i> range from .38 to .48; Orsillo, 2001). Burton, Foy, Bwanausi, Johnson and Moore (1994) also reported a correlation of <i>r</i> = .40 between continuous PTSD index scores and scores on a measure of violence in daily life for a sample of delinquent adolescents.
	<u>Factor structure</u> : Analyses generally identify as the best fit a model composed of three highly correlated factors that are congruent with the <i>DSM</i> diagnostic structure (all $rs \ge .95$; Foy, Wood, King, King & Resnick, 1997).
	<u>Concurrent/Predictive validity:</u> LASC scores are reported to correspond with rates of PTSD diagnoses. Researchers have also identified a series of cut scores representing varied levels of probable PTSD diagnoses. It appears the items outside of the PTSD index do not add to the predictive power of the measure (King, King, Leskin & Foy, 1995).
Pros:	-Several studies pairing LASC with a measure of violence exposure -Some data examining LASC in justice-involved samples -Address PTSD symptoms as well as other indicators of psychological distress
Cons:	-Measure may not adequately address avoidance, as only 1 item relates to trauma- related avoidance (Asmundson, Stapleton & Taylor, 2004). -Research with adolescent populations is comparatively limited. Of available

	adolescent samples, many are high school students. -Classification accuracy is somewhat lower than with other PTSD measures (King, King, Leskin & Foy, 1995)
General Comments:	
* denotes key cite

^tdenotes inclusion of juvenile justice sample

- Asmundson, G. G., Stapleton, J. A., & Taylor, S. (2004). Are avoidance and numbing distinct PTSD symptom clusters?. *Journal of Traumatic Stress*, *17*(6), 467-475.
- Briere, J., & Elliott, D. M. (1998). Clinical utility of the Impact of Event Scale: Psychometrics in the general population. *Assessment*, *5*, 171-180. doi:10.1177/107319119800500207,
- Bruce, E., & Waelde, L. C. (2008). Relationships of ethnicity, ethnic identity, and trauma symptoms to delinquency. *Journal of Loss & Trauma*, *13*, 395-405. doi:10.1080/15325020802171326.
- *Foy, D. W., Wood, J. L., King, D. W., King, L. A., & Resnick, H. S. (1997). Los Angeles Symptom Checklist: Psychometric evidence with an adolescent sample. *Assessment*, 4(4), 377-384.
- King, L.A. (1996). Psychometric review of the Los Angeles Symptom Checklist (LASC). In B. H. Stamm (Ed.) *Measurement of Stress, Trauma, and Adaptation*. Lutherville, MD: Sidran Press.
- *^tKing, L. A., King, D. W., Leskin, G., & Foy, D. W. (1995). The Los Angeles Symptom Checklist: A self-report measure of posttraumatic stress disorder. *Assessment*, 2, 1-17. doi: 10.1177/1073191195002001001LASC
- Orsillo, S. M. (2001). Measures for acute stress disorder and posttraumatic stress disorder. In Practitioner's guide to empirically based measures of anxiety. Antony, M. M., Orsillo, S. M. & Roemer, L. (Eds.). Dordrecht Netherlands: Kluwer Academic Publishers.
- Scott, S. T. (2007). Multiple traumatic experiences and the development of posttraumatic stress disorder. *Journal of Interpersonal Violence*, 22(7), 932-938.
- Strand, V. C., Pasquale, L. E., & Sarmiento, T. L. (2006). *Child and adolescent trauma measures: A review*. Retrieved from <u>http://www.ncswtraumaed.org/wp-content/uploads/2011/07/Child-and-Adolescent-Trauma-Measures_A-Review-with-Measures.pdf</u>
- The National Center for PTSD. (January 3, 2014). *Los Angeles Symptoms Checklist (LASC)*. Retrieved from the U.S. Department of Veterans Affairs website. http://www.ptsd.va.gov/professional/assessment/adult-sr/lasc.asp.
- ^tWood, J., Foy, D. W., Goguen, C. A., Pynoos, R., & James, C. (2002). Violence exposure and PTSD among delinquent girls. *Journal of Aggression, Maltreatment & Trauma*, 6(1), 109-126.
- ^tWood, J., Foy, D. W., Layne, C., Pynoos, R., & James, C. (2002). An examination of the relationships between violence exposure, posttraumatic stress symptomatology, and delinquent activity: An 'ecopathological' model of delinquent behavior among incarcerated adolescents. *Journal of Aggression, Maltreatment & Trauma*, 6(1), 127-147

Structured Trauma-Related Experiences and Symptoms Screener (STRESS)

Authors:	Grasso, Reid-Quinones, Felton & De Arellano (2013)
Administration Time:	Administration and scoring time unknown
Purpose/Description:	The STRESS was developed as a PTSD screening tool and can be used to develop preliminary PTSD diagnoses. The measure includes 22 adverse experiences and potential traumas as well as symptoms of PTSD, defined by the criteria of the <i>DSM-5</i> . Potentially traumatic events listed include experiencing a natural disaster, accident, injury/medical traumas, physical and sexual abuse, domestic violence and neglect. Symptoms screened correspond with <i>DSM-5</i> symptom clusters as well as dissociative symptoms and trauma-related impairment (i.e., ability to make and keep friends, do school works, get along with others, etc.)
	The STRESS uses a relatively brief retroactive reporting period based on research indicating that youths' report of symptoms is less valid over extended periods of time.
	Directions read: "We are going to go through a list of very scary things that sometimes happen to people. Circle YES if the thing happened to you or circle NO if it has not happened to you." Youth are directed to write down the age at which the event happened for any endorsed item. In Part II, youth are instructed, "The next questions ask about problems some people have after scary or bad things happen to them. Please think about a scary or bad thing that happened to you and how you have been thinking, feeling, or acting in the past week when answering these questions. Circle or check your answer." Youth are provided with pictorial representations of a calendar week with X's indicating various frequencies (None, 1 day, 2-3 days, Most days). These items address PTSD diagnostic symptoms. Youth then respond to 6 items referencing functional impairment using a Yes/No format.
	Scoring Administrators use subscripts on the measure to total the number of Non- Interpersonal, Interpersonal, Emotional/Physical Neglect and Sexual Traumas as well as a total number of adverse experiences. Symptom counts are tallied according to <i>DSM</i> diagnostic clusters, including impairment indicators. Youth scores on these clusters are used to indicate probable diagnostic status.
Administration Procedures:	The STRESS can be administered as a paper-and-pencil self-report measure or as a computer-administered interview that reads items aloud and provides automatic scoring and feedback. The latter allows for administration, scoring and guided interpretation by non-clinicians.
Target Demographics:	The STRESS was developed for use with youth ages 7-18 exposed or believed to have been exposed to one or more potentially traumatic events. Reading level is

	unknown.
Ownership and Purchase Information:	Unknown
Examiner Qualifications & Training Requirements:	There are no published user qualifications for the paper-and-pencil version. No clinical training is needed to administer or interpret results from the computer-assisted interview.
Samples studied	Validation sample: 229 youth age 7-17 referred for evaluation secondary to abuse or neglect allegations (54.6% female, 50% African American, 9% Hispanic, 41% White)
Psychometric evidence:	All data below were reported in Grasso, Felton & Reid-Quinones (under review). Demographic Differences: No significant race/ethnicity or age differences were observed in total or subscale scores. Internal Consistency: Strong internal consistency for total (α = .92) and subscale (α = .7782) scores. Intercorrelations: Total scores were significantly positively correlated with all subscales (rs = .7991) and the number of adverse events experiences (r = .67). Total scores are also significantly correlated with trauma types (r = .47 non- interpersonal trauma; r = .53 interpersonal trauma; r = .41 sexual trauma; r = .25 suspected neglect), suggesting sensitivity to all adversity types. Additionally, subscale scores were significantly intercorrelated (rs = .6176). Test-retest Reliability: Not yet established Factor Structure: Corresponds with 4-factor structure of <i>DSM-5</i> PTSD diagnostic criteria. Construct, Concurrent and Convergent Validity: In addition to using Total Scores, a cut off score of exposure to 4 or more potentially traumatic events accurately identified 70% of youth who met probable PTSD criteria. Predictive Validity: Not established
Pros:	 Reflects <i>DSM-V</i> diagnostic criteria Exposure and symptom screen in one Screens for exposure to a greater number of adverse events than the UCLA Allows for assessment of symptoms based on all endorsed traumatic events, rather than limiting reports to symptoms tied to one specific event – allows for fuller assessment of symptoms and impairment

Cons:	No published research yetStudied in single sample (not juvenile justice)
General Comments	• Measure is being piloted in a South Carolina child advocacy and rape crisis center as of 2013.

- Grasso, D., Felton, J., & Reid-Quinones. (under review). *The Structured Trauma-Related Experiences* and Symptoms Screener (STRESS) for DSM-5: Development and Preliminary Psychometrics.
- Grasso, D. J., Reid-Quinones, S., Felton, R., & De Arellano, M. (2013). The Structured Trauma-Related Experiences & Symptoms Screener (STRESS). Farmington, CT: University of Connecticut Health Center.

University of California at Los Angeles Posttraumatic Stress Disorder Reaction Index (UCLA PTSD-RI)

Authors:	Steinberg, A. M., Brymer, M., Decker, K., & Pynoos, R. S. (2004). The UCLA PTSD reaction index. <i>Current Psychiatry Reports</i> , <i>6</i> , 96–100. doi:10.1007/s11920-004-0048-2.
Administration Time:	15-30 minutes to administer, depending on age, reading ability, method of administration and extent of trauma exposure/symptomology
	Scoring time: 5-10 minutes
Purpose	The PTSD-RI is a self-report measure developed to assess youths' history of exposure to potentially traumatic events and screen for the frequency of <i>DSM-IV</i> PTSD symptoms. The measure was developed to assess for symptoms during the past month; however the time period can be altered. The PTSD-RI can provide preliminary diagnostic information; however the tool is not intended to be diagnostic in nature and positive results should be followed up by a more intensive assessment to confirm a diagnosis. However, PTSD-RI scores have proven sensitive to changes occurring in the context of treatment (e.g., Berkowitz et al., 2011; Cohen et al., 2004) and may be useful in tracking symptom changes over time or with intervention. Abbreviated versions of the measure have been developed for use in triage situations and rapid screening. A new version which corresponds to <i>DSM-V</i> diagnostic criteria has also been created; however psychometric data on this version are not yet available. This new version may include significant changes to the exposure screener in Part I (including prompts for gathering additional details related to the exposure). The symptom scale has also been updated to include questions assessing for dissociative subtype features.
Administration Procedures:	The PTSD-RI was intended to be administered as an interview but is often used as a paper-and-pencil measure. When administered in this fashion, it is appropriate for one-on-one or group administration. Experts recommend that instructions and questions always be read aloud to children under 12 years or those with known reading comprehension difficulties. Rodriquez, Steinberg & Pynoos (1999) provide explicit instructions for administration in one-to-one or group settings. Some sources recommend amending item content for one-to-one administration to tailor items to youth's identified most traumatic event. For example, the item reading "When something reminds me of what happened " would become "When something reminds me of the shooting" This is intended to increase understanding of the task and accuracy of reporting. (Rodriquez et al., 1999).
Target	The UCLA PTSD-RI was developed for use with youth ages 7 to 18 exposed

Demographics:	to any type of potentially traumatic event. Child- (age 7-12), Adolescent- (age 13-18) and parent-report versions exist. All three versions are largely the same with only minor changes in wording to reflect developmental level. It is appropriate for use in both clinical and research settings. Reading level is estimated at a 5 th grade level.
Description:	The PTSD-RI is a revision of the widely used and researched Child Posttraumatic Stress Disorder Reaction Index (CPTSD-RI). PTSD-RI items are keyed to <i>DSM</i> diagnostic criteria and the measure has undergone revisions to reflect <i>DSM</i> revisions. Each diagnostic symptom is addressed individually by one or more items on the measure. In addition to <i>DSM</i> diagnostic criteria, several questions address "associated feature" symptoms (e.g., guilt, fear of reoccurrence) that were included as a result of research indicating their clinical salience and relationship to symptom severity. Given its close relationship with <i>DSM</i> criteria, the PTSD-RI can be used to develop preliminary diagnostic impressions; however it is not intended to serve as a stand-alone diagnostic tool.
	The PTSD-RI is divided into three sections. Part I is the Traumatic History Profile. Directions read, "Below is a list of VERY SCARY, DANGEROUS, OR VIOLENT things that sometimes happen to people. These are times when someone was HURT VERY BADLY OR KILLED, or could have been. Some people have had these experiences, some people have not had these experiences. Please be honest in answering if the violent thing happened to you, or if it did not happen to you" (emphasis in original). Youth respond Yes or No to 13 questions addressing direct experience or witnessing of events including natural disasters, accidents, war, physical victimization, sexual abuse, and invasive medical treatment. Example items include "being in a bad accident, like a very serious car accident," "being beaten up, shot at or threatened to be hurt badly in your town" and "hearing about the violent death or serious injury of a loved one." Descriptions of these events were adapted from the National Child Abuse and Neglect Data System Glossary. After responding to each item, an open-ended question assesses for any other trauma exposure. If youth endorsed exposure to more than one event, they are asked to indicate the one "that bothers you the most now." All youth are asked to describe the most distressing event, which is recorded on the form. This allows for determination of satisfaction of diagnostic criterion A1. In Part II, youth are asked, "HOW YOU FELT during or right after the bad thing happened to you" by answering Yes or No to questions that address PTSD diagnostic criteria B (reexperiencing), C (arousal) and D (avoidance). This allows for evaluation of objective and subjective features of the traumatic experience. Example items include "I have upsetting thoughts, pictures or sounds of what happened come into my mind when I do not want them to" (Intrusion), "I watch out for danger or things that I am afraid of" (Hyperarousal), and "I feel like staying by myself and not being with my friends" (Avoidance/Numbing). In Part III, directions rea

