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Multiple Mediators of the Relationships Among Maternal Childhood Abuse, Intimate Partner Violence, and Offspring Psychopathology

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What is This?

Multiple Mediators of the Relationships Among Maternal Childhood Abuse, Intimate Partner Violence, and Offspring Psychopathology

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Abstract

The aim of the study was to examine whether maternal depression, mothers' and fathers' parenting, child physical punishment and negative life events (NLE) mediate the effect of maternal childhood abuse (CA), intimate partner violence (IPV) and cumulative violence (both CA and IPV) on Spanish children's and adolescents' psychopathology. Furthermore, multiple mediator models examine whether IPV mediates the effect of CA on the contextual and family factors mentioned above. Three hundred and eighteen Spanish outpatients aged 7 to 18 and their parents were assessed using a structured interview and other instruments for measuring the study variables. Structural equation models (SEMs) showed multiple pathways explaining

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psychopathological problems among offspring of mothers who suffered CA, IPV and both of these violent experiences. In particular, mothers' depression mediated the link between maternal CA, IPV, cumulative violence and children's externalizing, and total behavior problems. Child NLE was an important pathway between maternal CA and total behavior problems, as well as between cumulative violence and both externalizing and total problems. IPV contributed to explaining the link between maternal CA and contextual and family factors, such as child physical punishment and NLE, which were in turn, associated with children's behavior problems. Findings show the complex interconnections between different types of violence and their harmful effects on the mental health of women and their offspring, as well as the need to extend our knowledge on this subject.

Keywords

maternal childhood abuse, intimate partner violence, child and adolescent psychopathology, mediator

Childhood abuse (CA) and intimate partner violence (IPV) are crucial issues in research work, given their alarming magnitude, their harmful consequences in the short and long term, and their inestimable individual, social and economic costs (White, Koss, & Kazdin, 2010). Being a victim of CA is an important risk factor for poor mental health in adulthood, as well as for parent-to-child difficulties and IPV (Banyard, 1997; Banyard, Williams, & Siegel, 2001, 2003). Although some studies have found a high risk for mental health problems among the offspring of childhood-abused mothers (Collishaw, Dunn, O'Connor, & Golding, 2007; Roberts, O'Connor, Dunn & Golding, 2004), as Collishaw et al. (2007) point out, only a few studies have explored this issue. In contrast, a great body of research has established the negative outcomes of IPV-exposed children, including academic/cognitive, behavioral, social, and emotional problems (Holt, Buckley, & Whelan, 2008; Wolfe, Crooks, Lee, McIntyre-Smith & Jaffe, 2003). However, most of the literature on family violence has focused on the direct link between IPV and children's outcomes, and less is known about the mechanisms through which this type of violence impacts on children's well-being (Wolfe et al., 2003).

Given the considerable overlap between different types of childhood violence (Hughes, Humphrey, & Weaver, 2005) and the high risk for adult revictimization among survivors of CA (Fergusson, Boden, & Hordwood, 2008), a life-course approach has been proposed, which has been clinically,

empirically, and theoretically supported (Banyard, Williams, & Siegel, 2001; Becker, Stuewig, & McCloskey, 2010). According to this perspective, examining past history of CA and also recent IPV may contribute to a better understanding of the psychological consequences of violence (Becker et al., 2010). As suggested by some researchers (Banyard et al., 2001), the experiences of childhood violence may initiate chain reactions of trauma throughout life, beginning in childhood and continuing into adulthood. Consequently, it has been found that experiences of CA may increase the risk for IPV, which in turn may lead to mental health problems (Becker et al., 2010). Recent studies focusing on maternal lifetime violence report that any violent experience suffered by mothers, in childhood or adulthood, could adversely affect their offspring's mental health (Koverola et al., 2005; Morrel, Dubowitz, Kerr, & Black, 2003). Furthermore, research has found some evidence for cumulative effects—that is, cumulative violence suffered by mothers (both as a child and as an adult) was linked to poorer outcomes in their offspring, such as higher externalizing and internalizing problems (Dubowitz et al., 2001) and disruptive disorders (Miranda, de la Osa, Granero, & Ezpeleta, 2011). Nevertheless, to our knowledge, the direct and indirect effects of these different types of maternal violence (mothers' CA, IPV, and cumulative violence) on children's outcomes have not been examined altogether in a single study. Therefore, additional research is needed to test potential pathways explaining psychological problems in offspring of women who have suffered violence in childhood, adulthood, or both periods. Moreover, although studies provide evidence for examining IPV as a mediator between CA and women's adult outcomes (Banyard et al., 2001; Becker et al., 2010), the way in which women's violent history and multiple related factors jointly impact on their offspring's well-being remains unanswered.

Depression is one of the most commonly documented mental health consequences among women with a history of CA (Wise, Zierler, Krieger, & Harlow, 2001) and of IPV (Golding, 1999); also, poorer outcomes in depression have been reported among women who experienced violence during both childhood and adulthood (Dubowitz et al., 2001). Nevertheless, research on the potential mediating effects of maternal depression has shown inconclusive evidence. Some studies have found that maternal affective symptoms and depression mediated the effects of mothers' violence history (CA or IPV) on children's internalizing, externalizing, or adjustment problems (Collishaw, et al., 2007; Koverola et al., 2005; Miranda, de la Osa, Granero, & Ezpeleta, 2013; Morrel et al., 2003). In contrast, other studies failed to find support for the mediating role of mothers' mental health problems in general (McCloskey, Figueredo, & Koss, 1995) and depression in particular (Roberts et al., 2004).

