

Early Abuse Experiences and Subsequent Gender Differences in Couple Adjustment

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The main purpose of the current study was to evaluate the relationship between early abusive experiences (sexual abuse, parental violence, and witnessing parental violence) and subsequent couple adjustment with a theoretical model that incorporates attachment and psychological distress as mediator variables. We specifically examined the variability in long-term psychosocial characteristics of child abuse survivors across women and men. A representative sample of French-Canadian couples composed of 632 men and women completed measures of child abuse, attachment, psychological distress, and dyadic adjustment. Structural equation analyses showed that, for both women and men, sexual abuse was related to dyadic adjustment through anxiety about abandonment and psychological distress. For men, experiencing physical or psychological violence was associated with dyadic adjustment through psychological distress. For women, there was an indirect relationship between witnessing physical violence and dyadic adjustment through abandonment anxiety. Differences between men and women in the long-term adjustment to childhood sexual abuse were small and not consistent with a gender-specific model of psychosocial repercussions.

Keywords: Early abuse; mental distress; gender differences; attachment; psychological distress; structural equation modeling

Despite individual differences in the long-term impact of child abuse, couple problems such as chronic dissatisfaction, sexual difficulties, physical violence, and union dissolution represent a typical class of psychosocial repercussions to early traumatic experiences (Davis & Petretic-Jackson, 2000; Delsol & Margolin, 2004; DiLillo, 2001; Nelson & Wampler, 2000; Rumstein-McKean & Hunsley, 2001). However, characteristics of child maltreatment (sexual abuse, parental violence, and witnessing parental violence) on cohabiting and married couples have generally been understudied because the most severe forms of abuse are associated with multiple risk factors that potentially hamper the union formation process in young adults. In such cases, abusive experiences during childhood can disrupt the development of

intimacy regulation and problem-solving skills to such an extent that these individuals will not marry or will experience a series of short-lived love relationships. However, epidemiological and clinical studies show that a large segment of the child-abused population will eventually become involved in long-term marriages or common-law relationships. Thus, there is a need to determine whether these early stressful negative life events are associated with subsequent difficulties in married or cohabiting couples.

In the few empirical studies that have dealt with sex differences in the long-term correlates of childhood abusive experiences, some found a large overlap (for a review of child sexual abuse studies, see Holmes, Offen, & Waller, 1997), whereas others revealed a mixed portrait with shared and distinct symptom clusters (Whiffen, Thompson, & Aube, 2000). When sex differences do appear, they generally point to internalizing problems in women (anxiety, depression, etc.) and externalizing problems in men (alcohol and drug abuse, impulsive disorders, etc.). Given these inconsistent findings and the insufficient number of studies to date, the main objective of the present investigation was to conduct a differential examination of the long-term consequences of childhood abuse on couple distress experienced by women and men in a representative sample of 316 French-Canadian couples. Our goal was to assess whether diverse abusive experiences (sexual abuse, parental violence, and witnessing parental violence) were related in different ways to couple distress. We selected child sexual abuse, physical and psychological maltreatment, and observed parental violence as specific indicators of child abuse. This selection provided an empirical examination of the consequences of direct versus indirect traumatization.

Abusive experiences are, by definition, early negative interpersonal life events that have structuring effects on the capacity to assume adult roles through diverse variables. The present study focuses on attachment patterns and psychological distress. Attachment security stands as a central mediational concept in the understanding of the short- and long-term interpersonal problems of children who have been maltreated or who have witnessed parental violence (Kim & Cicchetti, 2004). Preoccupied, fearful, and dismissive individuals are overrepresented in adults who have been neglected, physically abused, or sexually molested during their childhood (Runtz & Schallow, 1997). Attachment representation may also be relevant to our understanding of potential sex differences in the psychosocial repercussions of abusive experiences. In stressful situations, men generally show avoidance of proximity, whereas women exhibit abandonment anxiety. Detachment in men and hyperalertness in women could thus be exacerbated following abuse and could represent alternative sex-typed pathways through which adversity would impact on psychological and couple distress. Thus, we expected that the long-term effect of child abuse on women would be manifested in the form of abandonment anxiety. For men who were abused, we predicted that the adult sequelae of maltreatment would be marked by avoidance of intimacy. Attachment security was also given a central mediational role in our structural models, because disordered attachment is a robust predictor of psychological distress (Putnam, 2003; Shapiro & Levendosky, 1999) and couple adjustment (Davila & Bradbury, 2001). In this context, psychological distress is conceived as an intrapersonal proximal variable that reflects the effects of daily hassles and pervasive vulnerabilities associated with past negative experiences. Cross-sectional and longitudinal relations between psychological symptomatology, relationship quality, and stability have been well documented in both community and clinical samples (for a literature review, see Whisman & Uebelacker, 2003).

METHOD

Participants and Procedure

Participants were 316 men and 316 women who composed a representative sample of French-Canadian couples. They were either married ($n = 202$) or cohabiting ($n = 114$), and had been living together for more than six months. The couples had been living together for an average of 13 years. At the time of the study, 30% of the sample did not have children from their present relationship, and 70% had one or more children. The mean age was 40.5 years ($SD = 4.5$) for women and 43.5 years ($SD = 5.0$) for men. Thirty-seven percent ($n = 116$) of women reported 12 years of education or less, 36% ($n = 113$) had completed between 13 and 15 years of education, and 27% ($n = 86$) had 16 or more years of education. Forty-one percent ($n = 128$) of men reported 12 years of education or less, 33% ($n = 104$) had between 13 and 15 years of education, and 26% ($n = 83$) had completed 16 or more years of education. An annual income of CDN\$25,000 or less was reported by 49% ($n = 154$) of women; 35% ($n = 111$) reported an income between CDN\$25,000 and CDN\$45,000; and 9.5% ($n = 30$) reported an income of CDN\$45,000 or more. An annual income of CDN\$25,000 or less was reported by 21% ($n = 65$) of men; 43% ($n = 136$) reported an income between CDN\$25,000 and CDN\$45,000; and 34% ($n = 108$) reported an income of CDN\$45,000 or more.