	CIRCLE ONE of the numbers that tells how often the problem has happened to you in the past month. Use the Rating Sheet on Page 5 to help you decide how often the problem has happened in the past month." The Rating Sheet provides youth with a pictorial representation of frequencies corresponding with the Likert scale using a monthly calendar marked with a varying number of X's that represent symptom occurrence days (0 = "None of the time/not at all in the past month", 1 = "Little of the time/about two times in the past month", 2 = "Some of the time/about once a week in the past month", 3 = "Much of the time/two or three days a week in the past month," and 4 = "Most of the time/almost every day in the past month". I feel grouchy, angry, or mad I feel alone inside and not close to people I think that I will not live a long life." In this section, items are denoted with subscripts to aid assessors in quickly identifying the <i>DSM</i> criterion to which they correspond.
	Scoring The PTSD-RI is scored by hand using the associated scoring sheet which provides instructions for calculating a total PTSD severity score as well as severity scores for each of the <i>DSM</i> symptom subcategories. The severity score is calculated by summing the scores for each question that corresponds to a <i>DSM</i> symptom. Subscores are calculated for criteria B, C, and D by summing scores for questions that assess symptoms of each respective subcriterion. (Note: only 17 items in Part III contribute to these scores – three symptoms have two alternate items. For these pairs, only the item with the higher frequency score contributes to the final scores). For the full scale, a cutoff score of 38 or greater is recommended for identifying PTSD in youth with a single incident traumatic event (no recommendations for youth with chronic or repeated exposures). Cutoff scores of 16 and 20 are recommended for the 7- and 9-item abbreviated scales, respectively. Preliminary PTSD diagnostic information can also be obtained by determining if youth endorsed the requisite number of symptoms from criteria B, C and D. When Criterion A is met, children who meet criteria B, C, and D (using endorsements of "much of the time" and "most of the time" for symptom presence) are scored as having a likely diagnosis of "full" PTSD. If only two subcriteria are met, youth are scored as likely "partial" PTSD.
	members.
Ownership and Purchase Information:	The UCLA PTSD-RI is available at no charge from the authors. Robert S. Pynoos, National Center for Child Traumatic Stress, 11150 W. Olympic Blvd, Suite 770, Los Angeles, CA 90064, 310-235-2633 <u>rpynoos@mednet.ucla.edu</u>).
	UCLA Trauma Psychiatry Services 300 Medical Plaza Los Angeles, CA 90095-6968 (310) 206-8973 <u>Asteinberg@mednet.ucla.edu</u>
	Materials may also be obtained through ISTSS (fee required for membership).

	For information on the DSM-5 version, contact <u>hfinley@mednet.ucla.edu</u>
Examiner Qualifications & Training Requirements:	Assessment materials will be distributed only to qualified mental health professionals and researchers. The PTSD-RI may be administered, scored and interpreted by a graduate student under the supervision of a licensed masters level clinician with experience in the assessment of trauma exposure and PTSD in youth.
Samples studied	 The UCLA PTSD-RI <i>DSM-IV</i> version has been adopted by the National Child Traumatic Stress Network for purposes of collecting network-wide treatment outcome data at centers across the US. These efforts have resulted in the accumulation of data from over 6,000 ethnically diverse youth exposed to one or more potentially traumatic events, known as the Core Data Set (CDS). Treatment-seeking psychiatric outpatients (Berkowitz, Stover & Marans, 2011; Cohen, Mannarino & Knudsen, 2004; Contractor et al., 2013; Elhai et al., 2013; Stover, Hahn, Im & Berkowitz, 2010) Medically impaired youth (Shemesh et al., 2005; Steinberg et al., 2013) Children in residential care (Rosenberg, Vance, Rosenberg, Wolford, Ashley & Howard, 2013; Steinberg et al., 2013) School students (Steinberg et al., 2013) Juvenile offenders (Ford, Grasso, Hawke & Chapman, 2013; Ford, Hartman, Hawke & Chapman, 2008; Rosenberg et al., 2013; Steinberg et al., 2013; Steinberg et al., 2014)
Psychometric evidence:	The PTSD-RI is among the most widely used and researched measures in the assessment of trauma in children and adolescents (Balaban, 2009; ISTSS, 2014; Steinberg et al., 2004; Steinberg et al., 2013; Stover et al., 2010). It has been used across a variety of trauma types, age ranges, settings and cultures in studies including youth exposed to natural disasters, abuse, serious medical illnesses, terrorist attacks, war and other forms of violence (ISTSS, 2014; Steinberg, Brymer, Decker & Pynoos, 2004) <u>Demographic differences:</u> At present, there is limited data to support a systematic racial/ethnical influence on PTSD-RI scores, even in light of typical differences in level of trauma exposure across groups. This is true for community-based and juvenile-justice involved youth (Ford et al., 2008; Steinberg et al., 2013; Stimmel et al., 2014). Findings regarding the influence of gender are somewhat mixed. Using the CDS, Contractor et al. (2013) described consistently higher reported levels of PTSD in females as well as greater variability in girls' symptom factor scores. However, gender did not exert a robust moderating effect overall. Also using the CDS, Steinberg et al. (2013) similarly reported that girls had significantly higher mean total scores. In a separate sample of detained youth, gender was unrelated to PTSD diagnostic status (Ford et al., 2008).

With regard to age, data from the CDS indicate younger (ages 7-9) and older (ages 16-18) youth tend to score higher than peers ages 10-15 (Steinberg et al., 2013). However, there is not a clear pattern of differences in terms of symptom endorsement among these age groups. Scores of younger youth may be vulnerable to greater variability in reporting; however age has not demonstrated a robust moderating effect on scores overall (Contractor et al., 2013).

Research with juvenile-justice-involved youth suggests that scores in this population may be lower than those typically found in clinical samples despite higher rates of reported exposure to potentially traumatic events (Ford et al., 2013).

Internal consistency:

Researchers have repeatedly reported excellent internal consistency coefficients for the full PTSD-RI, with alphas in the range of 0.90 (ISTSS, 2014). Symptom subscale scores have also demonstrated moderate to strong internal consistency (Reexperiencing = .72 - .86, Avoidance = .73 - .80, Arousal = .61 - .71; Steinberg et al., 2013). Statistics for the abbreviated versions are similar ($\alpha = 0.84$ for the 7-item version, 0.87 for the 9-item version; Steinberg & Brymer, 2008; Steinberg et al., 2004). Internal consistency has been shown to be stable across genders ($\alpha = 0.89$ for boys, 0.90 for girls) and racial/ethnic groups ($\alpha = 0.88$ to 0.90) at both the total and subscale levels. Figures remain largely consistent across age groups as well, with only a slight decrease in the 7 to 9 year old age group (Steinberg et al., 2013).

Intercorrelations:

Steinberg et al. (2013) examined subscale and item intercorrelations in the CDS. They reported interitem correlations in the range of 0.24 to 0.40 and subscale-to-total score correlations in the range of 0.85 to 0.91. Subscale intercorrelations were more modest (rs = 0.65 to 0.71).

Test-retest reliability

Data indicate PTSD-RI scores are generally highly reliable over periods ranging from 6 to 28 days (median = 7 days; r total = 0.84, Intrusion = 0.78, Avoidance = 0.78, Hyperarousal = 0.73; Steinberg et al., 2013). Figures from non-US-based studies indicate reliability statistics ranging from 0.84 to 0.93 (Balaban, 2009; ISTSS, 2014; Steinberg et al., 2004).

Factor Structure

Three recent studies have examined the factor structure of the PTSD-RI using data from the CDS. Elhai et al. (2013) examined *DSM* 3-factor, 4-factor emotional numbing, 4-factor dysphoria and 5-factor dysphoric arousal models. They reported that while all models fit the data reasonably well, the 5-factor dysphoric arousal model fit best. Similarly, Contractor et al. (2013) also supported a 5 factor model, reporting better fit to the data across age and gender groups. Conversely, an exploratory factor analysis conducted by Steinberg et al. (2013) described a 3-factor solution in which criteria B items clustered together in one factor while crierion C and D items split between the

remaining two factors.

Construct, Concurrent and Convergent Validity

Convergent and concurrent validity have been studied in diverse clinical samples. Researchers have described strong relationships between scores on the PTSD-RI and other measures of posttraumatic stress in children and adolescents including the TSCC (PTSD-RI total score to PTS subscale r = .75; Contractor et al., 2013; Elhai et al., 2013; Steinberg et al., 2013), the PTSD Module of the Kiddie Schedule for Affective Disorders and Schizophrenia-Epidemiological Version (K-SADS-E; rs = 0.49 - 0.70) and PTSD diagnoses rendered based on the Clinician-Administered PTSD Scale for Children and Adolescents (CAPS-CA; r = 0.82; ISTSS, 2014; Steinberg et al., 2004; Steinberg et al., 2013). Steinberg et al. (2013) reported that in the CDS sample, a 10-unit increase in PTSD-RI scores was associated with reports of increased levels of behavioral problems at home, in school/daycare and in the community, attachment problems and academic problems. Shemesh et al. (2005) compared the accuracy of PTSD-RI scores based on youth and parent dichotomous (i.e., PTSD likely or unlikely) and continuous (i.e., total symptom severity score) scoring methods relative to K-SADS-based diagnoses in a sample of youth with chronic medical illnesses. They reported that children's reports were more often consistent with K-SADS diagnostic status (x parentreport = .12; child report = .22). Multiple studies have also described a doseexposure relationship in which youth with more extensive histories of trauma exposure tend to score higher than youth with less trauma exposure (Ford et al., 2013; Ford et al., 2008; ISTSS, 2014; Steinberg et al., 2004; Steinberg et al., 2013; Stimmel et al., 2014).

Predictive validity

Developers recommend using a cut score of 38 for determining PTSD caseness, reporting a sensitivity rate of 0.93 and a specificity rate of 0.87. Steinberg and colleagues (2004) reported a similar cutoff score of 40 which correctly identified 78% of youth in their sample (note: this study used the *DSM-III-R* version of the measure).

Sensitivity to change, intervention effects and longitudinal/maturational effects have been studied in diverse clinical samples (data on intervention effects also available for nonclinical samples). I could not identify any published research linking UCLA PTSD-RI scores to distal functional outcomes.

Parent-Child Agreement

Stover et al. (2010) examined parent-child agreement for scores in a sample of treatment-seeking youth with a history of trauma exposure. In terms of reports of exposure to various trauma types, authors reported poor to moderate agreement ($\kappa = 0.12 - 0.58$), with parents generally underestimating youths' exposure history. Rates of agreement were better for boys and younger children relative to girls and adolescents. Across genders and age groups, agreement on symptom severity was generally stronger for hyperarousal symptoms relative to avoidance and re-experiencing symptoms (Stover et al., 2010).

