

EXECUTIVE SUMMARY

Summary of Findings Related to Efficacy of Divorce Education Relative to ACE Domains & Co-Parenting Quality

The enclosed report details the methodology and findings for a study conducted on the efficacy of divorce education programming (Successful Co-Parenting After Divorce; SCAD) investigating participants' Adverse Childhood Experiences (ACEs) and the quality of their co-parenting relationship. Key elements of study design and key findings include:

1. Parents viewed a free, open access, university-sponsored SCAD Curriculum online. They were asked to first complete a pre-test gauging their attitudes and baseline co-parenting behaviors (before taking the curriculum) and were asked the same questions about their attitudes after taking the training (post-test).
2. Parents' baseline co-parenting quality was measured as a pre-test only (using a previously validated scale) to assess baseline levels of the *quality of co-parenting behaviors* across four empirically-supported areas (support; overt conflict; self-controlled covert conflict; externally-controlled covert conflict). A composite representing all four domains, with conflict domains reversed scored, was created. Thus, higher scores indicating higher quality co-parental relationships.
3. In order to determine whether the online co-parenting training helped change parents' attitudes toward their coparent, targeted co-parenting attitudes were assessed at both pre-test and post-test. These included attitudes about *post-divorce parenting* in general, *child focused* attitudes, and attitudes about the *former partner*.
4. Four domains/categories of ACEs were also studied. Parents filled out an ACEs survey on these domains: *Neglect*, *Abuse*, *Environmental*, and *Household*. See Appendix A for a description of each.
5. Parents in this sample ($n = 505$) had on average 5 childhood traumas (range = 0-13), and only about **5.3% of the sample reported no childhood traumas**. Approximately **70.5% of the sample reported 4 or more ACEs**, a known cutoff for long-term health issues.
 - 32% had at least one neglect-related trauma (*physical and emotional neglect*)
 - 77% had at least one abuse-related trauma (*physical, emotional, and sexual abuse*)
 - 85% had at least one environmental trauma (*community, collective, and peer violence*)
 - 84% had at least one household trauma (*mental health issues, alcohol or drug abuse, or incarceration of somebody in the home; divorce or death of a parent; household violence*)
6. Differences in Co-Parenting Quality - Baseline co-parenting quality was reported to be **higher** in those parents who had experienced **fewer than four** traumas as children – a finding that holds across all categories of trauma. This suggests that those parents who did not experience four or more ACEs and who participate in divorce education classes may have higher quality relationships (with their co-parent) in place prior to taking the

online co-parenting course, and in turn, may have a less substantial change in their co-parenting relationship to be made based on the recommendations of the training. It is also possible that parents who have not experienced childhood trauma may have an easier time applying the co-parenting communication and conflict reduction techniques recommended by the training program.

7. The Impact of Environmental Trauma - For parents who had experienced environmental trauma (community, collective, and peer violence), targeted attitudes toward *post-divorce parenting* (e.g., I have confidence in my parenting skills) and *child focused* attitudes (e.g., My actions during the divorce will affect my child) **had a better chance of positively changing** from pre-test to post-test. If a parent has experienced environmental trauma, their attitudes (of being child focused, and toward post-divorce parenting overall) seem more flexible.
8. The Impact of Neglect - For parents who had experienced neglect, targeted attitudes about the *former spouse relationship* (e.g., I understand that my former spouse has strengths that can benefit our child) had **less of a chance of positively changing** from pre-test to post-test. If a parent has experienced neglect, their attitudes (toward the former partner) seem less flexible. In addition, for those who experienced neglect the quality of the co-parenting relationship reported at pretest does not predict the attitudes about the former spouse post-test, a finding that is contrary to the experience of parents without childhood neglect.
9. It is worth noting that 94% of the parents in this study that had experienced neglect also experienced environmental traumas. However, the impact of the environmental trauma on parents' attitudes (toward post-divorce parenting, generally and toward child focused issues) remained the same with or without neglect.
10. No significant differences were found in the impact of the training on parent attitudes when the parent experienced abuse-related ACEs compared to those who had not experienced abuse during childhood.
11. No significant differences in the impact of the training on attitudes were found for those with household (mental health issues, alcohol or drug abuse, or incarceration of somebody in the home; divorce or death of a parent; household violence) traumas compared to those who had not experienced household traumas.