The initial randomized pool of participants was recruited through a private research organization specializing in surveys. The sample was formed using telephone numbers from across the province of Québec in Canada. We conducted 2,516 phone interviews to briefly describe the purpose of the study and to solicit participation: 1,382 people contacted were excluded because they did not meet the criteria (couple status and relation duration), and 634 were excluded because one of the partners did not agree to participate. Measures, including a detailed consent form, were mailed separately to each partner ($N = 500$ couples); 63.2% of these couples returned completed questionnaires. The margin of error for the study was 5.5%, with a 95% confidence interval.

Measures

We measured dyadic adjustment with a shortened version of the Dyadic Adjustment Scale (DAS; Spanier, 1976, translated to French by Baillargeon, Dubois, & Marineau, 1986). The DAS is the most widely used scale for the evaluation of marital characteristics in clinical and research settings (Piotrowski, 1999). The shortened version is an eight-item self-report questionnaire developed with item response theory. Respondents indicated the degree to which events describe their couple adjustment during the past month using five-item and six-item Likert-type response format. Global dyadic adjustment scores range from 0 to 41, with higher scores reflecting a higher level of relationship quality. The items of the DAS-8 were derived from the Cohesion (two items) and Satisfaction (six items) subscales of the DAS. Internal consistency (Cronbach's alphas range from .76 to .96) is satisfactory for the shortened DAS (Sabourin, Valois, & Lussier, 2005). The predictive validity was supported in a 3-year longitudinal study of couple dissolution (Sabourin et al., 2005). In addition, the relation between dyadic adjustment as measured in the short version of the DAS and social desirability as measured by the Balanced Inventory of Desirable Responding (Paulhus, 1984) are low, ranging between .17 and .25. Thus, dyadic adjustment scores were not substantially contaminated by socially desirable responding. Finally, temporal stability coefficients over a 2-year period were quite high (.87 for men and .83 for women; Sabourin et al., 2005). In the present study, Cronbach's alphas were .82 for men and .85 for women.

We measured attachment representations with the Experiences in Close Relationships Questionnaire (ECR; Brennan, Clark, & Shaver, 1998, translated to French by Lafontaine & Lussier, 2003). The ECR is a 36-item self-report measure of attachment that uses a 7-point Likert-type scale ranging from *strongly disagree* to *strongly agree*. The items of the ECR were derived from a factor analysis of several existing self-report measures of adult attachment. The ECR is composed of two 18-item subscales labeled Anxiety and Avoidance. Higher scores on the Anxiety scale indicate greater anxiety about rejection by others and feelings of personal unworthiness regarding interpersonal relationships. Higher scores on the Avoidance scale reflect interpersonal distrust and avoidance of closeness with others. The alpha coefficients were high in the English (.94 for Avoidance and .91 for Anxiety; Brennan et al., 1998) and in the French versions of the questionnaire (.88 for Avoidance and .88 for Anxiety, Lafontaine & Lussier, 2003). Exploratory and confirmatory factor analyses of the French-Canadian version of the ECR replicated these two attachment dimensions (factor loadings range from .41 to .71 for Avoidance and from .40 to .72 for Anxiety; Lafontaine & Lussier, 2003). Finally, the ECR appears to be nonbiased by gender differences ($\chi^2(585, n = 274) = 125.23, p < 1$; Lafontaine & Lussier, 2003). In the present study, alpha coefficients for Avoidance and Anxiety were .87 and .85 for men and .88 and .86 for women, respectively.

We measured psychological distress with the shortened version of the Psychiatric Symptom Inventory (PSI; Ilfeld, 1976, 1978) and conducted factor analytic studies to reduce the PSI from 29 to 14 items. The best indicators of psychological distress were selected (Préville, 1995; Préville, Boyer, Potvin, Perreault, & Légaré, 1992; Préville, Potvin, & Boyer, 1995). Items on the PSI-14 assess depression (five items), anxiety (three items), aggressiveness (four items), and cognitive problems (two items). The PSI-14 shows good internal consistency (.92), construct validity, and criteria validity (Préville, 1995; Préville et al., 1992; Préville et al., 1995). Global psychological distress scores obtained from the PSI-14 range from 0 to 42, with higher scores reflecting a higher level of psychological distress. Scores obtained on the PSI often have been related to marital satisfaction (Bégin, Sabourin, Lussier, & Wright, 1997; Gélinas, Lussier, & Sabourin, 1995). The alpha coefficients in our study were .88 for men and .90 for women.

Two single-item measures assessed whether the participants had witnessed parental violence during their childhood: (1) witnessing physical violence as a child ("Was there physical violence between your parents [hitting or kicking with or without objects, fighting, etc.?]") and (2) witnessing psychological violence as a child ("Was there verbal violence between your parents [shouting, putting down, etc.]?"). Two single-item measures determined whether the participants had experienced violence during their childhood: (1) experiencing physical violence as a child ("During your childhood, were you hit or beaten by one or both of your parents?") and (2) experiencing psychological violence as a child ("Did your parents put you down or shout hurtful words at you?"). Response choices for these four items were grouped into three categories (0 = *never or not to my knowledge*, 1 = *sometimes*, 2 = *quite often or very often*). A single-item dichotomized measure determined child sexual abuse: "Were you sexually abused during your childhood or adolescence?"