Parenting may also significantly influence the way in which offspring are affected by mothers' history of violence. Several parenting difficulties have been reported among women survivors of CA, such as negative views of themselves as mothers, and greater use of permissive behaviors and physical discipline toward their children (Banyard, 1997; DiLillo & Damashek, 2003). Some studies provide support for the mediational role of parenting for offspring's outcomes, showing that low maternal confidence (Roberts et al., 2004) and maternal hostility (Collishaw et al., 2007) contribute to explaining the psychological problems in the children of CA survivors. With respect to IPV and its impact on maternal parenting, mixed findings have been reported. Previous studies suggest that IPV can affect children's outcomes through different maternal parenting problems, such as damaged general qualities of parenting (Levendosky & Graham-Bermann, 2001), maternal verbal aggression (Morrel et al., 2003), and physical child abuse (Salzinger et al., 2002). Conversely, research suggests that IPV does not *necessarily* damage maternal parenting, and that mothers may try to compensate for the violent environment (Casanueva, Martin, Runyan, Barth, & Bradley, 2008). On the other hand, few studies have focused on paternal parenting among violent families. Nevertheless, previous research suggests that the dysfunctional parenting of abuser fathers may disrupt children's development, highlighting the importance of further research exploring this issue (Guille, 2004).

Moreover, detrimental impact of exposure to multiple stressors and negative life events (NLE) has been found among offspring of mothers with CA (Collishaw et al., 2007) and IPV experiences (Holt et al., 2008; Rossman, 2000). Besides, it has recently been reported that IPV-exposed children experienced a greater number of NLEs than nonexposed children (Martinez-Torteya, Bogat, von Eye, & Levendosky, 2009). However, there is a paucity of research on the potential mediator role of NLE. In this regard, the cumulative risk model (Rutter, 1979) provides theoretical support for testing how multiple NLEs can explain psychological problems among these children. Since this model proposes that as the number of risk factors increases, the level of negative outcomes increases accordingly, it is important to clarify whether the number of NLEs is a significant pathway through which mothers' experiences of violence (CA, IPV, or cumulative violence) exert their effects on offspring's mental health.

The current study builds on and extends previous research by examining in Spanish outpatient children and adolescents whether maternal depression, mothers' and fathers' parenting, child physical punishment, and NLE mediate the effect of maternal CA, IPV, and cumulative violence (CA and IPV) on offspring's psychopathology. Furthermore, multiple mediator models

examine whether IPV mediates the effect of CA on the contextual and family factors referred to above.

Method

Participants

Participants were part of a larger study on risk and protective factors for children's and adolescents' psychopathology problems. They were recruited from public outpatient mental health centers in Barcelona, Spain. Exclusion criteria were the presence of mental retardation or pervasive developmental disorders. Starting out from an initial sample of 689 children and adolescents aged 7 to 18, together with their parents, 318 individuals with complete data for the measures analyzed in this work were included in the final study sample. The missing data strategy was to develop an algorithm that selected those participants who had the information for all variables used in the analysis. Accordingly, those who did not have data on one or more of the required measures were not involved in the study. There were no statistical differences by child's sex ($p = .44$), age ($p = .66$), ethnicity ($p = .10$), or socioeconomic status ($p = .75$; measured with Hollingshead's scale) (Hollingshead, 1975) between those who were included in the final sample and those who were not.

Participants ($N = 318$) in this study had different family characteristics; mothers living with the child: 96.2% ($n = 306$) biological mothers, 2.2% ($n = 7$) stepmothers, and 1.6% ($n = 5$) foster mothers; fathers living with the child: 89.3% ($n = 284$) biological fathers, 5.7% ($n = 18$) stepfathers, and 1.9% ($n = 6$) foster fathers; and children living without fathers: 3.1% ($n = 10$). Based on the mothers' and children's reports to the *Schedule of risk factors* (SRF; Unitat d'Epidemiologia I Diagnòstic en Psicopatologia del Desenvolupament, 1997), participants were classified into four groups according to the types of violence suffered by mothers over their lifetime: not exposed to violence ($n = 246$, 77.4%), CA only ($n = 30$, 9.4%), IPV only ($n = 29$, 9.1%), and both CA and IPV ($n = 13$, 4.1%). Table 1 shows the demographic characteristics of the participants.

Measures

Schedule of risk factors (SRF; Unitat d'Epidemiologia I Diagnòstic en Psicopatologia del Desenvolupament, 1997). The SRF is a comprehensive structured interview based on the Service Utilization and Risk Factors interview (Goodman et al., 1998), which assesses a wide range of factors that may affect the mental health of children and adolescents. Separate versions were

Table 1. Sociodemographic Characteristics.