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Method

Participants & Procedure

The current study draws data from a sample of participants ($n = 505$) who participated in a divorce education training program (*Successful Co-Parenting After Divorce*; see Ferraro, Malespin, Oehme, Bruker, & Opel, 2016) and associated surveys. Inclusion criteria required that participants were either divorced or in the process of divorcing with at least one shared minor child from the relationship that was being or had been dissolved. Participants were predominantly female (73.86%), highly educated (38.48% had at least a Bachelor's degree), on average 36.77 years of age ($SD = 8.01$), and identified predominantly as non-Hispanic White or Caucasian (77.59%); 8.25% identified as Black or African American, 9.73% identified as

Hispanic or Latino, and 4.44% identified as Asian or other. Participants had, on average, 2.18 ($SD = 1.14$) children. Participants with multiple children (70.30%) were instructed to refer to their youngest child from their most recent marriage (target child). The target child was on average 7.09 ($SD = 4.60$) years old and slightly more likely to be female (52.84%) than male (47.16%). Participants were most likely to have primary physical custody of the target child (53.30%); 13.92% identified as nonresident, 29.72% identified shared physical custody with their former partner, and the remaining 3.07% identified an alternative physical custody situation or a physical custody determination that was yet to be determined.

Measures

Childhood Trauma. Parent's childhood trauma was studied using the Adverse Childhood Experiences International Questionnaire (ACE-IQ; World Health Organization, 2011). Thirteen domains of childhood trauma were assessed and aggregated into four omnibus priori categories: (1) *neglect*, which included indicators of physical neglect and emotional neglect; (2) *abuse*, which included indicators of physical abuse, emotional abuse, and sexual abuse; (3) *environmental*, which included indicators of community violence, collective violence, and peer violence; and, (4) *household*, which included indicators of the divorce or death of a parent, mental health issues for somebody in the home, alcohol or drug abuse by somebody in the home, incarceration of somebody in the home, and household violence. Responses were dichotomized to represent the presence of any trauma or no trauma in any given omnibus category. As a whole, parents in this sample had an average of 5.43 ($SD = 3.11$; range 0-13) identified childhood traumas. 32.28% identified at least one neglect-related trauma, 76.89% identified at least one abuse-related trauma, 84.66% identified at least one environmental trauma, and 83.76% identified at least one household trauma.

Co-Parenting Quality. To assess the quality of the co-parenting relationship, a 12-item short form of the Multidimensional Co-Parenting Scale for Dissolved Relationships (Ferraro, Lucier-Greer, & Oehme, 2018; Ferraro, Pippert, & Duncan, 2019) was used. Responses ranged from (1) *Never* to (6) *Always* and sample items included: “I criticize or belittle my former partner” and “We support each other during difficult parenting decisions.” Items that represented subconstructs of overt or covert conflict were reverse scored; higher scores indicated higher quality co-parenting relationships ($\alpha=.887$, $M = 4.341$, $SD = 1.012$).

Attitudes. An adapted version of the Parental Experiences Scale from the UpStart Parent Survey evaluation (Benzies et al., 2013) was used; subscales were utilized consistent with a previously validated factor structure (Ferraro, Oehme, Bruker, Arpan, & Opel, 2018). Targeted attitudes were *Post-Divorce Parenting* (four items, $\alpha = .746$, $M = 5.905$, $SD = 1.027$ [pre-test]; $\alpha = .829$, $M = 6.219$, $SD = 0.913$ [post-test]), *Child Focused* (two items, $\alpha = .623$, $M = 5.654$, $SD = 1.478$ [pre-test]; $\alpha = .762$, $M = 6.160$, $SD = 1.292$ [post-test]), and *Former Spouse Relationship* (six items, $\alpha = .884$, $M = 5.076$, $SD = 1.463$ [pre-test]; $\alpha = .908$, $M = 5.662$, $SD = 1.268$ [post-test]). Sample items included: “I have confidence in my parenting skills” [Post-Divorce Parenting], “My actions during the divorce will affect my child” [Child Focused], and “I understand that my former spouse has strengths that can benefit our child” [Former Spouse Relationship], with responses ranging from (1) *Strongly Disagree* to (7) *Strongly Agree*.

Covariates. In the analyses described herein, two control variables were included based upon empirical support for their importance in explaining attitudes about parenting: target child’s age and participant gender.