First, we performed descriptive analyses to report information on the prevalence of child abuse and data on psychosocial variables, focusing on possible gender differences. Subsequently, we tested our general hypothesis using a two-step approach: (1) by computing correlations between independent (child trauma variables) and intermediate variables, excluding nonsignificant relations from further analyses and establishing whether we observe mediational or indirect relationship, and (2) by assessing the complete mediational model through structural equation analyses (Bentler, 1995). Structural equation modeling estimates relationships among latent variables, considering all relationships at the same time and mini-

mizing the effects of measurement error. Because child trauma variables are categorical, we opted for the robust estimation method. Following recommendations by Raykov, Tomer, and Nesselroade (1991), the fit of each estimated model to the observed data was evaluated with several indices of adjustment: Bentler's (1990) comparative fit index (CFI), and Bentler-Bonett's normed fit index (NFI), and nonnormed fit index (NNFI). These indexes range from 0 to 1, where 1 indicates the best possible fit. Values above .90 indicate a good fit. The chi-square test was computed, but, because it is sensitive to sample size (Hayduck, 1987; Kline, 1998), the chi-square to degrees of freedom (χ^2/dl) ratio was used. Values between 1 and 5 (Jöreskog & Sörbom, 1993) indicate a satisfactory fit between the theoretical model and empirical data. Finally, Steiger and Lind's (1980) root mean square error of approximation (RMSEA) estimates the difference between model-implied and actual variances and covariances. Better fit is indicated by smaller RMSEA values. Good fit is evident when values are less than .05 (Kline, 1998).

RESULTS

Descriptive Statistics

The prevalence of childhood sexual abuse in the present sample was 8% in men ($n = 26$) and 17% in women ($n = 55$). In 23% of the couples, one of the two partners reported having been sexually abused as a child. The proportion of partners who had experienced physical violence during their childhood was 42% in men ($n = 114$ *sometimes*, $n = 17$ *often* or *very often*) and 33% in women ($n = 97$ *sometimes*, $n = 8$ *often* or *very often*). Approximately half of the participants reported having experienced psychological violence during their childhood: 46% for men ($n = 106$ *sometimes*, $n = 30$ *often* or *very often*) and 47% for women ($n = 117$ *sometimes*, $n = 33$ *often* or *very often*). The proportion of participants having witnessed parental physical violence as a child was 8% in men ($n = 18$ *sometimes*, $n = 8$ *often* or *very often*) and 14% in women ($n = 29$ *sometimes*, $n = 14$ *often* or *very often*). Finally, 40% of the men ($n = 90$ *sometimes*, $n = 36$ *often* or *very often*) and 48% of the women ($n = 93$ *sometimes*, $n = 59$ *often* or *very often*) had witnessed parental psychological violence as a child. We tested significant sex differences with nonparametric tests (Wilcoxon signed ranks tests) and observed differences for physical violence experienced during childhood ($z = 2.69$, $p < .01$) and witnessing psychological parental violence as a child ($z = 2.68$, $p < .01$).

We performed paired t tests to evaluate gender differences on psychosocial variables. Results indicated significant sex differences in abandonment anxiety (for women, $M = 3.35$, $SD = 1.03$; for men, $M = 3.10$, $SD = 1.01$, $t(296) = 3.31$, $p < .001$), avoidance of proximity (for women, $M = 2.22$, $SD = .93$; for men, $M = 2.35$, $SD = .91$, $t(297) = 1.95$, $p < .05$), psychological distress (for women, $M = 11.32$, $SD = 6.96$; for men, $M = 9.16$, $SD = 6.08$, $t(291) = 4.62$, $p < .001$), and dyadic adjustment (for women, $M = 30.00$, $SD = 6.14$; for men, $M = 30.57$, $SD = 5.67$, $t(312) = 1.93$, $p < .05$).

Correlational Analyses

Correlations between childhood trauma variables and psychosocial variables are reported in Table 1. For both men and women, childhood sexual abuse was related to psychological distress and anxiety about abandonment. Experiencing physical violence was associated with experiencing psychological violence, witnessing physical and psychological violence between parents, and dyadic adjustment in both women and men. Experiences of psychological violence during childhood were related to witnessing physical and psychological

violence between parents and psychological distress for both sexes. There was a correlation between witnessing physical parental violence and witnessing psychological parental violence for both men and women. Finally, psychological distress, anxiety about abandonment, avoidance of proximity, and dyadic adjustment were all related for both sexes.

We also observed gender-specific correlations. Men who had experienced sexual abuse had also experienced physical and psychological violence as children. Women who had been victims of child sexual abuse had also witnessed parental physical and psychological violence. Additionally, experiencing physical violence was correlated to psychological distress and avoidance in attachment relationships in men; experiencing psychological violence was related to their dyadic adjustment. Women who had experienced psychological violence and had witnessed physical and psychological parental violence during their childhood were more likely to report abandonment anxiety in their close relationships. Finally, witnessing physical violence between their parents was related to women’s psychological distress. These gender differences underlined the need to test the stability of our model in women and men. Nonsignificant relationships observed in these correlational analyses were excluded from subsequent structural analyses.