	Maternal Exposure to Violence				
	S0 (*N* = 246)	S1 (*n* = 30)	S2 (*n* = 29)	S3 (*n* = 13)	Total (*N* = 318)
Sex: girls; %	43.1	70	27.6	61.5	45
Age (years); *Mean (SD)*	13.3 (2.3)	13.0 (2.2)	12.9 (2.5)	13.6 (2.3)	13.3 (2.3)
Mother's age (years) *Mean (SD)*	40.6 (5.6)	38.9 (5.4)	39.6 (5.6)	41.6 (7.8)	40.4 (5.7)
Father's age (years-old)	43.1 (5.7)	42.5 (5.2)	41.8 (6.3)	42.0 (8.3)	42.9 (5.8)
SES[a]; %					
Upper/upper-middle	12.8	6.9	14.3	23.1	12.8
Middle/lower-middle	62.0	65.5	64.3	46.2	61.9
Lower	25.2	27.6	21.4	30.8	25.3
Ethnicity; %					
Caucasian	98.4	96.7	100	92.3	98.1
Mother's educational level; % % (%)					
Unfinished primary school	12.2	13.8	11.1	7.7	12.1
Primary school	48.1	55.2	33.3	53.8	47.7
Unfinished high school	15.6	13.8	22.2	15.4	16.0
High school	16.9	13.8	25.9	7.7	17.0
Undergraduate degree	1.7	3.4	3.7	0.0	2.0
College degree	4.2	0.0	3.7	7.7	3.9
Graduate degree	1.3	0.0	0.0	7.7	1.3
Father's educational level; % % (%)					
Unfinished primary school	12.0	11.5	21.7	0.0	12.4
Primary school	46.2	53.8	43.5	50.0	46.8
Unfinished high school	16.4	7.7	4.3	25.0	14.9
High school	13.8	11.5	13.0	25.0	13.8
Undergraduate degree	5.8	3.8	13.0	0.0	6.0
College degree	0.9	3.8	4.3	0.0	1.4
Graduate degree	4.9	7.7	0.0	0.0	4.6
Stepfamily; %					
Yes (%)	8.5	6.7	21.4	15.4	9.8

Note: S0: Not exposed to violence; S1: Only childhood abuse; S2: Only IPV in adulthood; S3: Both childhood abuse and IPV in adulthood.
[a]SES: Socioeconomic status (Hollingshead, 1975). SD: Standard deviation.
*p < .05.

used for parents and for children. The SRF presents acceptable inter-interviewer reliability and concurrent validity in a Spanish population (Guillamón, 1999). Research on Spanish children exposed to IPV (Olaya, Ezpeleta, de la Osa, Granero, & Doménech, 2010) and other risk factors (Ezpeleta, Granero, & Doménech, 2005) has demonstrated good psychometric properties of this measure. In the current study, several sections were used, providing categorical variables. *Mothers' reports of CA experiences* (psychological, physical, and/or sexual): mothers were scored as having suffered CA if they answered yes to any of six items: During your childhood, (a) did you receive any

physically abusive behaviors? (Examples of violent acts were given, such as being pushed or slapped); (b) were you forced to submit to any sexual contact?; (c) did you experience both physically and sexually abusive behavior?; (d) did you receive any psychologically abusive behavior (e.g., being threatened, scared, or controlled); (e) did you experience both psychologically and physically abusive behavior?; (f) did you experience both psychologically and sexually abusive behaviors?. *Children's exposure to IPV*, specifically in this research we used a question about whether children had ever seen their parents hitting each other during an argument—an item adapted from the Child's Perception of Interparental Conflict Scale (Grych, Seid, & Finchman, 1992). *Child negative life events* (life events checklist; Johnson & McCutcheon, 1980): children were asked about the occurrence of a wide range of possible stressful life events (e.g., changes in interpersonal relationships, instability in home environment—death of a close family member, parental separation, difficulties in school). Thus, this section examined a range of events that vary in their nature and their potential impact on children, and provided a count variable that was used in the mediation models. In addition, considering that IPV-exposed children had more stressful events than nonexposed children (Martinez-Torteya et al., 2009), a binary variable was created with all participants classified as experiencing 6 or more events (yes = 1 and no = 0). This binary variable was used to describe the characteristics of the sample. *Child physical punishment* (Parental Discipline Practices Scales; Goodman et al., 1998): this was rated present if either parents or children answered affirmative on some of the following items: "spank or slap (you/her/him)" and "hit (you/her/him) with a belt or other object" (Parental Discipline Practices Scales; Goodman et al., 1998). Mothers' and fathers' physical punishment toward child were assessed separately. Next, an algorithm was used giving a score of 1 if any of the informants (mothers, fathers, and/or children) responded affirmatively to any of the items described above. A score of 0 was given if the informants did not meet this condition. Thus, a single composite measure was created and labeled as child physical punishment. *Mothers' cumulative violence*: an index of cumulative violence suffered by mothers was created—participants scored 1 if they answered yes to questions about maternal CA and also IPV, whereas a score of 0 was given if participants did not report both types of violence.

Child behavior checklist (CBCL; Achenbach & Rescorla, 2001). The CBCL is an extensively validated 113-item questionnaire to assess behavioral and emotional problems in children and adolescents aged 6 to 18. Parents completed a 3-point scale: 0 = *not true*, 1 = *somewhat or sometimes true*, 3 = *very true or often true*. The CBCL has been adapted and validated for Spanish population with satisfactory psychometric properties (Cronbach's

α values above .80) (Sardinero, Pedreira, & Muñiz, 1997). Three global scales were used in this study: internalizing, externalizing, and total behavior problems. In the present study, the Cronbach's αs were adequate to very good: Internalizing scale (α = .85), Externalizing scale (α = .90) and total CBCL score (α = .94).

Symptom checklist 90 items-revised (SCL-90-R; Derogatis, 1983). The SCL-90-R is a well-established 90-item questionnaire to assess the presence of psychopathology and psychiatric distress levels. Mothers answered each item on a Likert-type 5-point scale ranging from 0 = *never* to 4 = *very much*. The SCL-90-R has been adapted for Spanish populations and has demonstrated high reliability (internal consistency; α = .96) for the assessment of psychiatric symptoms (Robles, Andreu, & Peña, 2002). In this study, the depression symptom subscale (DEP) score was used, this instrument having a Cronbach's α of .90.