Analysis

First, independent samples t tests were used to examine group differences on variables of interest between (1) those with no prior ACEs (1 or more) compared to those with at least one ACE present, and (2) those with an elevated numbers of ACEs (4 or more) compared to those with three or less ACEs present. Then, single-sample t tests were used to examine differences between groups (those who completed the training and those who did not) at pre-test to measure the impact, if any, of attrition. Then, paired-samples t tests were used to assess change in targeted attitudes from pre-test to post-test. Finally, a series of structural equation models were fit using AMOS 25. Three goodness-of-fit statistics were used to examine model fit: the Root Mean Square Error of Approximation (RMSEA), the chi-square/degrees of freedom ratio (χ^2/df ratio), and the Comparative Fit Index (CFI). RMSEA values of .08 or less and a χ^2/df ratio between 3 and 1 indicate reasonable fit (Browne & Cudeck, 1993; Carmines & McIver, 1981), while a CFI in excess of .95 indicates good model fit (Bentler & Bonnett, 1980; Hu & Bentler, 1999). For each omnibus trauma category (neglect, abuse, environmental, and household) a constrained model (where parameters were held constant) and an unconstrained model (where parameters were allowed to freely vary) were specified and compared. Pairwise parameters were used to determine path-level variation across models consistent with the critical ratio (CR) difference method, as indicated by a CR in excess of |1.96|.

Findings

Preliminary Analyses

Results of the independent samples t tests revealed significant differences between those with 4 or more childhood traumas and those with less than 4 childhood traumas. Those with greater than four traumas had lower baseline scores on attitudes about the former spouse

relationship ($\Delta M = 0.454, t = 3.281, p = .001$), post-divorce parenting attitudes ($\Delta M = 0.195, t = 1.972, p = .050$), and the quality of co-parenting behavior ($\Delta M = 0.483, t = 4.898, p < .001$).

This same trend was also exhibited for those with no prior trauma compared to those with at least one childhood trauma; however, only about 5% of the sample reported having experienced no ACEs and thus, this finding should be interpreted with caution.

Then, single-sample *t* tests were used to examine whether differences existed between completers and non-completers. Results of the single-sample *t* tests revealed significant differences on pre-test attitudes between non-completers and the full sample: post-divorce parenting ($\Delta M = 0.344, t = 7.440, p < .001$); child-focused ($\Delta M = 0.141, t = 2.123, p = .034$); former spouse relationships ($\Delta M = 0.485, t = 7.337, p < .001$). In addition, the quality of the co-parenting relationship of non-completers was lower than ($\Delta M = 0.221, t = 4.745, p < .001$) than the full sample and the number of ACEs experienced was higher than the full sample ($\Delta M = 0.496, t = 3.489, p = .001$). Paired-samples *t* tests revealed significant positive change from pre-test to post-test on all targeted attitudes ($\Delta M = 0.204, t = 4.181, p < .001$ [post-divorce parenting]; ($\Delta M = 0.484, t = 6.250, p < .001$ [child focused]; ($\Delta M = 0.414, t = 6.940, p < .001$ [former spouse relationship]), suggesting that at least for completers, significant positive gains were made.

Base Model

Prior to testing the moderation models, a base model was fit to examine the interrelation and fit of the model independent of omnibus trauma categories (see Figure 1). The base structural model demonstrated good fit ($\chi^2/df = 1.633$; CFI = .995; RMSEA = .035, $p = .814$). Consistent with expectations, pre-test attitudes were the strongest predictors of post-test attitudes in each of the three targeted domains ($b = .437, p < .001$; ($b = .443, p < .001$; $b = .490, p < .001$).

Neither target child age ($b = -.028, p = .535$; $b = -.009, p = .855$; $b = .008, p = .839$) nor participant gender ($b = .035, p = .438$; $b = .025, p = .591$; $b = .006, p = .876$) were significant predictors of post-test attitudes. Co-parenting quality was a significant predictor of post-test former spouse relationship attitudes ($b = .229, p < .001$) and post-test post-divorce parenting attitudes ($b = .130, p = .006$) even with pre-test attitudes included in the model.