Structural Models: Construction of the Latent Variables and Measurement Model

Before assessing our theoretical model, we constructed latent variables based on reliable empirical indicators to test whether we could create a composite childhood trauma latent variable and latent variables for attachment, psychological distress, and dyadic adjustment. The results of these analyses appear in Figure 1.

Childhood Trauma. We conducted separate structural equation analyses for each trauma measure. We used the self-reported question as a single observed indicator to determine each of these latent variables. Thus, the four single indicators represented family violence and had

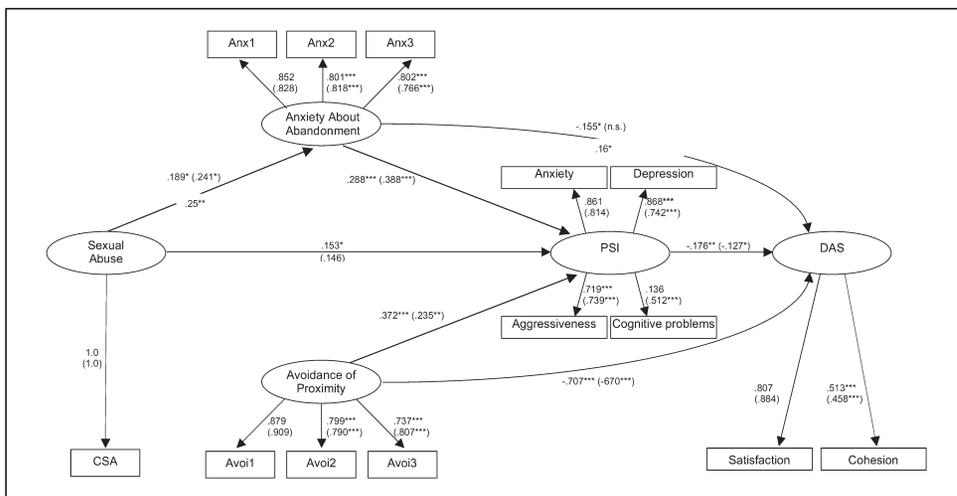


Figure 1. Structural equation modeling for childhood sexual abuse (CSA), attachment avoidance and anxiety, psychological distress (PSI), and dyadic adjustment (DAS) in men (coefficients in parentheses) and women.

* $p < .05$. ** $p < .01$. *** $p < .001$

TABLE 1. Correlations Among Child Abuse, Psychological Distress, Attachment, and Dyadic Adjustment

Variable	1	2	3	4	5	6	7	8	9
1. Sexual abuse	—	.02	.10	.15**	.17**	.18**	.14*	.06	-.03
2. Victim of physical violence	.16**	—	.45***	.30***	.19***	.10	.07	.09	-.13*
3. Victim of psychological violence	.14**	.47***	—	.35***	.45***	.16**	.12*	.11	-.07
4. Witness of physical violence	.04	.28***	.28***	—	.50***	.11*	.15**	-.03	-.06
5. Witness of psychological violence	.10	.39***	.50***	.47***	—	.07	.13*	.01	-.08
6. Psychological distress	.14**	.17**	.13*	.05	.06	—	.37***	.40***	-.39**
7. Anxiety about abandonment	.12*	.04	.06	.08	.02	.34***	—	.25***	-.32***
8. Avoidance of proximity	.06	.12*	-.02	.06	.02	.25***	.31***	—	-.58***
9. Dyadic adjustment	-.06	-.12*	-.12*	-.04	-.08	.25***	-.16**	-.57***	—

Note. Correlations for women (*N* ranged between 293 and 316) are presented above the diagonal, and correlations for men (*N* ranged between 293 and 316) are presented below the diagonal.

* $p < .05$. ** $p < .01$. *** $p < .001$.

three values: 0 = *never or not to my knowledge*, 1 = *sometimes*, and 2 = *quite or very often*. The indicator for child sexual abuse can take two values: 0 = *never sexually abused* and 1 = *sexually abused*.

Attachment. Because both attachment scales are based on a large number of items, and to reduce the complexity of subsequent structural analyses, we used interitem correlations to develop three six-item empirical indicators for Anxiety and for Avoidance. This process could not be conducted on theoretical grounds because neither Anxiety nor Avoidance is subdivided into specific conceptual dimensions. The first three indicators were substantially predicted by the latent variable Anxiety (factor loadings were all above .766) and the other three by the latent factor Avoidance (factor loadings were higher than .735).

Psychological Distress. The latent factor for psychological distress was determined by four indicators corresponding to scores observed on the four theory-driven subscales of the PSI: Depression, Anxiety, Aggressiveness, and Cognitive Problems. These four indicators were strongly predicted by the latent variable Psychological Distress (factor loadings were above .512, except cognitive problems for women, .136).

Dyadic Adjustment. The latent factor for Dyadic Adjustment was measured with two indicators that were derived from scores on the two conceptual subscales of the DAS-8: Satisfaction and Cohesion. These two sets of indicators were substantially predicted by their latent variable, Dyadic Adjustment (factor loadings were higher than .458).

We tested the structural model of the relationship between each child trauma and psychosocial variables independently for women and men. When structural models were satisfactory for both men and women and included significant paths from the trauma to psychosocial variables, we conducted subsequent analyses to test gender differences.