EMBU (Egna Minnen Beträffande Uppfostran, My memories of upbringing; Perris, Jacobson, Lindström, VonKnorring, & Perris, 1980). The EMBU is a well-documented 81-item questionnaire that assesses parental styles. The versions for children (between 8 and 12 years old), adolescents (from 13 years old) and parents were used. Mothers' and fathers' parenting styles were assessed separately. Participants answered a 4-point scale ranging from 1 = *never* to 4 = *almost always*. In this study, three scales were analyzed: Emotional Warmth, Rejection, and Overprotection. The EMBU has been adapted and validated for the Spanish population with satisfactory psychometric properties (Castro, de Pablo, Gómez, Arrindell, & Toro, 1997; Castro, Toro, Van der Ende, & Arrindell, 1993). Research has shown that Cronbach's α ranged from .66 to .84 (Castro et al., 1997). In the current study, the Cronbach' αs for the EMBU, version for Children/Adolescents (EMBU-C) and Parents (EMBU-P), were adequate to good: mother's emotional warmth (α = .90; α = .84), father's emotional warmth (α = .92; α =.88), mother's rejection (α = .82; α =.77), father's rejection (α = .85; α=.77), mother's overprotection (α = .77; α = .70) and father's overprotection (α = .74; α = .74).

Procedure

Approval was obtained from the Ethics Committee of the authors' institution. Youngsters referred to mental health services within the Barcelona public health network were recruited. All children and adolescents were visiting the centers for the first time, and were not receiving treatment at the time of the assessment. Parents signed a written informed consent document, and

verbal assent was obtained from the children and adolescents. Interviews were conducted separately for children and parents (but at the same time) by trained interviewers. Questionnaires were given to the participants to be returned at a later date. After the assessment, the researchers made a full report to the clinicians at the mental health centers.

Statistical Analysis

Analyses were carried out with SPSS17.0.1 for Windows and the EQS6.1. The procedure outlined by Baron and Kenny (1986) was used to test whether the relationships among maternal CA, IPV, and children's behavior problems were mediated by the variables proposed in this study as mediators. Following the procedures outlined by Baron and Kenny (1986), the mediational path was considered as adequate for the data when the three criteria were met: (a) Predictor was associated with outcome and hypothesized mediator; (b) Hypothesized mediator was associated with outcome; (c) Predictor had limited or no effect on outcome when hypothesized mediator was controlled for. Structural equations models (SEMs) were estimated, including maternal CA and IPV as predictors, mothers' depression, parenting styles, child physical punishment and NLE as mediators, and children's behavior problems as outcomes. SEMs were also used for testing the link between maternal CA and IPV and for the joint analysis of potential mediating variables. Separately, SEMs exploring mothers' cumulative violence as predictor were also estimated. The significance of each specific pathway was assessed with the method described by Kenny, Kashy, and Bolger (1998). This method is a modification of a test proposed by Sobel (1982), and measures the direct effect of pathways ab (pathway a: from predictive variable to mediator; pathway b: from mediator to outcome). It requires the standard error of pathway a (S_a) and the standard error of pathway b (S_b). The standard error of ab can be displayed to equal approximately the square root of $S_a^2 S_b^2 + b^2 S_a^2 + a^2 S_b^2$, and thus under the null hypothesis that $ab = 0$, is approximately distributed as Z (Kenny et al., 1998). All the SEMs included as covariates children's sex and age, with the aim of controlling the potential effects of both variables in the pathways. Goodness of fit was assessed by several indices: chi-square test (χ^2), comparative fit index (CFI), and the root mean square error of approximation (RMSEA). In the present study, indices showing how well the models fit the data were: the Chi-square achieved p values above .05, the CFI coefficient was higher than .90, and the RMSEA was lower than .08 (Byrne, 2001).

Results

Correlations Between Variables and Descriptive Statistics

Table 2 shows bivariate correlations between the variables analyzed in this work. These coefficients allow assessment of the initial criteria established by Baron and Kenny (1986) for considering mediation: (a) predictors must be related to both outcomes and potential mediators; (b) potential mediators must be related to outcomes.

As expected, mothers' CA, IPV and cumulative violence were positively and significantly associated with CBCL externalizing and total behavior problems scores.

All the variables related to mothers' history of violence-maternal CA, IPV, and cumulative violence-achieved significant correlations with mothers' DEP, child NLE and physical punishment (except for maternal CA and physical punishment). Furthermore, maternal CA was significantly correlated with maternal rejection (EMBU-C), while mothers' cumulative violence was correlated with paternal overprotection (EMBU-C).

Mothers' DEP, child NLE and physical punishment, as well as maternal rejection and paternal overprotection, show significant associations with CBCL externalizing and total behavior problems scores.

CBCL internalizing behavior problems scores did not significantly correlate with the predictors (maternal CA, IPV, and cumulative violence). Thus, this offspring's outcome did not meet the first criteria indicated by Baron and Kenny (1986) to test mediation. For this reason, the CBCL internalizing problems scale was not included in the mediation models.

The variables that met the listed criteria for mediation were included in the SEMs. Descriptive information for potential mediators and outcomes are shown in Table 3.