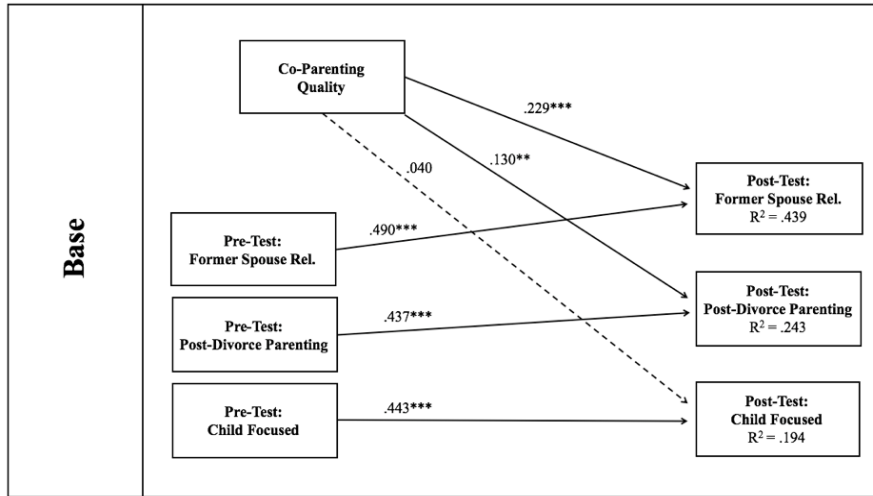


Figure 1. Base structural equation model predicting targeted post-test attitudes. Note. ** $p < .01$. *** $p < .001$. Solid lines indicate significant pathways. Dotted lines indicate non-significant pathways.

Group-Level Moderation Models

A series of group-level moderation models were fit with each model comparing participants on the presence or lack thereof of a given omnibus trauma category. Across all models, model fit was well within acceptable range. χ^2/df ratio ranged from 1.158 to 1.680, CFI ranged from .984 to .996, and RMSEA was non-significant in each model with the associated coefficient ranging from 0.018 to 0.037. The model comparison between the unconstrained abuse model and constrained abuse model was nonsignificant ($\Delta\chi^2 = 21.85, df = 13$), as was the model comparison between the unconstrained household model and the constrained household model ($\Delta\chi^2 = 14.55, df = 13$). In contrast, unconstrained and constrained models varied

significantly when examining both neglect ($\Delta\chi^2 = 31.16, df = 13$) and environmental ($\Delta\chi^2 = 30.35, df = 13$) traumas.

For the neglect model (Figure 2), the pathway from pre-test former spouse relationship attitudes to post-test former spouse relationship attitudes varied significantly ($CR = -3.234$), with the strength of the association greater for those that experienced a neglect-related trauma in childhood ($b = .687, p < .001$) than for those that did not ($b = .405, p < .001$). In addition, the relationship between the quality of the co-parenting relationship and post-test former spouse relationship attitudes varied significantly ($CR = 2.155$). For those that did not experience a neglect-related trauma, the pattern from the base model held consistent, with a significant relationship found ($b = .295, p < .001$). However, for those that did experience a neglect-related trauma, the pathway was non-significant ($b = .102, p = .177$).