Structural Models for Relationships Between Childhood Sexual Abuse and Adult Dyadic Adjustment

For men, the structural model of the relationship between child sexual abuse and psychosocial variables showed satisfactory fit indices (CFI = .983, NFI = .928, NNFI = .978, RMSEA = .031, and $\chi^2/df = 1.28$). Significant structural paths are illustrated in Figure 1. The final model showed an indirect longitudinal relationship between childhood sexual abuse and dyadic adjustment through anxiety in attachment representations and psychological distress. Men who had been victims of child sexual abuse develop an internal working model characterized by anxiety over close relationships. Their abandonment anxiety is associated with higher levels of psychological distress and lower levels of dyadic adjustment. Child sexual abuse was not related to intimacy avoidance in men. However, avoidance was directly related to both higher levels of psychological distress and lower levels of dyadic adjustment. In the present model, dyadic adjustment was generally well predicted by the other latent variables ($R^2 = .51$).

Fit indices of the model were also satisfactory for women (CFI = .957, NFI = .911, NNFI = .942, RMSEA = .053, and $\chi^2/df = 1.83$). Significant longitudinal paths are illustrated in Figure 1. As with the men, the final model for women indicated a longitudinal relationship between childhood sexual abuse and dyadic adjustment mediated by abandonment anxiety and psychological distress. However, there were two additional direct standardized paths for women. First, childhood sexual abuse was related to an increase in psychological distress. Second, we observed a direct path from abandonment anxiety to dyadic adjustment. Women who experienced abandonment anxiety in close relationships were more likely to report couple distress. There were no significant relations between childhood sexual abuse

and avoidance in attachment representations. As in men, avoidance in women was both directly and indirectly (through psychological distress) negatively associated with dyadic adjustment. In the present model, dyadic adjustment was generally well predicted by the other latent variables ($R^2 = .67$).

Finally, we tested the model to determine its stability across sex. Thus, we added a series of equality constraints specifying that standardized estimates should not vary across sex for the structural models. The invariant model's fit was satisfactory (CFI = .962, NFI = .906, NNFI = .956, RMSEA = .032, and $\chi^2/dl = 1.59$), with one exception to the pattern of results. Abandonment anxiety was directly related to dyadic adjustment for women but not for men. When this path was removed, the fit of the invariant model improved slightly (CFI = .964, NFI = .908, NNFI = .957, RMSEA = .031, and $\chi^2/dl = 1.59$). Finally, despite the fact that the standardized path from childhood sexual abuse to psychological distress was significant in women and not in men, this path was deemed invariant across sex. There are probably two reasons for this. First, the absolute value of the first estimate is significant, albeit fairly small, and, second, the difference in the two standardized coefficients is slight ($\beta = .114$ for women, $z > 1.96$; and $\beta = .107$ for men, $z = 1.751$).

Structural Models for Relationships Between Experiencing Parental Violence During Childhood and Adult Dyadic Adjustment

Experiencing Physical Violence During Childhood. For men, the structural model testing the relationship between physical violence experienced during childhood and psychosocial variables showed satisfactory fit indices (CFI = .981, NFI = .934, NNFI = .975, RMSEA = .035, and $\chi^2/dl = 1.35$). Significant structural paths are illustrated in Figure 2. The final model showed an indirect relationship between experiencing physical violence and dyadic adjustment through psychological distress. In addition, abandonment anxiety and avoidance of proximity were both negatively related to dyadic adjustment via psychological distress. However, we also observed a significant direct path from avoidance

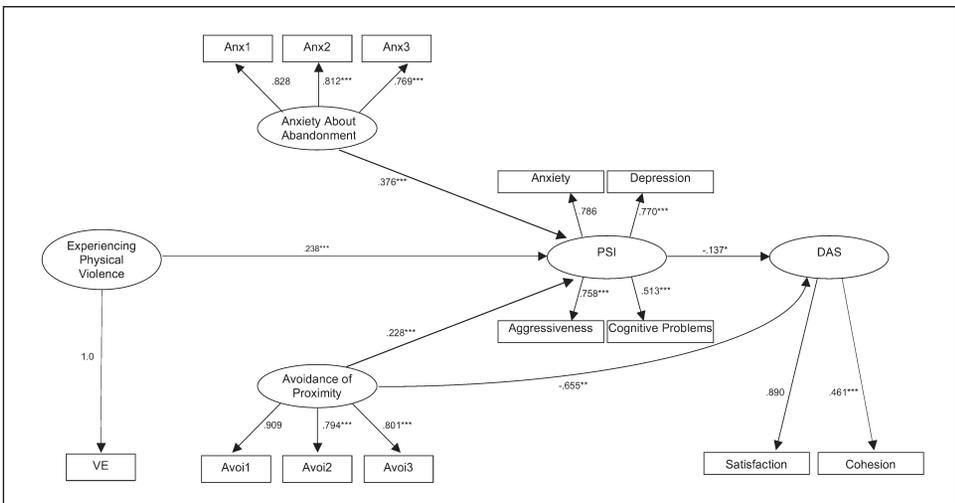


Figure 2. Structural equation modeling for experiencing physical violence during childhood (VE), attachment avoidance and anxiety, psychological distress (PSI), and dyadic adjustment (DAS) in men. * $p < .05$. ** $p < .01$. *** $p < .001$.

to dyadic adjustment. Thus, men who had experienced physical violence during their childhood showed increased levels of psychological distress as adults and reported less dyadic adjustment. In this model, dyadic adjustment was moderately well predicted by the other latent variables ($R^2 = .489$). For women, the final model was adequate (CFI = .949, NFI = .902, NNFI = .932, RMSEA = .058, and $\chi^2/dl = 1.94$) but revealed no significant relationship between parental physical violence experienced during childhood and psychosocial variables. Thus, the stability of our model across sex could not be tested.