Mediator Models

Figure 1 indicates that Model 1 fits the data well ($\chi^2 = 5.35$, $p = .15$; *CFI* = .99; *RMSEA* = .05; $R^2 = .293$) and showed that mothers' DEP mediated the link between maternal CA, IPV, and CBCL externalizing behavior problems ($z = 2.62$, $p < .001$; $z = 2.44$, $p = .015$, respectively). As expected, maternal CA and IPV were positively associated with DEP, and mothers' DEP was positively associated with CBCL externalizing behavior problems. Also, Model 1 showed that maternal CA was positively associated with IPV, and IPV was positively associated with child NLE and physical punishment. Tests on the significance of pathway showed that IPV mediated the relationship of maternal CA with child NLE and physical punishment ($z = 2.31$, $p = .018$; $z = 2.21$, $p = .027$,

Table 2. Intercorrelations Among the Variables of the Study.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. Maternal CA	—																				
2. IPV	.15*	—																			
3. Maternal cumulative violence	.50*	.47*	—																		
4. SCL mother's depression	.22*	.23*	.12*	—																	
5. EMBU-C maternal rejection	.10*	.01	−.01	.11*	—																
6. EMBU-C paternal rejection	.07	.05	.02	.09	.78*	—															
7. EMBU-C maternal warmth	.04	−.05	−.07	−.07	.50*	.53*	—														
8. EMBU-C paternal warmth	−.01	−.06	−.09	−.07	.46*	.48*	.96*	—													
9. EMBU-C maternal overprotection	.06	−.05	−.05	.05	.69*	.65*	.61*	.60*	—												
10. EMBU-C paternal overprotection	−.03	−.07	−.11*	−.02	.55*	.66*	.59*	.60*	.85*	—											
11. EMBU-P paternal rejection	−.01	−.01	.02	.19*	.06	.15*	−.02	−.04	.04	.10	—										
12. EMBU-P maternal rejection	.09	.03	.05	.23*	.30*	.24*	.13*	.15*	.19*	.17*	.35*	—									
13. EMBU-P paternal warmth	.06	−.02	−.2	−.13*	.07	.06	.32*	.34*	.17*	.20*	−.33	−.20*	—								
14. EMBU-P maternal warmth	.01	−.06	−.04	−.14*	−.03	.01	.25*	.24*	.11*	.11*	−.14*	−.35*	.38*	—							

(continued)

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Table 2. (continued)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
15. EMBU-P paternal overprotection	−.07	.01	.02	.16*	.13*	.16*	−.07	−.05	.13*	.16*	.41*	.26*	.01	−.15*	—						
16. EMBU-P maternal overprotection	.07	.04	.06	.30*	.16*	.13*	−.04	−.02	.22*	.13*	.25*	.52*	−.12*	−.16*	.38*	—					
17. Child physical punishment	.04	.22*	.12*	.01	.22*	.25*	.05	.07	.26*	.22*	.20*	.19*	−.01	−.08	.17*	.21*	—				
18. Child negative life events	.11*	.30*	.16*	.20*	−.12*	−.13	−.35*	−.35*	−.18*	−.20*	.08	.03	−.18*	−.19*	.14*	.08	.15*	—			
19. CBCL internalizing	.08	.07	.03	.34*	.09	.04	−.06	−.05	.05	.01	.16*	.15*	−.11	−.06	.13*	.12*	−.01	.28*	—		
20. CBCL externalizing	.11*	.20*	.13*	.39*	.30*	.32*	.004	−.02	.19*	.16*	.30*	.32*	−.15	−.22*	.34*	.41*	.22*	.19*	.38*	—	
21. CBCL total	.14*	.14*	.10*	.45*	.30*	.26*	.01	.004	.18*	.13*	.28*	.33*	−.15*	−.19*	.29*	.37*	.15*	.27*	.76*	.84*	—

EMBU-C: offspring's reports; EMBU-P: parents' reports.
*Significant correlation (.05 level).
CA = childhood abuse; CBCL = child behavior checklist; IPV = intimate partner violence; SCL = symptom checklist.

Table 3. Descriptive Statistics on Study Variables.

	S0 (N = 246)			S1 (N = 30)			S2 (N = 29)			S3 (N = 13)			Total (N = 318)		
	Mean	SD	T ≥ 70 (%)	Mean	SD	T ≥ 70 (%)	Mean	SD	T ≥ 70 (%)	Mean	SD	T ≥ 70 (%)	Mean	SD	T ≥ 70 (%)
Children's psychopathology: child behavior checklist															
Externalizing	62.7	13.7	29.3	64.2	16.2	26.7	69.7	14.2	58.6	74.4	14.9	69.2	64.1	14.3	33.3
Total behavior problems	65.2	13.0	32.5	68.3	13.2	43.3	70.0	14.5	44.8	73.3	12.6	53.8	66.2	13.3	35.5
Mothers' mental health problems															
SCL-90-R depression	.82	.67		1.34	.95		1.37	1.1		1.53	.90		0.95	0.80	
Parenting style															
EMBU-C maternal rejection	13.6	7.6		17.3	7.5		15.4	9.5		14.0	7.7		14.1	7.8	
EMBU-C paternal overprotection	22.0	6.8		22.7	5.3		22.2	8.4		16.8	4.6		21.9	6.8	
Child physical punishment (%)															
Children's report															
Father hit/slap/spank	5.3			0.0			8.0			27.3			5.8		
Mother hit/slap/spank	5.0			6.6			6.8			15.4			5.8		
Father hit with an object (belt)	3.9			0.0			0.0			9.1			3.4		
Mother hit with an object (belt)	2.1			0.0			6.9			7.7			2.6		
Parents' report															
Father hit/slap/spank	2.9			0.0			15.3			23.1			4.6		
Mother hit/slap/spank	6.5			3.3			6.9			15.4			6.6		
Father hit with an object (belt)	2.9			0.0			11.5			7.7			3.6		
Mother hit with an object (belt)	2.8			0.0			3.4			7.7			2.8		
Composite physical punishment	18.8			10.3			37.9			61.5			21.5		
Negative life events (≥6; %)	47.1			69.0			79.3			84.6			53.7		