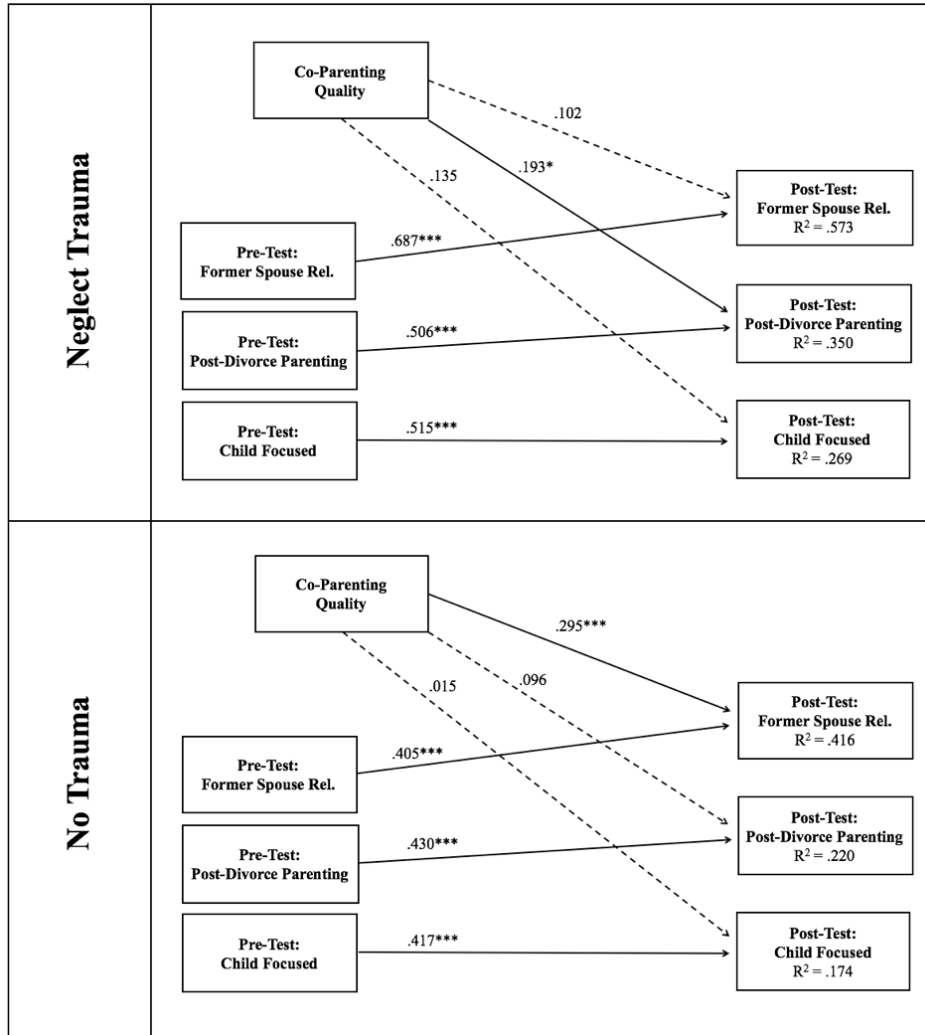


Figure 2. Neglect-related trauma moderation models.
 Note. * $p < .05$. *** $p < .001$. Solid lines indicate significant pathways. Dotted lines indicate non-significant pathways.

For the environmental model (Figure 3) the pathway from pre-test post-divorce parenting attitudes to post-test post-divorce parenting attitudes varied significantly ($CR = 2.858$), with the strength of the association greater for those that did not experience an environmental trauma in childhood ($b = .640, p < .001$) than for those that did ($b = .409, p < .001$). This pattern also presented for the pathway from pre-test child focused attitudes to post-test child focused attitudes ($CR = 3.060$), with the strength of the association greater for those that did not experience an

environmental trauma in childhood ($b = .646, p < .001$) than for those that did ($b = .421, p < .001$).

