

# Development and Testing of the Child Exposure to Domestic Violence (CEDV) Scale

Jeffrey L. Edleson, Ph.D., and Narae Shin, M.S.W., Ph.D. student, School of Social Work



## Abstract

This study describes the development and testing of a 42-item self-administered Child Exposure to Domestic Violence (CEDV) Scale for children ages 10 to 16. The CEDV was administered to 65 children, ages 10 to 16 years of age, who were receiving services from several domestic violence prevention organizations. The results of validity and reliability tests show that the CEDV is a valid and reliable measure of the level of children's self-reported exposure to domestic violence.

### Example 1. Level of Violence

How often has your mom's partner ruined, broken or destroyed something on purpose, like punching a wall, ripping a phone cord out of the wall, smashing a picture, or things like that?

Never Sometimes A lot

Circle never, then go to the next question.

How did you know about it?

= I saw the outcome (like someone was hurt, something was broken, or the police came).

= I heard about it afterwards.

= I heard it while it was happening.

= I saw it from far away while it was happening.

= I saw it and was near while it was happening.

### Example 2. Level of Involvement

When your mom's partner hurts your mom, how often have you hollered or yelled something at them from a different room than where the fight was taking place?

Never Sometimes A lot

### Example 3. Other Risk Factors

How often do you worry about your mom getting drunk or taking drugs?

Never Sometimes A lot

How often have you seen someone being hurt or killed in a video game?

The higher the scores on each area of the CEDV indicate greater exposure, involvement and risks.

## Procedure

Sixty-nine children in three programs with four shelters and multiple community programs were administered the CEDV. Verbal consent was given by mothers/legal guardians recruited by program staff, and verbal assent was obtained from children.

The children were asked to complete *Things I've Heard and Seen* (TISH, Richters & Martinez, 1990) at the same time the first CEDV was administered, in order to establish convergent validity. After one week, the children were asked to retake the CEDV in order to establish test-retest reliability of the measure.

Children were offered a \$25 gift card for completion of both administrations. Program staff administered the CEDV to children in groups or individually. The research team never knew the identity of a child.

## Establishing the CEDV's Properties

- Test-retest reliability  
CEDV: twice, one week apart
- Internal consistency reliability  
Cronbach's alpha coefficient  
Content and face validity
- Development process  
Expert judge review
- Convergent validity  
TISH once concurrent with first CEDV

## Results

The Cronbach's alpha coefficient for all but one subscale of the CEDV ranged from  $\alpha = .59$  to  $.85$  at the first week and the overall  $\alpha$  of CEDV was a strong  $.86$  as seen in Table 1. Relatively high alpha coefficients indicate that questions are measuring the same general construct.

CEDV	M		SD		Alphas		N of items	Total Range
	Week 1	Week 2	Week 1	Week 2	Week 1	Week 2		
Total	24.60	24.28	8.58	9.57	.86	.84	33	0-66
Violence	6.06	5.76	3.45	3.20	.78	.74	10	0-20
Home Exposure	7.33	7.07	6.30	5.13	.85	.76	(10) <sup>a</sup>	(0-50) <sup>b</sup>
Community Exposure	8.45	8.49	2.62	2.87	.64	.71	8	0-16
Involvement	4.32	5.06	2.81	3.41	.67	.50	7	0-14
Risk Factors	4.06	3.97	1.61	1.96	.24	.60	4	0-8
Victimization	1.23	1.05	1.29	1.38	.59	.70	4	0-8

Table 1: Means, Standard Deviations and Reliability Coefficients for the CEDV

According to Table 2, the Pearson's correlation coefficient between two time points for each subscale ranged from  $r = .57$  to  $.70$ , and all of them were statistically significant at  $p < .001$ . These reveal that the children responded consistently to the survey.