S0: Not exposed to violence; S1: Only childhood abuse; S2: Only IPV in adulthood; S3: Both childhood abuse and IPV in adulthood.
EMBU-C = offspring's reports; SCL-90-R = symptom checklist 90 items-revised; SD = standard deviation; T = T-score (on a scale of mean = 50 and SD = 10; values above 70 are into the clinical range).
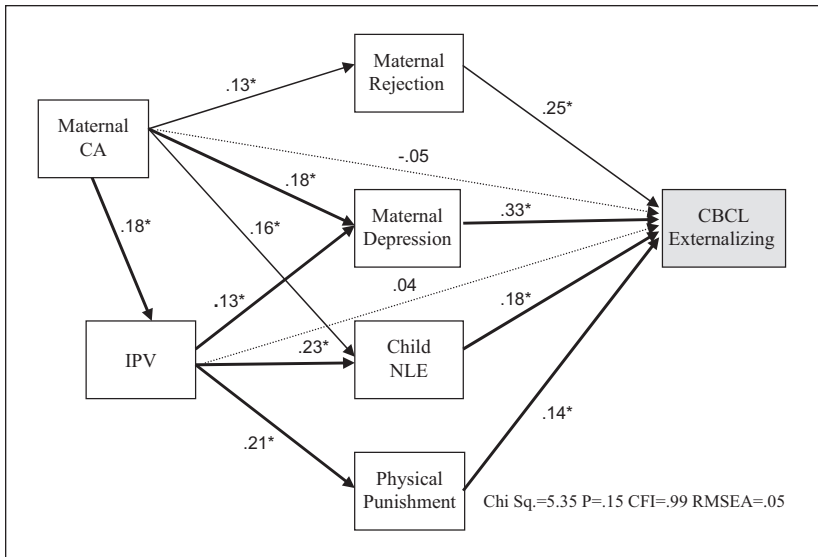
Figure 1. Model of multiple mediators in the relations among maternal CA, IPV, and offspring's externalizing behavior problems.
Dashed lines represent effects that were not statistically significant. Bold lines represent significant paths. *p < .05.

respectively). Child NLE and physical punishment mediated the effect of IPV on CBCL externalizing behavior problems ($z = 2.44$, $p = .015$; $z = 2.01$, $p = .044$, respectively). Although mothers' rejection and child NLE were significantly associated with maternal CA and CBCL externalizing behavior problems, the significance of the mediational path test showed that mothers' rejection and child NLE did not achieve the role of mediators ($z = 1.78$, $p = .075$; $z = 1.90$, $p = .057$, respectively). The results indicated no direct pathways between maternal CA, IPV, and CBCL externalizing problems.

Model 2, including pathways from maternal CA and IPV to CBCL total behavior problems, also fits the data well (Figure 2). Mothers' DEP mediated the effect of maternal CA and IPV on CBCL total behavior problems ($z = 2.82$, $p = .005$; $z = 2.03$, $p = .043$, respectively). Both maternal CA and IPV were positively associated with mothers' DEP, and mothers' DEP was positively associated with CBCL total behavior problems. On the other hand, maternal CA and IPV were positively associated, and IPV was positively associated with child NLE and physical punishment. The relation between maternal CA and child NLE and physical punishment was mediated by IPV ($z = 2.29$, $p = .022$; $z = 2.21$, $p = .027$). However, maternal CA was also directly and positively associated with child NLE and NLE was positively
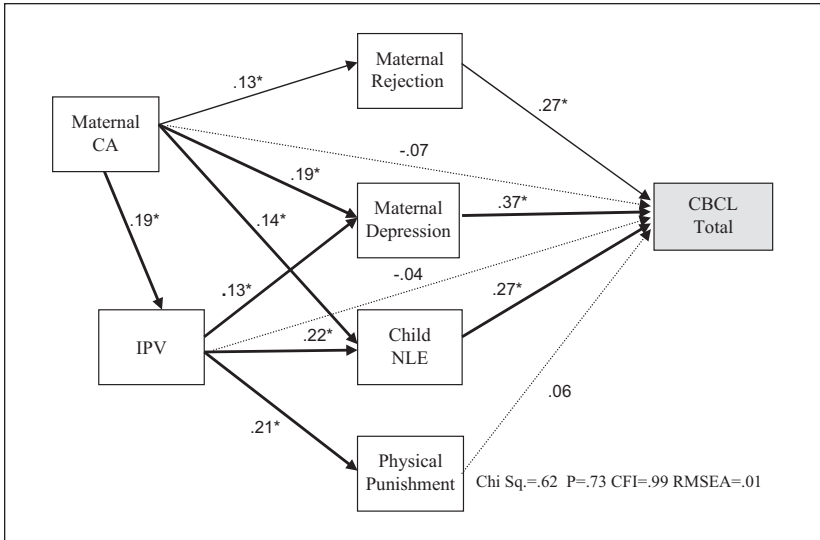
Figure 2. Model of multiple mediators in the relations among maternal CA, IPV and offspring's total behavior problems.
Dashed lines represent effects that were not statistically significant. Bold lines represent significant paths. *p < .05.

associated with CBCL total behavior problems. Child NLE mediated the effects of both maternal CA and IPV on CBCL total behavior problems ($z =$ 1.98, $p = .047$; $z = 2.90$, $p = .004$). Child physical punishment was not associated with CBCL total behavior problems. Mothers' rejection was positively associated with maternal CA and CBCL total behavior problems, but did not mediate this relationship ($z = 1.91$, $p = .056$).