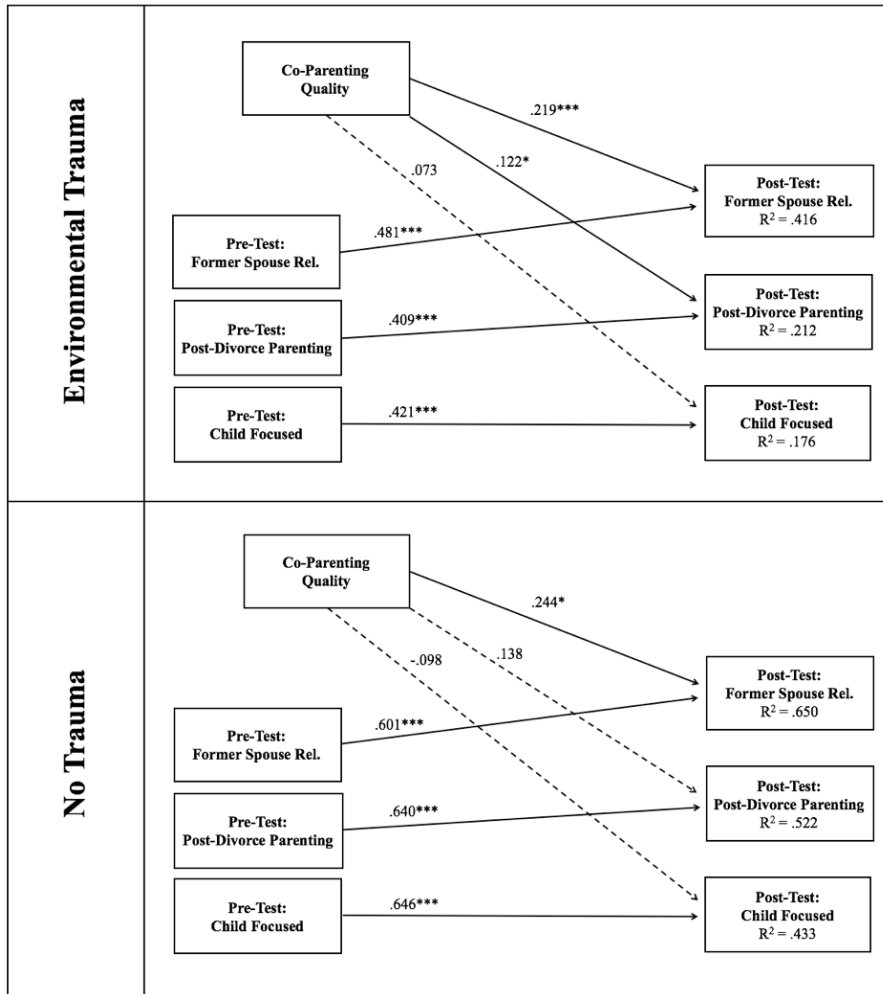


Figure 3. Environmental-related trauma moderation models.
 Note. * $p < .05$. *** $p < .001$. Solid lines indicate significant pathways. Dotted lines indicate non-significant pathways.

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Appendix A

Categories of Childhood Trauma

Category	ACEs	Items
Neglect	Physical Neglect	<ul style="list-style-type: none"> -How often did your parents/guardians not give you enough food even when they could easily have done so? -Were your parents/guardians too drunk or intoxicated to take care of you? -How often did your parents/guardians not send you to school even when it was available?
	Emotional Neglect	<ul style="list-style-type: none"> -Did your parents/guardians understand your problems and worries? -Did your parents/guardians really know what you were doing with your free time when you were not at school?
Abuse	Physical Abuse	<ul style="list-style-type: none"> -Did a parent, guardian, or other household member spank, slap, kick, punch, or beat you up? -Did a parent, guardian, or other household member hit or cut you with an object, such as a stick (or can), bottle, club, kniffe, whip, etc.
	Emotional Abuse	<ul style="list-style-type: none"> -Did a parent, guardian, or other household member yell, scream, or swear at you, insult or humiliate you? -Did a parent, guardian, or other household member threaten to, or actually, abandon you or throw you out of the house?
	Sexual Abuse	<ul style="list-style-type: none"> -Did someone touch or fondle you in a sexual way when you did not want them to? -Did someone make you touch their body in a sexual way when you did not want them to? -Did someone attempt oral, anal, or vaginal intercourse with you when you did not want them to? -Did someone actually have oral, anal, or vaginal intercourse with you when you did not want them to?
Environmental	Community Violence	<ul style="list-style-type: none"> -Did you see or hear someone being beaten up in real life? -Did you see or hear someone being stabbed or shot in real life? -Did you see or hear someone being threatened with a knife or gun in real life?
	Collective Violence*	<ul style="list-style-type: none"> -Were you forced to go and live in another place due to any of these events? -Did you experience the deliberate destruction of your home due to any of these events? -Were you beaten up by soldiers, police, militia, or gangs? -Was a family member or friend killed or beaten up by soldiers, police, militia, or gangs?
	Peer Violence	<ul style="list-style-type: none"> -How often were you bullied? -How were you bullied most often?

		-How often were you in a physical fight?
Household	Mental Health Issues ITFH	-Did you live with a household member who was depressed, mentally ill, or suicidal?
	Alcohol/Drug Abuse ITFH	-Did you live with a household member who was a problem drinker or alcoholic, or misused street or prescription drugs?
	Incarceration ITFH	-Did you live with a household member who was ever sent to jail or prison?
	Divorce/Death of Parent(s)	-Were your parents ever separated or divorced? -Did your mother, father, or guardian die?
	Household Violence	-Did you see or hear a parent or household member in your home being yelled at, screamed at, sworn at, insulted, or humiliated? -Did you see or hear a parent or household member in your home being slapped, kicked, punched, or beaten up? -Did you see or hear a parent or household member in your home being hit or cut with an object, such as a stick (or cane), bottle, club, knife, whip, etc.

*Note. ITFH = In the family home. * = Events prompted included wars, terrorism, political or ethnic conflict, genocide, repression, disappearances, torture and organized violent crime such as banditry and gang warfare.*