Pros:	 PTSD-RI is widely used – it has been studied extensively in US and foreign samples with youth exposed to a wide range of potentially traumatic experiences. The PTSD-RI has more psychometric research support than most other assessment scales for juvenile trauma (Balaban, 2009). It is currently being used by the NCTSN for nation-wide data collection. Has the benefits of an exposure and symptom severity measure in one Validated for assessment of traumatic stress and complex trauma (Ford et al., 2012)
Cons:	 There is a need to add items that assess related functional impairment as reflected in DSM criteria (Steinberg et al., 2004) Ties symptom report to single event
General Comments:	• Translations: Arabic, Armenian, Chinese, Farsi/Persian, Filipino/Tagalog, French, German, Greek, Hebrew, Japanese, Norwegian, Russian, Spanish, Visayan, Nyanja

References *denotes key cite ^tdenotes inclusion of juvenile justice sample

- Balaban, V. (2009). Assessment of children. In E. B. Foa, T. M. Keane, M. J. Friedman, J. A. Cohen (Eds.), *Effective treatments for PTSD: Practice guidelines from the International Society for Traumatic Stress Studies (2nd ed.)* (pp. 62-80). New York, NY US: Guilford Press.
- Berkowitz, S. J., Stover, C., & Marans, S. R. (2011). The child and family traumatic stress intervention: Secondary prevention for youth at risk of developing PTSD. *Journal of Child Psychology and Psychiatry*, 52, 676-685. doi:10.1111/j.1469-7610.2010.02321.x.
- Cohen, J. A., Mannarino, A. P., & Knudsen, K. (2004). Treating childhood traumatic grief: A pilot study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 43, 1225-1233. doi:10.1097/01.chi.0000135620.15522.38.
- Contractor, A. A., Layne, C. M., Steinberg, A. M., Ostrowski, S. A., Ford, J. D., & Elhai, J. D. (2013). Do gender and age moderate the symptom structure of PTSD? Findings from a national clinical sample of children and adolescents. *Psychiatry Research*, *210*, 1056-1064. doi:10.1016/j.psychres.2013.09.012.
- * ^tElhai, J. D., Layne, C. M., Steinberg, A. M., Brymer, M. J., Briggs, E. C., Ostrowski, S. A., & Pynoos, R. S. (2013). Psychometric properties of the UCLA PTSD Reaction Index. part II: Investigating factor structure findings in a national clinic-referred youth sample. *Journal of Traumatic Stress*, 26, 10-18. doi:10.1002/jts.21755.
- ^tFord, J. D., Chapman, J., Connor, D. F., & Cruise, K. R. (2012). Complex trauma and aggression in secure juvenile justice settings. *Criminal Justice and Behavior*, *39*, 694-724. doi: 10.1177/0093854812436957.
- ^tFord, J. D., Grasso, D. J., Hawke, J., & Chapman, J. F. (2013). Poly-victimization among juvenile justice-involved youths. *Child Abuse & Neglect*, *37*, 788-800. doi:10.1016/j.chiabu.2013.01.005.

- ^tFord, J. D., Hartman, J. K., Hawke, J., & Chapman, J. F. (2008). Traumatic victimization, posttraumatic stress disorder, suicidal ideation, and substance abuse risk among juvenile justice-involved youth. *Journal of Child & Adolescent Trauma*, *1*, 75-92. doi:10.1080/19361520801934456.
- Hawkins, S., & Radcliffe, J. (2006). Current measures of PTSD for children and adolescents. *Journal of Pediatric Psychology*, *31*, 420-430. doi:10.1093/jpepsy/jsj039.
- International Society for Traumatic Stress Studies (ISTSS). (2014). University of California at Los Angeles Posttraumatic Stress Disorder Reaction Index (UCLA-PTSD RI). Retrieved from http://www.istss.org/UCLAPosttraumaticStressDisorderReactionIndex.htm
- National Center for PTSD. (January 3, 2014). UCLA PTSD Index for DSM-IV. Retrieved from the U.S. Department of Veterans Affairs website

http://www.ptsd.va.gov/professional/assessment/child/ucla-ptsd-dsm-iv.asp.

- National Child Traumatic Stress Network [NCTSN] (2012). UCLA Posttraumatic Stress Disorder Reaction Index for DSM-IV. Retrieved from <u>http://www.nctsnet.org/content/ucla-posttraumatic-</u> <u>stress-disorder-reaction-index-dsm-iv</u>.
- Rodriquez, N., Steinberg, A. & Pynoos, R. S. (1999). UCLA PTSD for DSM IV (revision 1) instrument information: Child version, parent version, adolescent version. Retrieved from
- ^tRosenberg, H. J., Vance, J. E., Rosenberg, S. D., Wolford, G. L., Ashley, S. W., & Howard, M. L. (2013). Trauma exposure, psychiatric disorders, and resiliency in juvenile-justice-involved youth. *Psychological Trauma: Theory, Research, Practice, and Policy*, Advance online publication. doi:10.1037/a0033199
- Shemesh, E., Newcorn, J. H., Rockmore, L., Shneider, B. L., Emre, S., Gelb, B. D., & ... Yehuda, R. (2005). Comparison of parent and child reports of emotional trauma symptoms in pediatric outpatient settings. *Pediatrics*, 115, e582-e589. doi:10.1542/peds.2004-2201.
- *Steinberg, A., & Brymer, M. (2008). The UCLA PTSD Reaction Index. In G. Reyes, J. D. Elhai & J. D. Ford (Eds.), *The Encyclopedia of Psychological Trauma* (pp. 673-674). Hoboken, NJ: John Wiley & Sons Inc.
- *Steinberg, A. M., Brymer, M. J., Decker, K. B., & Pynoos, R. S. (2004). The University of California at Los Angeles Post-traumatic Stress Disorder Reaction Index. *Current Psychiatry Reports*, 6(2), 96-100.
- * ^{*} Steinberg, A. M., Brymer, M. J., Kim, S., Briggs, E. C., Ippen, C., Ostrowski, S. A., & ... Pynoos, R. S. (2013). Psychometric properties of the UCLA PTSD Reaction Index: Part I. *Journal of Traumatic Stress*, 26, 1-9. doi:10.1002/jts.21780.
- ^tStimmel, M. A., Cruise, K. R., Ford, J. D., & Weiss, R. A. (2014). Trauma exposure, posttraumatic stress disorder symptomatology, and aggression in male juvenile offenders. *Psychological Trauma: Theory, Research, Practice, and Policy, 6*, 184-191. doi:10.1037/a0032509.
- Stover, C., Hahn, H., Im, J. Y., & Berkowitz, S. (2010). Agreement of parent and child reports of trauma exposure and symptoms in the early aftermath of a traumatic event. *Psychological Trauma: Theory, Research, Practice, and Policy, 2*, 159-168. doi: 10.1037/a0019156.
- Strand, V. C., Pasquale, L. E., & Sarmiento, T. L. (2006). *Child and adolescent trauma measures: A review*. Retrieved from <u>http://www.ncswtraumaed.org/wp-content/uploads/2011/07/Child-and-Adolescent-Trauma-Measures_A-Review-with-Measures.pdf</u>

Adolescent Dissociative Experiences Scale (A-DES)

Authors:	Armstrong, J. G., Putnam, F. W., Carlson, E. B., Libero, D. Z., & Smith, S. R. (1997). Development and validation of a measure of adolescent dissociation: The Adolescent Dissociative Experiences Scale. <i>Journal of Nervous and Mental Disease</i> , <i>185</i> , 491-497.
Administration Time:	10-15 mins
Purpose:	The ADES is a self-report measure of normative and pathological dissociation in adolescents. The goal of the measure is to differentiate youth exhibiting clinically significant levels of dissociation (which could represent a possible dissociative disorder, PTSD, borderline personality disorder or an eating disorder) from youth exhibiting more typical dissociative behaviors. The ADES was the first measure developed to assess dissociation in children and adolescents (Armstrong, Putnam, Carlson, Libero & Smith, 1997). The ADES is a screening tool and therefore was not intended to be used as the basis of clinical diagnoses; but rather a tool for identifying youth in need of further assessment.
Administration Procedures:	The ADES is a self-guided, self-report measure. It can be administered individually or in a group setting. There is no corresponding parent report. The measure is completed with paper and pencil.
Target Demographics:	The recommended age range generally includes youth ages 11 to 17 (with some including youth as old as 21). The tool is recommended for use in research and clinical settings with youth exhibiting potential dissociative symptoms. The measure requires a fifth grade reading level.
Description:	The ADES, now it its second edition, was developed as a downward extension of the Dissociative Experiences Scale. It is a 30 item self-report measure consisting of four factor clusters empirically linked to dissociation. Dissociative amnesia items (7 items) reflect memory lapses related to faulty information processing during dissociation. Absorption and imaginative involvement items (6 items) reflect an ability to become so engulfed in fantasy activities that reality is neglected. Passive influence items (5 items) reflect feelings of having no control over one's own body and sensations. Depersonalization and derealization items (11 items) reflect a sense of feeling disconnected from one's own body and the world. Four items reflect experiences of dissociated identity and 3 items address experiences of dissociative disorders and PTSD, the measure is not intended to specifically assess diagnostic criteria. Sample items include, "I have strong feelings that don't know why," and "My body feels as if it doesn't belong to me."

	For each item, respondents are asked to indicate how often the described experience occurs using an 11-point score with qualitative anchors of "never" and "always." All items are written in the first person and worded in the positive direction to reflect coping rather than symptoms. An 11 point scale (ranging 0 to 10) was selected based on authors' experience developing dissociation and PTSD scales as well as the tendency of adolescents to spontaneously rate their experiences on a 10-point scale. Authors also believed a wider range of response options would allow for more reliable distinctions between normal and pathological dissociation. Directions do not provide a specific time frame for which to rate experiences; however respondents are directed not to endorse items based on experiences which occurred while they were under the influence of substances. [NOTE: Keck Seeley, Perosa & Perosa, 2004 amended the original response format to a 6-point scale and concluded that the reduced scale provided a sufficient range to reliably distinguish between normal and pathological dissociation].
	Scoring A total score is obtained by finding the mean of item responses. Users may also calculate scores for each symptoms cluster (Dissociative amnesia, Absorption/ imaginative involvement, Passive influence and Depersonalization/ derealization). Higher scores reflect greater levels of dissociation. There are no defined cut-scores to indicate pathological dissociation; however scores in the range of 3 to 4 indicate possible significant dissociation. It is recommended that those youth undergo further evaluation (Armstrong et al., 1997; Armstrong, Putnam & Carlson, 2001; Diseth & Christie, 2005; Kisiel & Lyons, 2001).
Ownership and Purchase Information:	The ADES is available to the public in Armstrong et al (1997). It can also be obtained through the publisher (Sidran Foundation) or directly from the author (jarmstrong@mizar.usc.edu), although a fee may apply.
Examiner Qualifications & Training Requirements:	There are no noted qualifications required to administer the measure. As it is not intended to be used diagnostically, the scale can be administered and interpreted by non-clinicians.
Samples studied:	 High school students Adolescent psychiatric in- and outpatients Pediatric injury patients Male juvenile-justice detainees (Lancaster, Compton, White, Bowers & Herring, 1998; Walker, 2002)
Psychometric evidence:	Demographic differences: Several studies have supported the finding that ADES scores do not vary systematically by age, gender or race (Armstrong et al., 1997; Brunner, Parzaer, Schuld & Resch, 2000; Farrington, Waller, Smerden & Faupel, 2001; Lemos- Miller & Kearney, 2006; Muris, Merckelbach & Peeters, 2003; Nugent, Sledjeski, Christopher & Delahunty, 2011). One study also asserted that ADES

scores were unrelated to injury severity, socioeconomic status and prior trauma exposure (Nugent et al., 2011).
<u>Internal consistency:</u> Studies collectively indicate strong to excellent internal consistency for ADES total and subscale scores, with alpha coefficients in the range of .90 to .94 and .64 to .85, respectively (Armstrong et al., 1997; Brunner et al., 2000; Carlson, 1996; Farrington et al., 2001; Keck Seeley et al., 2004; Nugent et al., 2011; Smith & Carlson, 1996). Split-half reliability estimates are equally strong (α = .90 to .94; Armstrong et al., 1997; Brunner et al., 2000; Farrington et al., 2001; Smith & Carlson, 1996).
<u>Test-retest reliability</u> In a sample of non-clinical adolescents, 2 week test-retest reliability was reported to be .77 (Smith & Carlson, 1996).
Factor structure Relatively low item-total correlations (<i>r</i> s range .39 to .70, most between .61 and .69) indicate that items do not cluster into distinct factors corresponding with pathological and benign dissociation as proposed by measure developers (Farrington et al., 2001). Factor analyses have supported a model with all items loading onto a single factor that accounts 35 to 40% of model variance (Farrington et al., 2001; Muris et al., 2003).
<u>Construct validity</u> ADES scores have been shown to vary in expected directions in groups of clinical/traumatized and non-clinical/non-traumatized samples. For example, youth receiving inpatient psychiatric services receive higher scores than youth receiving outpatient services (Brunner et al., 2000). Adolescents with dissociative disorders generally score higher than youth with other diagnoses and youth with histories of abuse score higher than youth without such histories (Armstrong et al., 1997; Carlson, 1997). Youth with more personal forms of victimization (i.e., sexual abuse) receive higher ADES scores than youth with histories of other forms of abuse (Keck Seeley et al., 2004; Kisiel & Lyons, 2001). In one study, youth considered "at risk" for experiencing traumatic events, such as juvenile justice detainees, evidenced more "high dissociaters" (i.e., those with ADES scores \geq 5) than a group of community youth (Walker, 2002). Finally, Brunner and colleague (2000) described a dose-response relationship between severity of various types of abuse experiences and ADES scores in a German sample of psychiatric in- and outpatients ages 11 to 19 which were generally in the expected direction.
ADES scores have been found to correlate significantly with other measures of dissociation, including the Dissociative Experiences Scale ($r = .77$; adult version from which the ADES was developed; Carlson, 1997; Smith & Carlson, 1996), the Creative Experiences Questionnaire ($r = .65$; a measure of fantasy proneness; Muris et al., 2003), and the Child Behavior Checklist CBCL Externalizing ($r = .44$) and Internalizing ($r = .33$) scales (Keck Seeley et al., 2004). Similarly, data indicate ADES scores correlate moderately but significantly with scores on the Child Dissociative Checklist, a parent-report measure of child dissociation