	Mean (SD)		r	Paired t-test	
	Week 1	Week 2		t	p
Violence	6.06 (3.45)	5.76 (3.20)	.684**	.564	.576
Home Exposure	7.33 (6.30)	7.07 (5.13)	.701**	.336	.739
Community Exposure	8.45 (2.62)	8.49 (2.87)	.674**	.173	.863
Involvement	4.32 (2.81)	5.06 (3.41)	.570**	-2.154*	.035
Risk factors	4.06 (1.61)	3.97 (1.96)	.632**	.410	.684
Victimization	1.23 (1.29)	1.05 (1.38)	.571**	1.119	.267

Table 2: Test-retest reliability

To assess convergent validity, scores for the CEDV and TISH, which are designed to measure the same constructs, were compared. Statistically significant and positive correlations between two scales indicate these scales measure similar content.

		r
CEDV vs. TISH		
	At Home	.494**
	In Community	.397**

Table 3: Comparison of CEDV and TISH

\*\* p < .001.

## Conclusion

CEDV appears to be a valid and reliable measure of child exposure.

After completing the study and continuing to consult with measurement development experts we have decided to further revise the measure in several ways:

- Shorten some items and simplify them by bulleting examples;
- Change the rating scale from a three-point to a four-point scale to give children a wider range of possible answers; and
- Test this using an online version.

More information in detail is available on the MINCAVA website: <<http://www.mincava.umn.edu/cedv/>>

## Introduction

Exposure to domestic violence is increasingly recognized as having a negative impact on child development.

- Range: 10% to 20% annually, resulting in 7 to 14 million children exposed each year (Carlson, 2000)
- 40.2% of battered women in US national survey reported their children exposed to violent incidents (NVAWS, 2003)
- Exposure to domestic violence correlates highly with children's behavioral problems, including externalized behaviors such as aggression and disobedience, and the internalized behaviors such as depression, sadness and lack of self-confidence (Jouriles et al., 1996).

Most existing scales are inadequate because:

- Few focus on domestic violence exposure;
- Few collect data on multiple factors such as level of violence, exposure, involvement in events, and other risks/poly-victims; and
- Few collect child self-reports.

There is a need for standardized and multidimensional methods of measuring children's exposure to adult domestic violence.

## Method

The research team gathered question items from a number of existing surveys and interview guides based on key content areas identified in an earlier review (Edleson et al., 2007).

A panel of nine international expert judges working with children exposed to domestic violence was invited to review each item online. A revised CEDV based on expert judge reviews was then subjected to a pilot test with 10 children. Based on the children's responses to the pilot test, the CEDV was again revised for testing.


In brief, the CEDV is:

- Self-administered;
- Targeted to 10-16 year olds;
- Consists of 33 key questions and 9 demographic questions; and
- Focuses on measuring:
  - Level of violence in the home;
  - Exposure to each form of violence in the home;
  - Exposure to other forms of violence outside the home;
  - Child involvement in violent events; and
  - Other risk and protective factors.

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*In depth assessments of children's exposure to adult domestic violence.*

Welcome to the Child Exposure to Domestic Violence (CEDV) Scale homepage. This is one of few measurement tools for use with children exposed to domestic violence. We are making the CEDV freely accessible through this website.

The purpose of the tool is to provide practicing professionals and researchers with a standard method to measure the level of exposure to domestic violence that a child may have experienced, allowing for a recognition of a continuum of child experiences and the need for corresponding continuum of interventions and practice techniques. It is designed to be self-administered by 10 to 16 year old children.

Please see the User Manual for more detailed information on the CEDV and how to administer it. And read the two articles we've produced in preparing the CEDV. You may need to install Adobe's free Acrobat Reader to access the CEDV in print, the User Manual and the CEDV articles.

We would like to thank the staff, mothers and children associated with Cornerstone, the Tubman Family Alliance and the Domestic Abuse Project in Minnesota for their cooperation in developing the CEDV.

### Contact Information:

Jeffrey L. Edleson: jedleson@umn.edu  
Narae Shin: shin077@umn.edu

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