Experiencing Psychological Violence During Childhood. For men, the structural model testing the relationship between psychological violence experienced during childhood and psychosocial variables showed satisfactory fit indices (CFI = .976, NFI = .929, NNFI = .969, RMSEA = .040, and $\chi^2/dl = 1.45$). Significant structural paths are illustrated in Figure 3. The final model showed an indirect relationship between experiencing psychological violence and dyadic adjustment through psychological distress. Psychological violence experienced during childhood was not associated with attachment representations. However, abandonment anxiety and avoidance were both negatively related to dyadic adjustment via psychological distress. We also observed a significant direct path from avoidance to dyadic adjustment. Thus, men who had experienced psychological violence during their childhood showed increased levels of psychological distress as adults and reported less dyadic adjustment. In this model, dyadic adjustment was moderately well predicted by the other latent variables ($R^2 = .492$). For women, the final model was adequate (CFI = .955, NFI = .907, NNFI = .941, RMSEA = .054, and $\chi^2/dl = 1.83$), but no significant association was revealed between psychological violence experienced during childhood and psychosocial variables. Thus, the stability of our model across sex could not be tested.

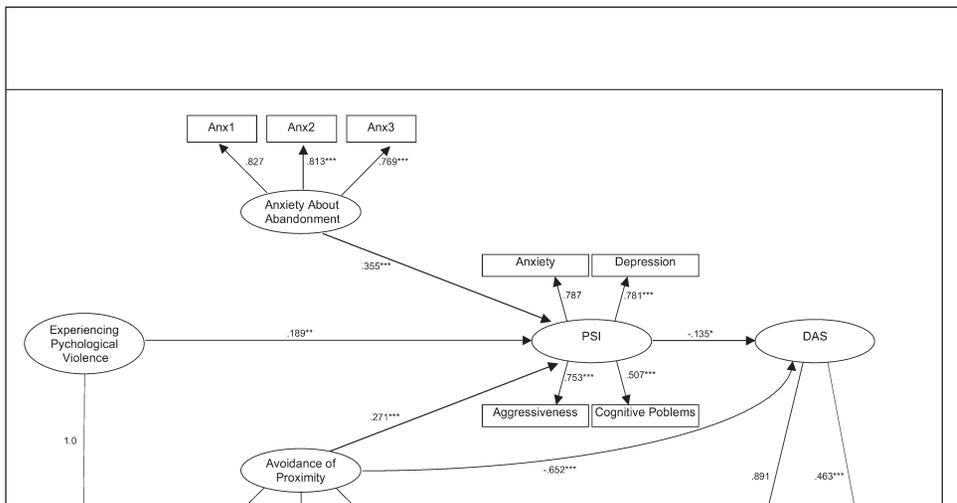


Figure 3. Structural equation modeling for experiencing psychological violence during childhood (VE), attachment avoidance and anxiety, psychological distress (PSI), and dyadic adjustment (DAS) in men.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Structural Models for Relationships Between Witnessing Parental Violence During Childhood and Adult Dyadic Adjustment

Witnessing Physical Violence During Childhood. For men, the structural model for the relationship between physical violence witnessed during childhood and psychosocial variables showed adequate fit indices (CFI = .953, NFI = .901, NNFI = .936, RMSEA = .052, and $\chi^2/dl = 1.79$). However, we found no significant association between witnessing physical violence between parents during childhood and psychosocial variables. For women, the final model was adequate (CFI = .956, NFI = .908, NNFI = .941, RMSEA = .053, and $\chi^2/dl = 1.79$). Significant structural paths are illustrated in Figure 4. We found an indirect relationship between witnessing physical violence and dyadic adjustment through abandonment anxiety. It is worth noting that abandonment anxiety and avoidance of proximity were related both directly and indirectly (via psychological distress) to dyadic adjustment. In this model, dyadic adjustment was well predicted by the other latent variables ($R^2 = .667$).

Witnessing Psychological Violence During Childhood. We did not test the relationship between witnessing psychological violence during childhood and male psychosocial variables because there were no significant correlations between them. For women, the final model was adequate (CFI = .937, NFI = .891, NNFI = .916, RMSEA = .064, and $\chi^2/dl = 2.18$). However, we found no significant association between witnessing parental psychological violence during childhood and psychosocial variables.

Structural Models for Co-Occurring Child Traumas and Adult Dyadic Adjustment

We created a latent variable for child trauma co-occurrence by computing the sum of the traumas experienced by the participants (sexual abuse, experiencing physical violence, experiencing psychological violence, witnessing physical violence, and witnessing

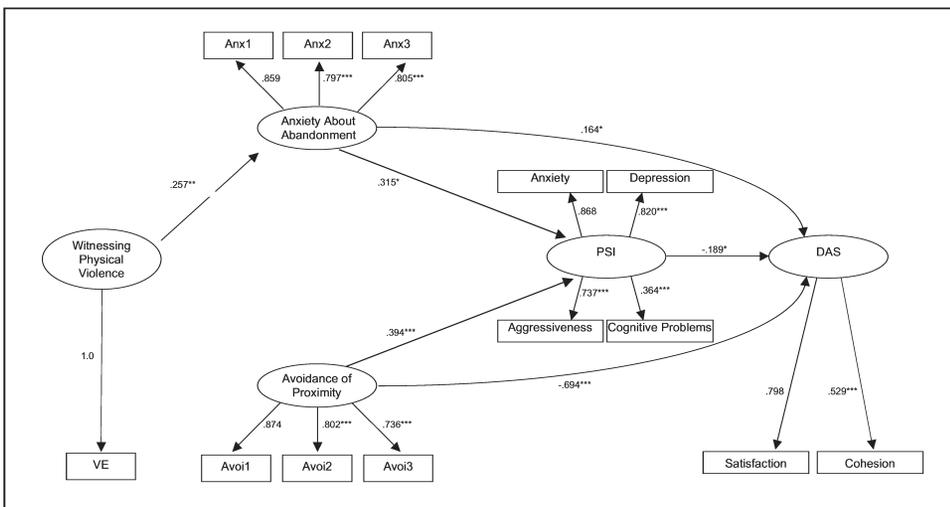


Figure 4. Structural equation modeling for witnessing physical violence during childhood (VE), attachment avoidance and anxiety, psychological distress (PSI), and dyadic adjustment (DAS) in women.