	(Kisiel & Lyons, 2001; Nugent et al., 2011). Furthermore, in one study, ADES scores demonstrated a significant positive correlation ($r = .55$) with therapist ratings of youth dissociation (Keck Seeley et al., 2004). <u>Concurrent/Predictive Validity</u> ADES scores are related to a number of poor psychiatric outcomes including characterological fantasy proneness and symptoms of PTSD and other anxiety disorders (rs between .21 and .52; Kisiel & Lyons, 2001; Muris et al., 2003). In one study, ADES total scores accounted for 38% of the variance in patient classifications to non-clinical, PTSD or general psychiatric groups. Although Armstrong and colleagues (1997) asserted that all ADES subscales were effective in differentiating youth with dissociative disorders (Keck Seeley et al., 2004). There is some debate regarding the most appropriate cut-score to identify youth with pathological dissociation. Although test developers recommend a score between 3 and 4, Zoruglu and colleagues (2002) reported mean scores of 6.2, 3.9 and 2.4 in youth with dissociative disorders, PTSD and other affective/anxiety disorders respectively in their sample of Turkish adolescents. Using an amended 6-point response scale, Keck Seeley and colleagues (2004) reported that a total ADES score of .80 correctly classified most of the adolescent females in their sample (some with an abuse history), with reported sensitivity of 87% and specificity of 68%.
Pros:	-Validated for assessment of traumatic stress and complex trauma (Ford et al., 2012)
Cons:	 -Directions do not include clarification for describing experiences occurring under conditions of fatigue, sleep or sensory deprivation, or hypnogogic and hypnopompoic states (Armstrong et al., 2001) -Scores not specifically or highly related to PTSD diagnostic status -No scales assessing response style -Development and validation samples generally small and homogenous

* denotes key citation

^tdenotes inclusion of juvenile justice sample

- *Armstrong, J. J., Putnam, F. F., & Carlson, E. E. (2001). *Adolescent Dissociative Experiences Scale*. Lincoln: University of Nebraska Press.
- *Armstrong, J. G., Putnam, F. W., Carlson, E. B., Libero, D. Z., & Smith, S. R. (1997). Development and validation of a measure of adolescent dissociation: The Adolescent Dissociative Experiences Scale. *Journal of Nervous and Mental Disease*, 185, 491-497. doi:10.1097/00005053-199708000-00003.
- Brunner, R., Parzer, P., Schuld, V., & Resch, F. (2000). Dissociative symptomatology and traumatogenic factors in adolescent psychiatric patients. *Journal of Nervous and Mental Disease*, 188, 71-77. doi:10.1097/00005053-200002000-00002.
- Carlson, E. B. (1997). Trauma assessments: A clinician's guide. Guildford Press: New York.
- Diseth, T. H. (2006). Dissociation following traumatic medical treatment procedures in childhood: A longitudinal follow-up. *Development and Psychopathology*, *18*, 233-251. doi:10.1017/S0954579406060135.
- Diseth, T. H., & Christie, H. J. (2005). Trauma-related dissociative (conversion) disorders in children and adolescents an overview of assessment tools and treatment principles. *Nordic Journal of Psychiatry*, *59*, 278-292. doi:10.1080/08039480500213683.
- Daviss, W., Racusin, R., Fleischer, A., Mooney, D., Ford, J. D., & McHugo, G. J. (2000). Acute stress disorder symptomatology during hospitalization for pediatric injury. *Journal of the American Academy of Child & Adolescent Psychiatry*, 39, 569-575. doi:10.1097/00004583-200005000-00010.
- *Farrington, A., Waller, G., Smerden, J., & Faupel, A. W. (2001). The Adolescent Dissociative Experiences Scale: Psychometric properties and difference in scores across age groups. *Journal* of Nervous and Mental Disease, 189, 722-727. doi:10.1097/00005053-200110000-00010
- *Keck Seeley, S. M., Perosa, S. L., & Perosa, L. M. (2004). A validation study of the Adolescent Dissociative Experiences Scale, *Child Abuse & Neglect*, 28, 755-769. doi: 10.1016/j.chiabu.2004.01.006.
- Kisiel, C. L., & Lyons, J. S. (2001). Dissociation as a mediator of psychopathology among sexually abused children and adolescents. *The American Journal of Psychiatry*, 158, 1034-1039. doi:10.1176/appi.ajp.158.7.1034
- ^tLancaster, W., Compton, D., White, N., Bowers, N., & Herring, P. (1998). MMPI-A and Dissociative Experiences Scale Responses of Violent and Non-Violent Youth Offenders. *Journal of Offender Rehabilitation*, 26, 45-52. doi:10.1300/J076v26n01_03.
- Lemos-Miller, A., & Kearney, C. A. (2006). Depression and ethnicity as intermediary variables among dissociation, trauma-related cognitions, and PTSD symptomatology in youths. *Journal of Nervous and Mental Disease*, 194, 584-590. doi:10.1097/01.nmd.0000230407.12687.ba.
- Muris, P., Merckelbach, H., & Peeters, E. (2003). The links between the Adolescent Dissociative Experiences Scale (A-DES), fantasy proneness, and anxiety symptoms. *Journal of Nervous and Mental Disease*, 191, 18-24. doi:10.1097/00005053-200301000-00004.
- Nugent, N. R., Sledjeski, E. M., Christopher, N. C., & Delahanty, D. L. (2011). The influence of family environment on dissociation in pediatric injury patients. *Clinical Child Psychology & Psychiatry*, *16*, 485-497. doi:10.1177/1359104511406487.
- *Smith, S. R., & Carlson, E. B. (1996). Reliability and validity of the Adolescent Dissociative Experiences Scale. *Dissociation: Progress in the Dissociative Disorders*, 9(2), 125-129.
- Steinberg, M. (1996). Diagnostic tools for assessing dissociation in children and adolescents. *Child and Adolescent Psychiatric Clinics of North America*, 5(2), 333-349.

- ^tWalker, A. (2002). Dissociation in incarcerated juvenile male offenders: A pilot study in Australia. *Psychiatry, Psychology & Law, 9*(1), 56-61.
- Waller, N., Putnam, F. W., & Carlson, E. B. (1996). Types of dissociation and dissociative types: A taxometric analysis of dissociative experiences. *Psychological Methods*, 1, 300-321. doi:10.1037/1082-989X.1.3.300.
- Zoruglu, S. S., Sar, V., Tunzun, U., Tutkun, H., Savas, H. A. (2002). Reliability and validity of the Turkish version of the Adolescent Dissociative Experiences Scale. *Psychiatry & Clinical Neurosciences*, *56*(5), 551-556.

Child and Adolescent Psychiatric Assessment (CAPA)

Authons	Angold Cox Prondergest Putter & Simonoff
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	Information, including glossary, available at <u>http://devepi.duhs.duke.edu/capa.html</u> .
Administration Time:	The amount of time required to complete the CAPA is based on the number of modules administered. In its entirely, the CAPA can take 1-1.5 hours. The Life Events/Posttraumatic Stress Module can be administered independently to reduce time. For youth who endorse few events and no symptoms, the Life Event/PTSD modules can take as little as 10 minutes. For youth with multiple traumatic experiences, the module may take up to 1 hour to complete. The Incapacity section takes approximately 10 minutes to complete.
	In addition to administration time, it generally takes about 45 minutes to code (an entire) CAPA interview and 30 minutes for a supervisor to check coding. Data entry for scoring can take up to 25 minutes.
	In total, interviewers can expect to spend between 20 and 70 minutes administering the Life Events/PTSD and Incapacity modules, plus 60 minutes in coding and data entry for a total time investment of 80 to 130 minutes per interview.
Purpose	The CAPA was developed with the goal of creating a measure that would serve both as a clinical research and epidemiological tool (Angold, Prendergast, Cox, Harrington, Simonoff & Rutter, 1995). As such, it collects information on the onset, duration, frequency and intensity of a range of psychiatric disorders and symptoms as defined by the <i>DSM</i> and <i>ICD</i> and is intended to be used as a diagnostic tool. The Life Events/PTSD module assesses for exposure to potentially traumatic events and PTSD symptoms. The measure focuses on symptoms and events occurring three months prior to the assessment (referred to as the primary period); however symptoms occurring before this period are queried under certain circumstances.
Administration Procedures:	The CAPA was intended to combine clinical interviewing techniques with highly structured epidemiological interview methods. It is generally administered as a semi-structured interview but audio recordings are available for some modules (unknown what modules currently have accompanying audio recordings). Administration requires interviewers to use a predetermined set of questions, along with follow up questions (i.e. probes) where appropriate, to gather information that is compared to extensive coding guidelines provided in the measure glossary. Although interviewers are trained to use discretion in adjusting the format of questions to a child's age and cognitive level, they are required to address all symptoms in the modules and maintain strict adherence to the glossary definitional guidelines. The glossary is relied upon extensively to assist interviewers in making determinations regarding the presence of reported symptoms (Angold & Costello, 2000). Abbreviated definitions of symptoms are provided on the interview schedule to reduce examiner burden. In order to employ the glossary definitions in scoring, interviewers must elicit highly detailed information about symptoms, including examples, to ensure appropriate

	 coding. As such, interviewers are expected to query responses until they can confidently determine the presence or absence of a given symptom (Angold & Costello, 2000). Throughout the interview, the onus is on the interviewer to ensure that respondents (1) understand the question being asked, (2) provide clear information on behavior or feelings relevant to the symptoms, and (3) have the symptom at the level of severity defined in the glossary while using a conversational style. (Angold, Erkanli, Copeland, Goodman, Fisher & Costello, 2012). CAPA developers recommend recording all interviews to verify codes at a later time. Interview scoring is done using a computerized program and diagnoses are not based on the interviewers' observations (Angold & Costello, 2000).
Target Demographics:	The CAPA is intended for use in youth ages 8-18 and their parents. The parent version may be used in younger youth; however the measure has not been testing in that population (Angold & Costello, 2000). The CAPA comes in parent- and child-report forms. There is also a version for use with adolescents living outside the home and young adults called the Young Adult
	Psychiatric Assessment.
Description:	The CAPA is a broad-based measure of psychiatric functioning and psychosocial impairment. The interview is structured in three levels with screening questions at the start of each module that aid in determining whether the module should be administered. These are followed by mandatory and discretionary probes which assist in gathering information necessary for coding. Items generally assess for the presence of symptoms during the three months preceding the interview; a time frame which was based on research indicating that symptom recall decreases precipitously in children and adults between three and five months (Angold & Costello, 2000). Diagnostic categories covered by the measure include disruptive behavior disorders (ADHD, CD, ODD, delinquency, antisocial personality disorder and DBD NOS), mood disorders (MDD, dysthymia, minor depression, mixed anxiety-depression, depression NOS, mania, hypomania), anxiety disorders (GAD, overanxious disorder, SAD, panic disorder, agoraphobia, social phobia, specific phobias, avoidant behavior, OCD, mutism, trichotillomania), eating disorders (anorexia, bulimia, rumination, early childhood eating difficulties), sleep disorders (primary insomnia and hypersonnia, nightmare disorder, sleep terror disorder, sleep walking disorder, bedtime problems), elimination disorders, substance use disorders, tic disorders, psychotic disorders, PTSD, adjustment disorders and somatization symptoms (Angold & Costello, 2000). Additional modules gather information on family structure and functioning, school/work functioning and attitudes toward treatment. Symptoms measured by the CAPA, including PTSD and trauma-related symptoms, are consistent with, but not based on, <i>DSM</i> diagnostic criteria. However, frequency and duration requirements employed in the glossary are consistent with those used in <i>DSM</i> nosology (Wamboldt, Wamboldt, Gavin & McTaggart, 2001). The glossary, which is a central component of the tool, was developed with guidance from well established measures of child trauma and PTSD