Model 3, examining the effects of mothers' cumulative violence on CBCL externalizing problems through multiple mediators, fit the data well. As Figure 3 shows, mothers' DEP and child NLE mediated the link between mothers' cumulative violence and CBCL externalizing problems ($z = 2.33$, $p = .020$; $z = 2.00$, $p = .046$, respectively). Mothers' cumulative violence was positively associated with both mothers' DEP and child NLE, and DEP and NLE were positively associated with CBCL externalizing behavior problems. Even though fathers' overprotection and physical punishment were associated with mothers' cumulative violence and CBCL externalizing behavior problems, they did not play a mediator role ($z = 1.72$, $p = .086$; $z = 1.79$, $p = .073$, respectively).

Figure 4 shows that Model 4 fits the sample data well. The link between mothers' cumulative violence and CBCL total behavior problems was
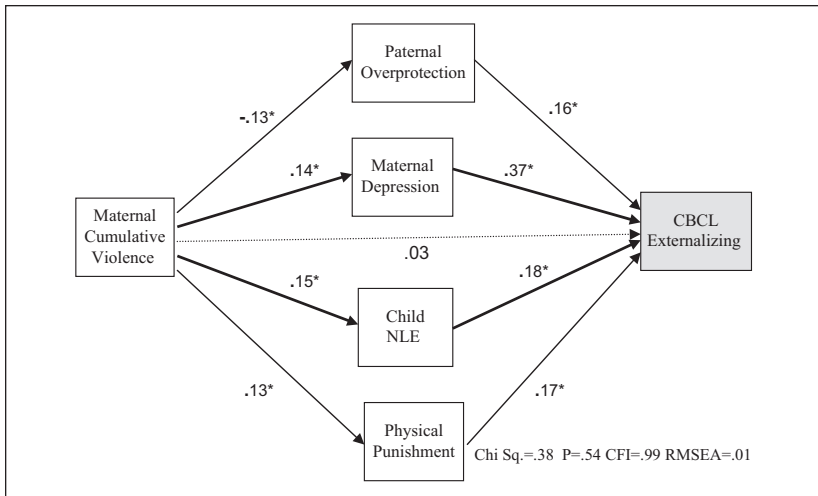
Figure 3. Model of multiple mediators in the relation between maternal cumulative violence and offspring's externalizing problems.
Dashed lines represent effects that were not statistically significant. Bold lines represent significant paths. *p < .05.
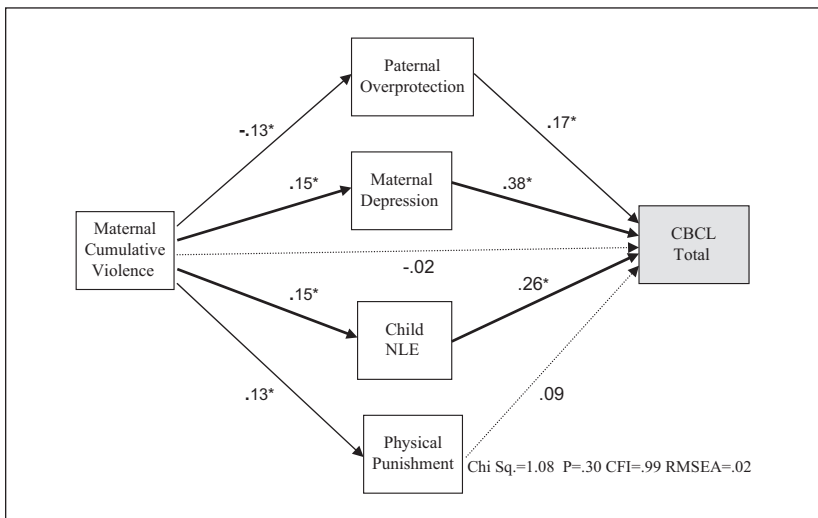

Figure 4. Model of multiple mediators in the relation between maternal cumulative violence and offspring's total behavior problems.
Dashed lines represent effects that were not statistically significant. Bold lines represent significant paths. *p < .05.

mediated by mothers' DEP and child NLE ($z = 2.40$, $p = .016$; $z = 2.46$, $p = .014$, respectively). Mothers' cumulative violence was positively associated with mothers' DEP and child NLE, and DEP and NLE were positively associated with CBCL total behavior problems. Fathers' overprotection was associated with mothers' cumulative violence and CBCL total behavior problems, though no mediating effect was found ($z = 1.75$, $p = .080$). Physical punishment was associated with mothers' cumulative violence, but not with CBCL total behavior problems.

Discussion

This study found multiple pathways explaining psychopathological problems of Spanish outpatients, aged 7 to 18, whose mothers had suffered CA, IPV or both. Particularly, mothers' depression mediated the effect of maternal CA, IPV and cumulative violence on children's externalizing and total behavior problems. Child NLE was an important pathway between maternal CA and total behavior problems, as well as between cumulative violence and both externalizing and total problems. IPV contributed to explaining the link between maternal CA and contextual and family factors, such as child physical punishment and NLE, which in turn were associated with children's behavior problems. These results support the potential utility of examining different types of traumatic exposure individually and in combination (Banyard et al., 2001), assessing the effects of lifetime violence on both survivors' (Banyard et al., 2001, 2003) and their offspring's functioning (Dubowitz et al., 2001; Miranda et al., 2011), and exploring possible explanatory factors.