* $p < .05$. ** $p < .01$. *** $p < .001$.

psychological violence). Scores ranged from 0 to 5. A score of 0 meant that the participant had not experienced any trauma, and a score of 5 indicated that the participant had experienced all five traumas. For women, 26.9% ($n = 85$) reported no childhood traumas, 24.1% ($n = 76$) reported one childhood trauma, 24.1% ($n = 76$) reported two childhood traumas, 13.9% ($n = 44$) reported three childhood traumas, 7.9% ($n = 25$) reported four childhood traumas, and, 2.8% ($n = 9$) reported five childhood traumas. For men, 34.8% ($n = 110$) reported no childhood traumas, 22.8% ($n = 72$) reported one childhood trauma, 17.1% ($n = 54$) reported two childhood traumas, 16.8% ($n = 53$) reported three childhood traumas, 7.6% ($n = 24$) reported four childhood traumas, and .6% ($n = 2$) reported five childhood traumas. We conducted structural equation analyses with this single indicator latent variable.

For men, the structural model of the relationship between co-occurring childhood traumas and psychosocial variables showed satisfactory fit indices (CFI = .982, NFI = .936, NNFI = .977, RMSEA = .035, and $\chi^2/df = 1.35$). The final model showed an indirect longitudinal relationship between the number of co-occurring traumas and dyadic adjustment through psychological distress. Men who had experienced co-occurring traumas during their childhood were more likely to report high levels of psychological distress as adults ($\beta = .182$, $z > 1.96$). Abandonment anxiety ($\beta = .365$, $z > 1.96$) and avoidance of proximity ($\beta = .237$, $z > 1.96$) were both related to psychological distress, which was in turn negatively linked to dyadic adjustment ($\beta = -.129$, $z > 1.96$). However, we also found a significant direct path from avoidance to dyadic adjustment ($\beta = -.673$, $z > 1.96$). In this model, dyadic adjustment was generally well predicted by the other latent variables ($R^2 = .51$).

Fit indices of the model were also satisfactory for women (CFI = .950, NFI = .903, NNFI = .935, RMSEA = .058, and $\chi^2/df = 1.95$). The final model for women indicated a significant relationship between co-occurring childhood traumas and dyadic adjustment through abandonment anxiety. Childhood trauma co-occurrence was associated with more intense feelings of abandonment anxiety ($\beta = .195$, $z > 1.96$). In addition, women who experienced abandonment anxiety in close relationships were more likely to report couple distress ($\beta = -.159$, $z > 1.96$). Abandonment anxiety ($\beta = .317$, $z > 1.96$) and avoidance of proximity ($\beta = .389$, $z > 1.96$) were both related to psychological distress, which was in turn negatively related to dyadic adjustment ($\beta = -.193$, $z > 1.96$). Avoidance was directly associated with dyadic adjustment ($\beta = -.695$, $z > 1.96$). In this model, dyadic adjustment was generally well predicted by the other latent variables ($R^2 = .67$).

DISCUSSION

The research reported in this article found that family-of-origin traumas, with the exception of witnessing psychological violence during childhood, are indirectly associated with long-term dyadic adjustment, through psychological distress and abandonment anxiety. This is an important finding because it was observed in a representative sample composed of nonclinical, cohabiting and married participants. It is well known that child abuse negatively impacts on the capacity of adolescents and young adults to form fulfilling love relationships. Unplanned pregnancy, sexual revictimization, self-destructive acts, and coercive behaviors have repeatedly been observed in samples of victims. However, few studies have investigated the more subtle consequences of child abuse on couple adjustment that surface once partners are committed in formal unions, especially in men. In addition, there is a lack of comparative studies of the psychosocial repercussions of child abuse in men and

women. The present findings only partially support the hypothesis that there are gender-specific differences in the long-term correlates of child abuse.

Our study revealed that childhood sexual abuse was indirectly related to dyadic adjustment through abandonment anxiety and psychological distress in both men and women. However, we observed an additional direct path from abandonment anxiety to dyadic adjustment for women. This is a significant exception to the expected pattern of stability of sequelae between men and women victims of childhood abuse. Childhood sexual abuse seems to exert a stronger direct impact on women's capacity to experience attachment security. Abandonment anxiety is generally stronger in women than in men, and this may infiltrate the couple relationship more directly through fear of rejection by others, intense dependency needs, and feelings of personal unworthiness (Feeney, 1999), which may in turn explain the strength of the pathway leading to increased levels of couple distress. The models revealed a direct path from sexual abuse to psychological distress in women but not in men. However, when we tested for gender disparities, the same path failed to show a significant difference between the sexes. Therefore, this potential effect must be interpreted cautiously.