	The Life Events section includes 17 potentially traumatic events (i.e., those meeting DSM-IV criterion A), called Group B/high magnitude events. Youth are asked to report on the occurrence of Group B events at any time during their life. These include events such as pregnancy, natural disasters, witnessing of serious violence, exposure to physical violence/abuse, and "any painful event in his or her entire life which has made the interviewee feel terribly bad, upset, frightened, or confused." The Life Events section also includes 15 events that do not meet criterion A but have been associated with anxiety or depression in children (Copeland, Keeler, Angold & Costello, 2012), referred to as Group A/low magnitude events. Youth are asked to report about the occurrence of these events during the three month before the interview. These include stressful but non-life threatening events such as parental separation/divorce, introduction of a step-parent or sibling into the home, relocation, medical illness and loss of peer relationships. The Danger to Life section of the module is used to determine if there was at least reasonable possibility that the youth could have died or experienced severe physical injury as a consequence of exposure to the reported event. This module also facilitates transition into the Posttraumatic Stress section which aids in collection of information related to the effects of stressful event on youths functioning. However, the Posttraumatic Stress module includes subsections that assess symptoms related to acute responses to traumatic events, intrusive ideas, hyperactivity, and dulling along with other symptoms. Interviewee sare directed to respond to questions in this section based on the single event they identify as the most disturbing, but the questions may be repeated to evaluate the consequences of exposure to distinct events. Ratings in this section are based on the single event they identify as the most disturbing, but the questions may be repeated to evaluate the consequences of expo
Ownership and	The CAPA manual and glossary are available for download on the Duke University
Purchase	Center for Developmental Epidemiology website at
Information:	<u>https://devepi.duhs.duke.edu/capa.html</u> free of charge. Review copies of both parent

	and child interviews are available on the site for free as well. Protocols are available for purchase by contacting jduncan@psych.mc.duke.edu PH: 919-687-4686 or Anita Chalmers at (919) 687-4686, ext 230. A list price of \$65 if given but the number of protocols included in this price is unclear. The publisher may be contacted at: Developmental Epidemiology Center Attn: Letitia Huger DUMC Box 3454 Durham, NC 27710 (919) 687-4686 ext 272
Examiner Qualifications & Training Requirements:	Interviewers are required to have at least a bachelor's degree and have completed training with the CAPA developers. Information on training and associated costs can be found at <u>https://devepi.duhs.duke.edu/capa.html</u> . Clinical experience is not required to participate in training. Training typically requires 1 to 2 weeks of classroom training and 1 to 2 weeks of field practice. The cost of training varies based on the number of trainees and the number of modules being used. Training costs can average several hundred dollars per trainee (plus other fixed costs). Certification by a qualified CAPA trainer is required before interviewers can use the CAPA in the field. Certification requires interviewers demonstrate a strong understanding of the glossary and the ability to apply that information in ratings. Following certification, developers recommend ongoing supervision and regular taping of interviews for review.
Samples studied	 Psychiatric in- and outpatients Youth receiving in- and outpatient medical care Community- and school-based samples
Psychometric Evidence: *Note: All statistics pertain to the CAPA as a whole unless noted to be PTSD modules specifically.	Demographic Differences: Although the CAPA has been employed in large epidemiological studies, there are limited data describing the effects of demographic features on outcomes. However, reported gender- and age-related patterns of CAPA diagnoses often reflect expected patterns (i.e., higher rates of anxiety disorders in girls, ADHD in boys, etc.; Angold & Costello, 2000; Angold, Costello & Erkanli, 1999; Costello, Angold, Burns, Erkanli, Stangl & Tweed, 1996). Interrater agreement: Some research suggests that with intensive training and supervision, lay interviewers using the CAPA are able to make accurate and reliable "clinical judgments" about the presence and severity of symptoms (Costello, Egger & Angold, 2005). Across studies, rates of agreement for discrete diagnostic categories typically range from moderate ($\kappa = .50$; ODD/CD) to excellent ($\kappa = 1.00$; substance abuse/ dependence; Angold & Costello, 1995). In a sample of youth receiving inpatient medical treatment, interrater reliability for PTSD diagnoses was excellent ($\kappa = 1.00$; Womboldt et al., 2001). Costello, Angold, March and Fairbank (1998) reported ICCs for symptom scales in the range of 0.95 for child reports and 0.99 for parent reports. Reliability seems to be stronger for parent report than child report ($\kappa = 0.40-0.79$ and 0.45-0.51, respectively; Costello et al., 1998). Rater agreement improves as symptom severity increases and agreement is typically higher

in outpatient samples (Angold & Costello, 1995; Angold et al., 2012). Ratings of child-reported psychosocial impairment also tend to be quite reliable ($\kappa = .77$; Angold & Costello, 1995). In a sample of clinically referred youth ages 10-16, ICCs for *DSM-III-R* PTSD symptom scale scores exceeded 0.90 (Angold & Costello, 2000).

<u>Parent-child agreement:</u> Evidence regarding agreement between parent- and childreported CAPA diagnoses suggests generally moderate agreement. One study reported modest parent-child agreement for symptom onset ($\kappa = .22$; Spearman's rho = .34). Costello et al., (1998) reported κ s of 0.64 and 0.54 for diagnostic agreement for parent and child reports, respectively. In a sample of youth receiving inpatient medical treatment, Womboldt et al., (2001) reported low to moderate agreement for common diagnostic categories ($\kappa = 0.27$ for any externalizing disorder, 0.46 for any anxiety disorder and 0.49 for any depressive disorder). For PTSD symptoms, Costello Angold, March and Fairbank (1998) reported kappas ranging from 0.40 to 0.79 for child- and parent-reported symptoms.

Test-retest reliability: Data regarding CAPA test-retest reliability are varied. Although test developers report "reasonable" test-retest reliability extending to the level of individual symptoms (Angold & Costello, 1995), other authors have reported only modest reliability for ratings of symptom onset, duration and frequency even in the presence (Angold, Erkanli, Costello & Rutter, 1996). In a sample of youth receiving psychiatric care, test-retest reliability ranged from moderate to excellent (k = .52 for separation anxiety and ODD; κ = .95 for substance abuse; Angold & Costello, 1995). Greenhill Pine, March, Birmaher & Riddle (1998) reported testretest reliabilities in the range of $\kappa = 0.78$ for anxiety disorders generally; however neither team reported statistics regarding PTSD diagnoses. In a sample of youth followed over one year, 48% diagnosed at initial assessment carried a diagnosis at follow up, compared to 7% who were not diagnosed in their initial assessment, implying longitudinal consistency (Angold & Costello, 2000). Lay interviewers have been shown capable of attaining good levels of test-retest reliability (Angold & Costello, 1995). In practice, the CAPA should not be used to reassess symptoms in periods shorter than three months.

For the PTSD modules, parent reports tends to be more stable over time than child reports; however reliability in parent reports of some events is still low ($\kappa = 0.25$ for learning about a traumatic event; Costello et al., 1998). Reliability of child-reported exposure to potentially traumatic events varied considerably, with reported kappas ranging from 0.16 to 0.84 (Costello et al., 1998). Reliability for reports of exposure to high magnitude events was slightly better than for reports of low magnitude events (ICC = 0.74 and 0.63, respectively; Costello, Erkanli, Fairbank & Angold, 2002).

<u>Construct validity</u>: Rates of diagnosable psychiatric conditions identified by the CAPA coincide with epidemiological prevalence rates. CAPA-based diagnoses also tend to agree with DISC-based diagnoses, with 76% of youth identified as diagnostic by the DISC also being identified by the CAPA (Angold et al., 2012).

<u>Concurrent/Predictive validity:</u> Data gathered on the CAPA Life Events and PTSD modules indicate that clinically-involved youth report higher rates of exposure to negative events, more posttraumatic stress symptoms and are more often diagnosed

	with PTSD (Costello, Angold et al., 1998; Sandberg, Rutter, Pickles, McGuinness & Angold, 2001). Children identified as more vulnerable also report higher rates of exposure to potentially traumatic events (Costello et al., 2002). Youth who reported exposure to more high magnitude events were more symptomatic than youth reporting exposure to low magnitude events (Copeland et al., 2012).
	A number of studies suggest that CAPA-based diagnoses are often supported by other assessment measures. For example, Angold et al., (2012) reported agreement between DISC and CAPA diagnoses in the range of $\kappa = 0.23$ -0.60 with agreement of $\kappa = 0.61$ for the presence of any diagnosis. However, agreement on anxiety disorders was among the lowest of all diagnostic categories ($\kappa = 0.29$). Other studies have indicated that youth identified as diagnostic by the CAPA are also flagged as symptomatic by the Teacher Report Form of the CBCL and YSR. However, the same authors reported that rates of clinician-rendered diagnoses exceeded rates of CAPA-based diagnoses, indicating the CAPA may underestimate the prevalence of certain psychiatric conditions (Wamboldt et al., 2001).
	CAPA scores have demonstrated utility in predicting a number of psychiatric outcome variables. For instance, CAPA-measured functional impairment has been show to predict utilization of mental health services, even when youth reported subthreshold symptoms and did not meet diagnostic criteria for any distinct condition (Angold & Costello, 2000; Angold, Costello, Farmer, Burns & Erkanli, 1999; Farmer, Burns, Angold & Costello, 1997). CAPA scores have also been linked to self- and parent-reported need for mental health services among young adolescents at-risk for psychiatric impairment (Costello et al., 1996).
Pros:	 Extensive glossary allows for administration by lay interviewers CAPA is recommended as a tool for assessing general mental health needs in children involved with state services (UCDavis) Collects more detailed information than many other measures (e.g., frequency and duration symptom information) Assess exposure and symptoms
Cons	 Coding rules are complex and require considerable knowledge of rating criteria Lengthy and expensive training required Lengthy administration time Many studies did not report statistics on PTSD diagnoses, often because too few cases were identified (even in large samples – suggests concerns regarding sensitivity) A significant amount of published data were derived from a single large-scale epidemiological project (Great Smokey Mountain Study) and was published by the same group of researchers No studies with juvenile justice samples
General Comments:	 Measure developers recommend all CAPA interviews be checked by a supervisor to assure consistency and that interviews are periodically taped for review. Additional information available at https://www.devepi.me.duke.edu The CAPA has been translated into several languages, including Spanish.

* denotes key citation

- Angold, A., & Costello, E. J. (1995). A test-retest reliability study of child-reported psychiatric symptoms and diagnoses using the Child and Adolescent Psychiatric Assessment (CAPA-C). *Psychological Medicine*, 25, 755-762. doi:10.1017/S0033291700034991.
- *Angold, A., & Costello, E. (2000). The Child and Adolescent Psychiatric Assessment (CAPA). *Journal* of the American Academy of Child & Adolescent Psychiatry, 39, 39-48. doi:10.1097/00004583-200001000-00015.
- Angold, A., Costello, E. J., & Erkanli, A. (1999). Comorbidity. *Journal of Child Psychology and Psychiatry*, 40, 57-87. doi:10.1111/1469-7610.00424.
- Angold, A., Costello, J. E., Farmer, E. M. Z., Burns, B. J., & Erkanli, A. (1999). Impaired but undiagnosed. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38(2), 129-137. doi: 10.1097/00004583-199902000-00011.
- Angold, A., Cox, A., Prendergast, M., Rutter, M., & Simonoff, E. (1998, January). *Glossary: Child and Adolescent Psychiatric Assessment*. Retrieved from http://devepi.duhs.duke.edu/eMeasures/CAPA%20glossary.pdf.
- Angold, A., Erkanli, A., Copeland, W., Goodman, R., Fisher, P. W., & Costello, E. (2012). Psychiatric diagnostic interviews for children and adolescents: A comparative study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 51, 506-517. doi:10.1016/j.jaac.2012.02.020.
- Angold, A., Erkanli, A., Farmer, E. Z., Fairbank, J. A., Burns, B. J., Keeler, G., & Costello, E. (2002). Psychiatric disorder, impairment, and service use in rural African American and White youth. *Archives of General Psychiatry*, 59, 893-904. doi:10.1001/archpsyc.59.10.893.
- *Angold, A., Prendergast, M. M., Cox, A. A., Harrington, R. R., Simonoff, E. E., & Rutter, M. M. (1995). The Child and Adolescent Psychiatric Assessment (CAPA). *Psychological Medicine*, 25, 739-753. doi:10.1017/S003329170003498X.
- Brooks, S. J., & Kutcher, S. (2001). Diagnosis and measurement of adolescent depression: A review of commonly utilized instruments. *Journal of Child and Adolescent Psychopharmacology*, 11, 341-376. doi:10.1089/104454601317261546.
- Copeland, W. E., Keeler, G., Angold, A., & Costello, E. (2010). Posttraumatic stress without trauma in children. *The American Journal of Psychiatry*, *167*, 1059-1065. doi:10.1176/appi.ajp.2010.09020178.
- Costello, E., Angold, A., Burns, B. J., Erkanli, A., Stangl, D. K., & Tweed, D. L. (1996). The Great Smoky Mountains study of youth: Functional impairment and serious emotional disturbance. *Archives of General Psychiatry*, 53, 1137-1143. doi:10.1001/archpsyc.1996.01830120077013.
- *Costello, E., Angold, A. A., March, J. J., & Fairbank, J. J. (1998). Life events and post-traumatic stress: The development of a new measure for children and adolescents. *Psychological Medicine, 28*, 1275-1288. doi: 10.1017/S0033291798007569.
- Costello, E., Egger, H., & Angold, A. (2005). 10-Year Research Update Review: The epidemiology of child and adolescent psychiatric disorders: I. Methods and public health burden. *Journal of the American Academy of Child & Adolescent Psychiatry*, 44, 972-986. doi:10.1097/01.chi.0000172552.41596.6f.
- Costello, E. J., Erkanli, A., Fairbank, J A., & Angold, A. (2002). The prevalence of potentially traumatic events in childhood and adolescence. *Journal of Traumatic Stress*, *15*(2), 99-112.
- Costello, E., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of psychiatric disorders in childhood and adolescence. *Archives of General Psychiatry*, 60, 837-844. doi:10.1001/archpsyc.60.8.837.
- Farmer, E. M. Z., Burns, B. J., Angold, A. & Costello, E. (1997). Impact of children's mental health problems on families: Relationships with service use. *Journal of Emotional and Behavioral Disorders*, 5(4), 230-238.

- Greenhill, L. L., Pine, D., March, J., Birmaher, B., & Riddle, M. (1998). Assessment measures in anxiety disorders research. *Psychopharmacology Bulletin*, *34*(2), 155-164.
- Sandberg, S., Rutter, M., Pickles, A., McGuinness, D., & Angold, A. (2001). Do high-threat life events really provoke the onset of psychiatric disorder in children?. *Journal of Child Psychology and Psychiatry*, 42, 523-532. doi:10.1111/1469-7610.00746.
- Simonoff, E., Pickles, A., Meyer, J. M., Silberg, J. L., Maes, H. H., Loeber, R., & ... Eaves, L. J. (1997). The Virginia twin study of adolescent behavioral development: Influence of age, sex, and impairment on rates of disorder. *Archives of General Psychiatry*, 54, 801-808. doi:10.1001/archpsyc.1997.01830210039004.
- Strand, V. C., Pasquale, L. E., & Sarmiento, T. L. (2006). *Child and adolescent trauma measures: A review*. Retrieved from <u>http://www.ncswtraumaed.org/wp-content/uploads/2011/07/Child-and-Adolescent-Trauma-Measures_A-Review-with-Measures.pdf</u>
- Wamboldt, M. Z., Wamboldt, F. S., Gavin, L., & McTaggart, S. (2001). A parent-child relationship scale derived from the Child and Adolescent Psychiatric Assessment (CAPA). *Journal of the American Academy of Child & Adolescent Psychiatry*, 40, 945-953. doi:10.1097/00004583-200108000-00017.

Child Report of Post-Traumatic Symptoms (CROPS)/ Parent Report of Post-Traumatic Symptoms (PROPS)

Authors:	Greenwald, R. & Rubin, A. (1999). Brief assessment of children's post- traumatic symptoms: Development and preliminary validation of parent and child scales. Research on Social Work Practice, 9, 61-75.
Administration Time:	5 minutes to complete each Scoring time: 1 minute
Purpose	Both the CROPS and PROPS assess a broad-spectrum of posttraumatic stress- related symptoms. Measured symptoms correspond with, but are not directly tied to, DSM diagnostic criteria. As a result, it is not intended to be used as a diagnostic tool. Both tools are acceptable for use with children who do not have an identified traumatic event. Measures can also be used to monitor changes in symptoms over time.
Administration Procedures:	The CROPS and PROPS are intended to be administered as paper-and-pencil self-reports but can also be administered as an interview. Scoring is performed by hand.
	Scale developers have published a brief (1 page) manual with administration and scoring instructions. Authors do not make recommendations regarding group versus individual administration.
Target Demographics:	The suggested age range for the CROPS includes youth ages 7 to 17. The PROPS was intended for youth ages 6 to 17. The tools can be used with youth with and without identified traumatic experiences. It has been used in clinical and research settings. Reading level of the tools is estimated at a 3 rd grade level.
Description:	The CROPS is a 26-item self-report scale that assesses posttraumatic symptoms including avoidance, intrusive thoughts/memories and psychological arousal. The scale was developed based on a blending of the results of a meta-analysis of child trauma literature (Fletcher, 1993) and <i>DSM-IV</i> diagnostic criteria. Items were evaluated by child trauma experts for content validity and clarity and piloted for comprehension and sensitivity to change. PROPS items were also peer reviewed in an informal peer review process (Greenwald & Rubin, 1999). The measures were developed jointly to tap youths' relative strength reporting on their internal experiences/feelings and parents' relatively better ability to report on youths' behavior (Strand et al., 2006). Consequently, the CROPS and PROPS assess similar symptoms but have different items with different foci; the CROPS focuses on internal processes (thoughts, feelings) and the PROPS focuses on observable behaviors.

	point Likert-scale (0 = none, 1 = some, 2 = lots). CROPS sample items include, "I try to forget about bad things they have happened," "I feel all alone" "I find it hard to concentrate," I don't feel like doing much," and "I am jumpy or nervous."
	Scoring The CROPS and PROPS are scored by summing responses. Scores on the CROPS range from 0 to 50. Scores on the PROPS range from 0 to 60. On both measures, higher scores reflect more severe symptomology; however the tools were not intended to be used as an indicator of probably PTSD diagnostic status (Newman, 2002). Authors have recommended cut off scores of 19 for the CROPS and 16 for the PROPS as indicators of clinical concern. However, Greenwald and Rubin (1999) caution against the stringent use of any cut off score.
Ownership and Purchase Information:	The CROPS and PROPS can be purchased through the Child Trauma Institute. Following the initial purchase, users are granted unlimited permission to copy the tool for personal/agency use.
	Ricky Greenwald can be contacted through Child Trauma Institute 285 Prospect St., Northampton, MA 01060 (<u>rg@childtrauma.com</u>) (413) 774 – 2340
	The publisher can be contacted at the same address. The items can be purchased online at www.childtrauma.com.
Examiner Qualifications & Training Requirements:	According to test developers, any "competent" person can administer and score the measure with only "a few minutes of training in basic administration." However, interpretation should be done only by a mental health professional. Sale of the testing materials through the publisher is limited to psychologists or those under the supervision of a psychologist.
Samples studied	The CROPS was developed using a volunteer sample of community-based school children ages 8 to 15. Of the 206 participating youth, 83% identified as a racial/ethnic minority. Developers used a community-based sample to obtain a wide range in participants' history of exposure to traumatic events.
	 School students (Greenwald & Rubin, 1999; other unpublished work by Greenwald & colleagues) Juvenile offenders (Greenwald et al., 2001 - unpublished) Sexual abuse, natural disaster, war/combat, immigration-related trauma, low SES, rural (NCTSN, 2005; 2012a)
	• Measure currently being used in school settings, treatment outcome studies, clinical settings (Greenwald & Rubin, 1999)
	• The CROPS and PROPS have been most widely researched in international samples with youth exposed to a range of traumas (results from international studies not reviewed here).

Psychometric evidence:	Demographic differences: Research using U.S. samples has not identified any gender or race/ethnicity effects (Greenwald & Rubin, 1999) associated with the CROPS. However youths' age ($r = .16$) and parental education ($r = .13$) were correlated with scores in the validation sample. PROPS scores appear more susceptible to the influence of demographic characteristics. In the validation sample, PROPS scores demonstrated a modest correlation with youths' age ($r = 0.26$) and ethnicity ($r = 0.24$), with Hispanic and African American youth evidencing the highest scores. Parental education ($r = 0.19$) and locality (urban versus rural; r = 0.19) also correlated weakly with PROPS scores (Greenwald & Rubin, 1999).
	<u>Internal consistency:</u> Authors reported strong internal consistency for CROPS ($\alpha = .91$) and PROPS ($\alpha = .93$) scores in the validation sample. Similar statistics have been reported for subsequent samples with alphas ranging from 0.80 to 0.93 (Georgiades, 2008; NCTSN, 2005; 2012; 2012a). The primary author also reported strong internal consistency ($\alpha = 0.92$) in a sample drawn from a juvenile detention facility (R. Greenwald, personal communication, July 14, 2014).
	<u>Intercorrelations:</u> Greenwald and Rubin (1999) reported modest-to-moderate CROPS item-total correlations in the validation sample ($rs = 0.36 - 0.60$). Correlations were somewhat stronger for the PROPS ($rs = 0.43 - 0.65$). Correlations between CROPS and PROPS scores generally fall in the $r = 0.34 - 0.60$ range (mean $r = 0.44$), which authors report is consistent with findings from the broader literature examining correlation between parent and child PTSD symptom reports (NCTSN, 2005; 2012; 2012a).
	<u>Test-retest reliability</u> Greenwald and Rubin (1999) evaluated test-retest reliability in the validation sample by re-assessing a subset of youth 4 to 6 weeks after the initial assessment. They reported a strong relationship between CROPS ($r = 0.80$) and PROPS ($r = 0.79$) scores. Other sources reference similar levels of reliability over short periods of times (i.e., less than 6 weeks; $rs = 0.70 - 0.80$; NCTSN, 2005; 2012). The primary author reported a correlation of $r = 0.70$ in scores obtained over 6 months in a juvenile justice sample (R. Greenwald, personal communication, July 14, 2014).
	<u>Construct Validity and Factor Structure</u> Authors sought to ensure content and construct validity during measure development by involving reviews by child trauma experts.
	Greenwald and Rubin (1999) reported findings from a factor analysis conducted using CROPS and PROPS data from the validation sample. Findings supported 3-factor solutions for both measures. For the CROPS, factors were moderately correlated ($rs = 0.33 - 0.43$) and reflected a symptoms including sense of self as damaged, self-alienation, guilt and dysphoria (factor 1), somatic symptoms (factor 2) and avoidance and intrusive thoughts (factor 3). PROPS items fell

	into factors reflecting internalizing symptoms, including anxiety, fear, withdrawal and depression (factor 1), externalizing symptoms, including conflictual interactions with others, antisocial behaviors, interpersonal difficulties and overt irritability (factor 2), and somatic symptoms and sleep problems (factor 3). These factors were also highly correlated ($r = 0.52$ -0.67). Although, CROPS and PROPS scores were found to be relatively strongly correlated ($r = 0.60$), authors reported that could be used together without fear of redundancy (Greenwald & Rubin, 1999).
	Concurrent/Convergent and Discriminant Validity In the validation sample, CROPS scores were highly correlated with posttraumatic stress symptoms ($r = 0.60$; R. Greenwald, personal communication, July 14, 2014). Subsequent research supports the relationship between CROPS scores and other measures of posttraumatic stress symptoms (e.g., TSCC; $r = 0.70$) as well as self-reported and clinician-rated histories of trauma exposure (CROPS: $r = 0.48 - 0.60$; Greenwald & Rubin, 1999; NCTSN, 2012a; R. Greenwald, personal communication, July 14, 2014; Saylor, Cowat, Lipovsky, Jackson & Finch, 2003). In a juvenile justice sample, scores correlated with TSCC scores (total score $r = 0.85$; scale scores $rs = 0.63-0.80$; R. Greenwald, personal communication, July 14, 2014). Measure developers also reported that scores correlate in expected directions with measures of distress, family stress, neuroticism and mastery and with the degree of trauma as a child had experienced (Greenwald & Rubin, 1999; Greenwald et al., 2001; NCTSN, 2012). Both measures appear to be sensitive to change occurring over time and with treatment (Georgiades, 2008, NCTSN, 2005; 2012; 2012a; Soberman, Greenwald & Rule, 2002).
	According to NCTSN (2012), the convergent, concurrent and discriminant validity of the CROPS has been studied in diverse clinical and nonclinical samples. However, convergent/concurrent validity of PROPS scores has not been studied in clinical samples (NCTSN, 2012a).
	Predictive validity The predictive validity of the CROPS and PROPS has been largely unstudied. Koverola and colleagues (2007) reported that in a sample of mostly minority youth ages 4-17 referred for mental health services secondary to child abuse or domestic violence exposure, CROPS scores did not differ with respect to treatment engagement or retention.
Pros:	 Simple language makes it appropriate for use with lower IQ youth After initial purchase, measure is free Appears to be equally sensitive to PTSD across genders
Cons:	 Majority of studies conducted with the CROPS have involved school children and the psychometrics with clinical or potentially traumatized populations have not been fully established No standardized norms Development sample was community-based and volunteer with a low response rate (<25%) Item content of both tools has varied somewhat over time, so some

	research reporting psychometrics refers to older versions
General Comments:	• Languages: Bosnian, Dutch, Finnish, French, German, Hindi (CROPS only), Italian, Kinyarwandan, Marathi (CROPS only), Persian, Spanish, Ugandan (PROPS only)