Clear sexual differences were revealed for the other childhood traumas. In men, experiencing physical and psychological violence were directly related to psychological distress, which in turn impacted on dyadic adjustment. The effects of these types of violence were not evident in women. The differential effect for physical abuse may be explained by its higher frequency in men than in women. Having experienced higher levels of physical violence than women, men seem less likely to report attachment insecurity but may adopt less effective cognitive and behavioral strategies to cope with stressful life events and marital conflicts. Further studies to measure such strategies as well as educational practices and family dysfunctions would provide a more complete understanding of discrepancies between the sexes.

In women, witnessing parental physical violence during their childhood was associated with abandonment anxiety, which was both directly and indirectly related, via psychological distress, to dyadic adjustment. The same path was not evident for men; however, this cannot be explained by sex differences in the exposure to parental physical violence. Women may be more sensitive than men to the indirect experience of abuse. One could generally hypothesize that the women in our study had observed their mother being physically abused by their father rather than the reverse. Identification or modeling processes may explain the association between witnessing physical abuse and abandonment anxiety in women. Identification with the victim and observation of the negative consequences of victimization (e.g., low self-esteem, high levels of psychological distress, financial insecurity, and threat of divorce) may contribute to the formation of attachment representations marked by ambivalence, self-devaluation, and fears of rejection. This would increase women's vulnerability to negative events and couple conflicts. In a meta-analysis of 118 studies of child witnesses of domestic physical violence, Kitzmann, Gaylord, Holt, and Kenny (2004) did not find gender differences. However, their analysis did not include studies where the participants were over the age of 18 and thus provided no information on the long-term interpersonal or couple correlates of parental physical abuse.

Our study showed that the cumulative impact of co-occurring childhood traumas on dyadic adjustment was significant for both men and women, but through different pathways. For men, co-occurring traumas were directly associated with psychological distress, which in turn impacted on dyadic adjustment. For women, co-occurring traumas were indirectly related to dyadic adjustment through abandonment anxiety. Thus, abandonment

anxiety was once again a significant variable explaining sex differences in the long-term consequences of childhood trauma. In women, couple bonding processes are partially developed on the basis of negative childhood experiences, whereas in men, psychological symptoms play a central role.

Few studies in this area of inquiry have examined the validity of structural models that incorporate indirect and mediational variables explaining the sequelae of child maltreatment on couple relationships. Our results underline the important role of abandonment anxiety and psychological distress in the path from sexual abuse in both sexes and from witnessing physical violence in women. Thus, the current study only partially supports the role played by attachment representations in understanding the sequelae of childhood trauma. Our hypothesis that abandonment anxiety would explain psychosocial variables in women and avoidance of proximity would be the main mediator of psychosocial variables in men was not confirmed. The indirect effects of experiencing and witnessing physical violence on dyadic adjustment through psychological distress were not accompanied by a direct path through attachment security. However, for childhood sexual abuse and witnessing physical violence during childhood, in addition to indirect effects through psychological distress, direct paths were shown from abandonment anxiety to couple adjustment.

It is important to note several limitations of the present study. First, the study was based on retrospective self-reports of abusive experiences, and this could lead to underreporting biases or distortions in the recall of traumatic events. However, in their critical analysis of retrospective reports, Brewin, Andrews, and Gotlib (1993) stated that such selection or distortion biases do not systematically affect the association between childhood maltreatment and current psychopathology.

Second, our single-item measure of traumatic experiences did not allow a more specific examination of the relation between the nature and severity of childhood traumas and psychosocial adjustment. This limitation may be more critical for childhood sexual abuse, where it was not possible to determine whether the participants had experienced intra- or extrafamilial sexual contacts, the number of abusers, and the duration and severity of the abuse. However, a single-item measure is less time-consuming, less threatening, and decreases the risk of nonresponse or distorted reports when investigating sensitive events. An examination controlling for the diverse facets of abusive experiences would require a large-scale community study with over 300 abused participants of each gender. For child sexual abuse, with prevalence at 8% for men and 17% for women (Gorey & Leslie, 1997), the initial sample should be composed of at least 3,000 participants. In addition, past efforts to develop a latent variable for child sexual abuse with multiple indicators have produced ambiguous results (Kallstrom-Fuqua, Weston, & Marshall, 2004). For example, there are confounds between indicators such as force and number of perpetrators or number of assaults and perpetrators. Likewise, variables expected to be positively related (being abused by one's father) or negatively related (age) to the severity of child sexual abuse were found to be inversely related to severity. Some indicators also had to be dropped (e.g., number of child sexual abuse incidents) (Kallstrom-Fuqua et al., 2004).

Third, the number of sexually abused adults in our sample was rather small, and the generalizability of our conclusions should be tested with a larger group of victims. Larger samples will help to determine more rigorously the specific repercussions of child abuse that are different in women and men from those that are mostly similar. The development of distinct intervention programs precisely designed for abused women or men should be based on empirical data documenting such differences. Fourth, although we used causal modeling, the design used in the present study was cross-sectional, and the specific

order of causation between endogenous variables—attachment security, psychological distress, and dyadic adjustment—was based on theoretical presuppositions and should be determined on empirical grounds through multiple-wave longitudinal designs. Fifth, to account more fully for the psychosocial outcomes of abusive experiences in childhood, ideally a multimethod strategy should have been used to measure the endogenous variables. Attachment security, psychological distress, and dyadic adjustment can be measured observationally and clinically. For example, the mediational role of attachment representations may be detected more easily with a developmentally based measure, such as the Adult Attachment Interview. Finally, future studies should scrutinize the developmental trajectories of couples that include a victimized partner. There may be distinct clusters of couples that show multiple pathways of couple variables (stable-happy, stable-unhappy, unstable-unhappy, etc.) associated with different stressors experienced during childhood.

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