References *denotes key cite ^tdenotes inclusion of juvenile justice sample

- Cook-Cottone, C. (2004). Childhood Posttraumatic Stress Disorder: Diagnosis, Treatment, and School Reintegration. *School Psychology Review*, *33*(1), 127-139.
- Greenwald, R., & Rubin, A. (1999). Assessment of posttraumatic symptoms in children: Development and preliminary validation of parent and child scales. *Research on Social Work Practice*, 9, 61-75. doi:10.1177/104973159900900105.
- ^tGreenwald, R., Rubin, A., Jurkovic, G. J., Wiedemann, J., Russell, A. M., O'Connor, M. B., ... & Weishaar, D. (2002, November). Psychometrics of the CROPS & PROPS in multiple cultures/ translations. Poster session presented at the annual meeting of the International Society for Traumatic Stress Studies, Baltimore, MD.
- ^tGreenwald, R., Rubin, A., Russell, A. M., & O'Connor, M. B. (2002, November). Brief assessment of children's and adolescents' trauma/loss exposure. Poster session presented at the annual meeting of the International Society for Traumatic Stress Studies, Baltimore, MD.
- Georgiades, S. D. (2008). A solution-focused intervention with a youth in a domestic violence situation: Longitudinal evidence. *Contemporary Family Therapy: An International Journal, 30*, 141-151. doi: 10.1007/s10591-008-9067-1.
- Koverola, C., Murtaugh, C. A., Connors, K., Reeves, G., & Papas, M. A. (2007). Children exposed to intra-familial violence: Predictors of attrition and retention in treatment. *Journal of Aggression*, *Maltreatment & Trauma*, 14(4), 19-42. doi:10.1300/J146v14n04_02.
- National Child Traumatic Stress Network (NCTSN). (2005). *Child Report of Post-Traumatic Symptoms*. Retrieved from http://www.nctsnet.org/nctsn_assets/pdfs/measure/CROPS.pdf.
- National Child Traumatic Stress Network (NCTSN). (2012). *Child Report of Post-Traumatic Symptoms*. Retrieved from <u>http://www.nctsn.org/content/child-report-post-traumatic-symptoms</u>.
- National Child Traumatic Stress Network (NCTSN). (2012a). *Parent Report of Post-Traumatic Symptoms*. Retrieved from <u>http://www.nctsn.org/content/parent-report-post-traumatic-stress-symptoms</u>.
- Newman, E. (2002). Assessment of PTSD and trauma exposure in adolescents. *Journal Of Aggression, Maltreatment & Trauma*, 6, 59-77. doi:10.1300/J146v06n01_04.
- Saylor, C.F., Cowart, B.L., Lipovsky, J.A., Jackson, C., & Finch, A.R. (2003). Media exposure to September 11: Elementary school students' experiences and posttraumatic symptoms. *American Behavioral Scientist*, 46, 1622-1642. doi:10.1177/0002764203254619.
- Soberman, G. B., Greenwald, R., & Rule, D. L. (2002). A controlled study of eye movement desensitization and reprocessing (EMDR) for boys with conduct problems. *Journal of Aggression, Maltreatment & Trauma*, 6, 217-236. doi:10.1300/J146v06n01_11.
- Strand, V. C., Pasquale, L. E., & Sarmiento, T. L. (2006). *Child and adolescent trauma measures: A review*. Retrieved from <u>http://www.ncswtraumaed.org/wp-content/uploads/2011/07/Child-and-Adolescent-Trauma-Measures_A-Review-with-Measures.pdf</u>

Trauma Symptom Checklist for Children (TSCC)

Authors:	Briere, J. (1996). Trauma Symptom Checklist for Children, Professional Manual. Odessa, FL: Psychological Assessment Resources.
Administration Time:	10-20 minutes; youth with significant trauma symptoms may require longer Scoring time: 5-10 minutes
Purpose	The TSCC is a self-report measure developed to assess trauma-related symptoms (including emotional, behavioral and cognitive effects of exposure) in children and adolescents who have been exposed to potentially traumatic events. Because youth are not directed to tie symptoms to a specific event, the TSCC is useful in assessing symptoms related to acute, single-event traumas as well as repeated or chronic trauma exposure. Although the TSCC addresses some symptoms of PTSD (e.g., cognitive avoidance, numbing, nightmares and intrusive thoughts), items do not align directly with <i>DSM</i> PTSD diagnostic criteria; therefore it is not intended to be used as a diagnostic tool. Rather, the TSCC is most useful as a screening measure or as part of a comprehensive diagnostic assessment. It can also be used to monitor symptom changes over time or with treatment.
Administration Procedures:	The TSCC was developed as a youth self-report paper-and-pencil measure. Youth answer questions directly into the test booklet, so the measure may be administered in an individual or group setting. Responses are automatically transferred to a scoring page attached to the test booklet to allow for easy hand scoring. Alternatively, a computer scoring program is available. Although specialized training is required to interpret TSCC results, the measure may be administered by laypersons (although it is advisable to have a mental health professional available should youth become distressed while responding to questions).
Target Demographics:	The TSCC was developed for use with youth ages 8 to 16 exposed to a potentially traumatic event. It is appropriate for use in both clinical and research settings. Normative scoring adjustments are available so the TSCC may be used with 17 year olds. Reading level is estimated between a 3 rd and 5 th grade level.
Description:	The TSCC is part of a family of measures developed for the assessment of posttraumatic stress and related symptoms over the life span (ages 3 through adulthood). Other related measures are the Trauma Symptom Checklist for Young Children (TSCYC) and Trauma Symptom Inventory (TSI). In developing the TSCC, Briere began with 75 items representing symptom clusters based on clinical experiences working with traumatized youth and theories of development and child trauma. These items were content-analyzed

by child psychologists with a specialization in trauma treatment and reduced to the 54 that make up the measure.

There are two versions of the TSCC. The 54-item version contains six clinical scales (two with subscales) and two validity scales. The Underresponse validity scale was designed to identify youth who indiscriminately respond to items with "0." It consists of 10 items marked 0 by less than 25% of the standardization sample. Conversely, the Hyperresponse validity scale was designed to identify youth who respond by indiscriminately marking 3s. This scale includes 8 items marked as 3 by less than 5% of the standardization sample. The Anxiety scale (ANX) measures generalized anxiety, hyperarousal. worry and fears and is intended to capture youths' sense of impending danger. The Depression scale (DEP) measures sadness, loneliness, depressive cognitions (e.g., guilt and self-denigration) and impulses to harm oneself. The Anger scale (ANG) measures the extent to which the respondent experiences angry thoughts, feelings and behavior. The Posttraumatic Stress scale (PTS) measures symptom related to PTSD with an emphasis on re-experiencing (e.g., intrusive thoughts, nightmares). The Dissociation scale (DIS) is divided into Overt and Fantasy subscales. The Overt Dissociation subscale measures derealization, emotional numbing and dissociative avoidance. The Fantasy Dissociation subscale measures one's tendency to engage in fantasy, pretending and daydreaming. The Sexual Concerns scale (SC) is divided into Preoccupation and Distress subscales. The Sexual Concerns Preoccupation subscale estimates the frequency of sexual thoughts. The Sexual Concerns Distress scale measures sexual conflicts, fears and unwanted sexual responses. There are also 8 critical items to identify youth who may require immediate intervention (e.g., items reference suicidality, self-injury, desire to harm others, concerns about sexual abuse, etc.). The 44-item version is identical to the 54-item version but does not include the Sexual Concerns scale or subscales.

In completing the scale, youth are not cued to think of any specific event and no time frame for considering symptoms is given. The respondent is presented with a list of thoughts, feelings, and behaviors and is asked to indicate how often each happens to him/her using a 4-point scale (0 = never, 1 = sometimes, 2 = lots of times, and 3 = almost all the time). Sample items include "Feeling mad" (ANG), "Worrying about things" (ANX), "Feeling sad or unhappy" (DEP), "Feeling like I'm not in my body" (DIS), and "Pretending I'm somewhere else (Fantasy DIS).

Scoring

The TSCC can be scored by hand or with a computer scoring program. The design of the test booklet allows for easy hand scoring using the tear-away scoring form attached to the booklet. This form allows for the conversion of raw scores to T scores and includes a graphical depiction of scale elevations.

The TSCC results in a score for each of the validity and clinical indices as well as a total score. Item scores are summed within each subscale and the raw scores are converted to *T*-scores using norms provided in the manual. Norms are provided separately by gender and age (male/female 8-12 years old and 13-

	16 years old). For all clinical scales except Sexual Concerns, <i>T</i> scores between 60 and 64 are considered subclinical, and scores 65 or higher are considered clinically elevated. For the Sexual Concerns scale, scores of 70 or higher are considered clinically elevated. Before proceeding with interpretation, users are directed to examine scores on the validity indices. The manual recommends that profiles with Underresponse scores of $T \ge 70$ and/or Hyperresponse scores of $T \ge 90$ be considered invalid. Profiles with 6 or more missing items, or subscales with 3 or more missing items, are also invalid (Briere, 1996). NOTE: The TSCC is not intended to be used as a diagnostic tool and scale elevations in the clinical range should not be interpreted as indicators of any specific psychiatric diagnosis.
Ownership and Purchase Information:	TSCC materials can be purchased through PAR. The introductory kit includes the professional manual, 25 test booklets, 25 male profile forms and 25 female profile forms and is currently selling for \$178. Additional manuals can be purchased for \$56 each. Additional test booklets and profile forms are sold in packages of 25 for \$68 and \$36, respectively (note: male and female profile forms sold separately). The optional scoring software is available for a one- time fee of \$350. PAR also provides technical assistance and free software updates.
Examiner Qualifications & Training Requirements:	The TSCC is designated by PAR as a "B" level test, meaning that users must have "a degree from an accredited 4-year college or university in Psychology, Counseling, or a closely related field plus satisfactory completion of coursework in Test Interpretation, Psychometrics, and Measurement Theory, Educational Statistics or a closely related area ; OR license or certification from an agency/organization that requires appropriate training and experience in the ethnical and competent use of psychological tests." Test developers have also created administration and interpretation training videos.
Samples studied	The TSCC was standardized on a large ($N = 3,008$) sample of non-clinical youth ages 8-16 (83% between 13 and 16) that included school children and youth who had a relative or who were themselves receiving minor or routine medical care at the Mayo Clinic. Racial/ethnic makeup was as follows: 44% Caucasian, 27% African American, 22% Hispanic, 2% Asian, 4% Other. Briere (1996) reported that the youth also represented diverse geographical and socioeconomic groups.
	 Clinical, treatment-seeking outpatient samples (Berkowitz, Stover & Marans, 2011; Crouch et al, 1999; Goslin, Stover, Berkowitz & Marans, 2013; Lanktree & Briete, 1995; Lanktree et al., 2008; Osterberg, Doss-Jensen, Cusack & de Arellano, 2009) Psychiatric inpatients (Sadowski & Friedrick, 2000) Children with known or suspected abuse or violence exposure; Elliott & Briere, 1994; Hawkins & Radcliffe, 2006; Wekerle, Wolfe, Hawkins, Pittman, Glickman & Lovald, 2001)

	 Children in residential/foster care (Kugler, Bloom, Kaercher, Truax & Storch, 2012; van Vugt, Lanctôt, Paquette, Collin-Vézina & Lemieux., 2014) School students (Singer & Anglin, 1995; Wekerle et al., 2001) Juvenile offenders (Leibowitz, Laser & Burton, 2011) Low SES Rural Wolpaw et al. (2005) reported that use of the TSCC is increasing in forensic settings; however Ford et al., (2012) did not cite any studies applying the TSCC to youth in juvenile justice settings. Many of the samples from studies cited here were largely female and most included children who had experienced primary sexual abuse
Psychometric evidence:	The TSCC is designated by the National Child Traumatic Stress Network as psychometrically mature and extensive data on the measure's psychometric properties have been published. The TSCC has also been used as a standard by which new trauma measures are evaluated (e.g., Crouch et al., 1999).
	In the standardization sample, age and gender were found to interact and influence TSCC scores. As such, separate scoring norms were developed for males and females ages 8-12 and 13-16 year. Typically, younger children tend to score higher on the clinical scales while older children and adolescents tend to score higher on the Underresponse scale. There is no published data indicating racial/ethnic score differences (Briere, 1996; Wolpaw et al., 2005).
	Internal consistency: In the standardization sample, alpha coefficients for the clinical scales ranged from .77 to .89 ($M = 0.83$; range for all scales: $\alpha = .5889$). Subsequent researchers have repeatedly reported good-to-excellent internal consistency for total scores and 5 of the 6 subscales ($\alpha = .8097$ for total score, .6091 for subscales; Balaban, 2009; Crouch et al., 1999; Hawkins & Radcliffe, 2006; Lanktree & Briere, 1995; Leibowitz et al., 2011; Sadowski & Friedrick, 2000; Singer & Anglin, 1995; Strand et al., 2006; van Vugt et al., 2014; Wekerle et al., 2001; Wolpaw et al., 2005). Reported alphas for the Sexual Concerns and Hyperresponse subscales tend to be more moderate ($\alpha = .5877$ and .6685, respectively; Boyle & Viswesvaran, 2003; Briere, 1996; Crouch et al., 1999; NCTSN, 2005 ; Singer & Anglin, 1995; Strand et al., 2006; Wolpaw et al., 2005). Sadowski and Friedrick reported satisfactory split-half reliability in a sample of adolescent psychiatric inpatients (Spearman-Brown $r = .97$).
	<u>Intercorrelations:</u> Reported item-to-scale and interitem correlations tend to be in the moderate to high range. In a sample of youth in residential foster care, Kugler et al (2023) reported correlations among ANX, DEP, ANG, PTS and DIS subscales in the range of $r = .5282$. Sadowski and Friedrick (2000) reported similar findings in a sample of adolescent psychiatric inpatients, with item-scale correlations in the range of $r = .5085$, subscale intercorrelations of $r = .3286$ and scale-

to-total correlations of $r = .5489$. <u>Test-retest reliability</u> Reported test-retest reliability statistics range from $r = 0.51$ to 0.81. However, data demonstrating changes in scores with therapy and over time are described as well as guidelines related to the re-administration of TSCC over time for purposes of tracking change.
<u>Construct Validity and Factor Structure</u> The six clinical scales were developed on a combination of theories of development and child trauma and the clinical experiences of experts in the field of child trauma. Only two subscales (Overt and Fantast Dissociation) were developed on the basis of factor analysis (Wolpaw et al., 2005). Limited attention has been given to exploring the empirical basis and support for the structuring of the measure and experts have called for confirmatory factor analytic studies to address this (Boyle & Viswesvaran, 2003). In the only study I located that included a factor analysis, Sadowski and Friedrick (2000) reported that in a sample of adolescent psychiatric inpatients, the model of best fit included a single factor reflecting affective distress related to negative life experiences, which accounted for 36.8% of the total variance. According to NCTSN, the TSCC's factorial validity has been validated in both clinical and non-clinical samples.
Concurrent/Convergent and Discriminant Validity Convergent/concurrent and discriminant validity have been evaluated in diverse clinical and nonclinical samples. Elevated TSCC scores are positively and significantly correlated with history of exposure to potentially traumatic events in community-based, treatment-seeking and CPS-involved youth, explaining up to 29% and 27% of the variance in total and subscale scores, respectively (Boyle & Viswesvaran, 2003; Carlson, 1997; Singer & Anglin, 1995; Wekerle et al., 2001). The PTS and ANG subscales may be particularly sensitive to history of trauma exposure (Goslin et al., 2013). Furthermore, scores in youth diagnosed with PTSD tend to be higher than scores of youth without such a diagnosis (Wolpaw et al., 2005), although this has not been consistently replicated (e.g., Sadowski & Friedrick, 2000). Similarly, TSCC scores tend to vary in the expected directions in samples of youth with known or suspected histories of sexual abuse relative to youth without such histories (Elliott & Briere, 1994; NCTSN, 2005).
The TSCC has demonstrated strong correlations with other established measures of psychopathology in children, including the Child Behavior Checklist ($rs = .2282$, mean $r = .67$; Boyle & Viswesvaran, 2003; Carlson, 1997; Hawkins & Radcliffe, 2006; Singer & Anglin, 1995). DEP, ANX and PTS subscales have shown the strongest correlations with other measures of internalizing symptoms (such as Children's Depression Inventory, Children's Manifest Anxiety Scale and Children's Impact of Traumatic Events-Revised, MMPI-2 Scale 2, Beck Depression Inventory, and SCL-90-R anxiety factor score; $rs = .5382$; Crouch et al., 1999; Hawkins & Radcliffe, 2006; NCTSN, 2005; Sadowski & Friedrick, 2000; Singer & Anglin, 1995) while ANG, DIS and SC subscales had demonstrated strong correlations with measures of externalizing symptoms (such as the Adolescent Dissociative Experiences

Pros:

	 Gender/age norms are a strength – as this split accurately reflects current understanding of the role of development and gender on susceptibility to and expression of trauma-related symptoms (Wolpaw et al., 2005) TSCC is the only youth PTSD measure with validity scales. It is also the only normed scale that assesses sexual concerns in this age group. Able to assess symptoms related to chronic or multiple trauma exposure because responses are not tied to a single event. Is also appropriate for use with youth who have not disclosed abuse as measure does not orient respondents to an abuse experience. Has been studied in child welfare samples
Cons:	 Cannot be used as a diagnostic tool as it does not comprehensively assess PTSD - items do not fully overlap with DSM diagnostic criteria. Therefore, additional resources would need to be invested if diagnosis is the ultimate goal. Standardization sample drawn from non-clinical youth in the Midwestern US PTSD subscale does not represent a comprehensive assessment of PTSD symptomology (mostly intrusion items).
General Comments:	 Many studies looked at factors that predicted TSCC scores, but fewer examined predictive validity of those scores Has been used primarily with children who have experienced sexual abuse Translations: Chinese, Dutch, French, Japanese, Latvian, Slovenian, Spanish, Swedish

References

*denotes key cite

^tdenotes inclusion of juvenile justice sample

- Balaban, V. (2009). Assessment of children. In E. B. Foa, T. M. Keane, M. J. Friedman, J. A. Cohen (Eds.), *Effective treatments for PTSD: Practice guidelines from the International Society for Traumatic Stress Studies (2nd ed.)* (pp. 62-80). New York, NY US: Guilford Press.
- Berkowitz, S. J., Stover, C., & Marans, S. R. (2011). The Child and Family Traumatic Stress Intervention: Secondary prevention for youth at risk of developing PTSD. *Journal of Child Psychology and Psychiatry*, 52, 676-685. doi:10.1111/j.1469-7610.2010.02321.x.
- *Boyle, G. J. & Viswesvaran, C. (2003). Review of the Trauma Symptom Checklist for Children. In B. S. Plake, J. C. Impara, R. A. Spies, L. L. Murphy (Eds.), *The fifteenth mental measurements yearbook* (pp. 974-976). Lincoln, NE: Buros Institute of Mental Measurements.
- Briere, J. (n.d.). *Trauma Symptom Checklist for Children (TSCC)*. Retrieved from <u>http://www.johnbriere.com/tscc.htm</u>.
- Carlson, E. B. (1997). Trauma assessments: A clinician's guide. Guildford Press: New York.
- Cook-Cottone, C. (2004). Childhood posttraumatic stress disorder: Diagnosis, treatment, and school reintegration. *School Psychology Review*, *33*(1), 127-139.
- Crouch, J. L., Smith, D. W., Ezzell, C. E., & Saunders, B. E. (1999). Measuring reactions to sexual trauma among children: Comparing the Children's Impact of Traumatic Events Scale and the Trauma Symptom Checklist for Children. *Child Maltreatment*, *4*, 255-263. doi:10.1177/1077559599004003006.
- *Elhai, J. D., Gray, M. J., Kashdan, T. B., & Franklin, C. (2005). Which instruments are most commonly used to assess traumatic event exposure and posttraumatic effects?: A survey of traumatic stress professionals. *Journal of Traumatic Stress*, *18*, 541-545. doi:10.1002/jts.20062.
- Elliott, D. M., & Briere, J. (1994). Forensic sexual abuse evaluations of older children: Disclosures and symptomatology. *Behavioral Sciences & the Law*, *12*, 261-277. doi:10.1002/bsl.2370120306.
- Ford, J. D., Chapman, J., Connor, D. F., & Cruise, K. R. (2012). Complex trauma and aggression in secure juvenile justice settings. *Criminal Justice and Behavior*, 39, 694-724. doi:10.1177/0093854812436957.
- Fricker, A. E., & Smith, D. W. (2001). Trauma specific versus generic measurement of distress and the validity of self-reported symptoms in sexually abused children. *Journal of Child Sexual Abuse*, 10, 51-66. doi: 10.1300/J070v10n04_04.
- Goslin, M., Stover, C. S., Berkowitz, S & Marans, S. (2013). Identifying youth at risk for difficulties following a traumatic event: Pre-event factors are associated with acute symptomatology. *Journal of Traumatic Stress*, *26*(4), 475-482.
- Hawkins, S., & Radcliffe, J. (2006). Current measures of PTSD for children and adolescents. *Journal of Pediatric Psychology*, *31*, 420-430. doi:10.1093/jpepsy/jsj039.
- Kugler, B. B., Bloom, M., Kaercher, L. B., Truax, T. V., & Storch, E. A. (2012). Somatic symptoms in traumatized children and adolescents. *Child Psychiatry & Human Development*, 43(5), 661-673.
- Lanktree, C. B., & Briere, J. (1995). Outcome of therapy for sexually abused children: A repeated measures study. *Child Abuse & Neglect*, *19*, 1145-1155. doi:10.1016/0145-2134(95)00075-J.
- Lanktree, C. B., Gilbert, A. M., Briere, J., Taylor, N., Chen, K., Maida, C. A., & Saltzman, W. R. (2008). Multi-informant assessment of maltreated children: Convergent and discriminant validity of the TSCC and TSCYC. *Child Abuse & Neglect*, 32, 621-625. doi:10.1016/j.chiabu.2007.10.003.
- ^tLeibowitz, G. S., Laser, J. A., & Burton, D. L. (2011). Exploring the relationships between dissociation, victimization, and juvenile sexual offending. *Journal of Trauma & Dissociation*, *12*, 38-52. doi:10.1080/15299732.2010.496143.

- Mertin, P., & Mohr, P. B. (2002). Incidence and correlates of posttraumatic symptoms in children from backgrounds of domestic violence. *Violence and Victims*, 17, 555-567. doi: 10.1891/vivi.17.5.555.33712.
- National Center for PTSD. (January 3, 2014). *Trauma Symptom Checklist for Children (TSCC)*. Retrieved from the U.S. Department of Veterans Affairs website. http://www.ptsd.va.gov/professional/assessment/child/tscc.asp
- National Child Traumatic Stress Network [NCTSN] (2005). *Trauma Symptom Checklist for Children*. Retrieved from NCTSN Measure Review Database http://www.nctsnet.org/nctsn_assets/pdfs/measure/TSCC.pdf.
- National Child Traumatic Stress Network [NCTSN] (2012). Trauma Symptom Checklist for Children. Retrieved from <u>http://www.nctsnet.org/content/trauma-symptom-checklist-children</u>.
- Osterberg, L. D., Doss-Jensen, A., Cusack, K. J., & de Arellano, M. A. (2009). Diagnostic practices for traumatized youths: Do clinicians incorporate symptom scale results? *Community Mental Health Journal*, 45, 497-507. doi: 10.1007/s10597-009-9258-8.
- Psychological Assessment Resources (2012). Trauma Symptom Checklist for Children (TSCC). Retrieved from <u>http://www4.parinc.com/Products/Product.aspx?Productid=TSCC</u>.
- *Sadowski, C. M. & Friedrick, W. N. (2000). Psychometric properties of the Trauma Symptom Checklist for Children (TSCC) with psychiatrically hospitalized adolescents. *Child Maltreatment*, 5(4), 364-371.
- Singer, M. I., & Anglin, T. (1995). Adolescents' exposure to violence and associated symptoms of psychological trauma. *Journal of the American Medical Association*, 273(6), 477-482.
- Strand, V. C., Pasquale, L. E., & Sarmiento, T. L. (2006). *Child and adolescent trauma measures: A review*. Retrieved from <u>http://www.ncswtraumaed.org/wp-content/uploads/2011/07/Child-and-Adolescent-Trauma-Measures_A-Review-with-Measures.pdf</u>
- van Vugt, E., Lanctôt, N., Paquette, G., Collin-Vézina, D., & Lemieux, A. (2014). Girls in residential care: From child maltreatment to trauma-related symptoms in emerging adulthood. *Child Abuse & Neglect*, *38*, 114-122. doi:10.1016/j.chiabu.2013.10.015.
- ^t*Wolpaw, J., Ford, J. D., Newman, E., Davis, J. L., & Briere, J. (2005). Trauma Symptom Checklist for Children. In T. Grisso, G. Vincent, D. Seagrave (Eds.), *Mental health screening and assessment in juvenile justice* (pp. 152-165). New York, NY: Guilford Press.
- Wekerle, C., Wolfe, D. A., Hawkins, D., Pittman, A., Glickman, A., & Lovald, B. E. (2001). Childhood maltreatment, posttraumatic stress symptomatology, and adolescent date violence: Considering the value of adolescent perceptions of abuse and a trauma meditational model. *Developmental* and Psychopathology, 13(4), 847-871.
- Wherry, J. N., Graves, L. E., Rhodes, H. M. (2008). The convergent validity of the Trauma Symptom Checklist for Young Children for a sample of sexually abused outpatients. Journal of Child Sexual Abuse, 17(1), 38-50.