The findings of the present study suggest that the effects of mothers' experiences of childhood violence and/or violent partner relationship depend on different risk factors, rather than impacting directly on offspring's well-being. Previous research reported several risk factors that fully explained the association of maternal CA with children's adjustment and prognosis, suggesting an intergenerational continuity in psychosocial risk, which may have a cumulative impact on children's development (Collishaw et al., 2007). Also, the models tested support a comprehensive view of the consequences of IPV, highlighting the mediating role of variables related to the context in which children grow up. As Levendosky and Graham-Bermann (2001) proposed, models that only examine the direct effects of IPV could overlook significant environmental factors that help us to understand its differential impact on outcomes in children and women.

All the models analyzed showed that maternal depression had an important mediator role. These findings support the argument that mothers' depression is a key pathway through which their experiences of violence impair

their offspring's capabilities to manage aggression (externalizing problems; Dehon, 2005; Miranda et al., 2013; Morrel et al., 2003), and also other aspects of their social and cognitive functioning (total behavior problems). Similarly, a high frequency and significant mediating effects were found for child NLE in the different relationships analyzed. It is noteworthy that, as shown in Table 3, the percentage of children exposed to six or more NLE reached 69% for those whose mothers suffered CA, tending to increase for those whose mothers experienced IPV or both (79.3% and 84.6%, respectively). The models tested suggest that offspring of women who have experienced these types of violence may be more likely to grow up in an environment that puts them at risk of having traumatic experiences, which may disrupt their normal development. Offspring of mothers abused in childhood were more likely to experience a broad range of NLE (Collishaw et al., 2007), and multiple stressful factors may accumulate and impact on the lives of IPV-exposed children (Rossman, 2000). On the other hand, child physical punishment had a mediating effect specifically on the association of IPV with offspring's externalizing behavior problems. Consistent with previous research (Miranda et al., 2011), these findings suggest that children exposed to IPV are at high risk for experiencing parent–child aggression, and this dysfunctional parental behavior can lead to the development of aggressive and delinquent behaviors in offspring. It is important to note that mothers' CA was associated with child physical punishment via IPV. As in previous reports, these findings show that some survivors of CA are still living with abuse (Banyard et al., 2001; Becker et al., 2010), but also suggest that their own children are suffering abuse from parental practices, which may place them at risk for aggressive behavior.

The models testing mothers' cumulative violence provide some evidence about the joint effect of two major experiences of violence (CA and IPV), suggesting its negative impact on adults' outcomes, as well as on their offspring's mental health. Interestingly, only in these models does paternal parenting, specifically fathers' overprotection, emerge as a significant predictor of children's behavior problems. These findings suggest that for offspring whose mothers suffered childhood and adulthood violence, the nature of the father–offspring relationship may have a strong influence on children's clinical symptomatology. It has been clearly shown that more studies are needed to examine the relation between fathers and children in families affected by IPV (Guille, 2004). Moreover, our results indicate that specific risk factors may be affecting the offspring of dual-exposed mothers.

Although maternal rejection did not reach statistical significance as a mediator, this factor was associated with mothers' CA and was a significant predictor of children's externalizing and total problems. This suggests that

mothers' experience of CA may affect their parenting skills for accepting their own offspring and being receptive and responsive to their needs, with a tendency being observed that this in turn could impact negatively on their children's welfare. Future research is needed to clarify this pattern of associations, which may contribute to the development of treatments to help survivors of CA deal with the particular challenges they may face as mothers, and also to stop the potential indirect impact of CA across multiple generations (DiLillo & Damashek, 2003).

It is important to note that maternal history of violence (CA, IPV, and cumulative violence) was related to children's externalizing and total behavior problems, whereas no association was found with internalizing problems. In a recent study, Graham-Bermann, Gruber, Howell, and Girz (2009) reported different profiles of adjustment in children exposed to IPV, highlighting the consistency of these findings with previous research (Grych, Jouriles, & Swank, 2000; Hughes & Luke, 1998). This evidence suggests that different factors of the child, the mother and the family context would be related to the heterogeneity of results in these children.

The present study contributes to increasing knowledge about the different mechanisms underlying clinical psychological problems in offspring of women with a history of violence. This study is one of the few that address this issue in Spanish population. It uses dimensional measures of psychopathology and a comprehensive instrument to assess multiple risk factors that may affect children's and adolescents' mental health. Its findings indicate that mothers' depression, as well as child physical punishment and NLE, are significant pathways through which mothers' CA and IPV may be associated with emotional and behavioral difficulties in children and adolescents. In this field, future research is needed to explore how these and other factors related to maternal experiences of violence (e.g., social support) jointly impact on offspring's well-being. The current study is one step in this direction, and further work using larger samples could help us to develop a better understanding of women who have suffered violence and the experiences of their offspring.

The findings of this study should be interpreted in the light of its limitations. First, the cross-sectional design used in the study precludes causal relationships. Second, limitations related to the measures should be considered. Retrospective self-reports could be affected by recall and report biases. Since most of the factors analyzed in this study are difficult to observe directly, as argued by Fergusson et al. (2008), the accuracy of the data depends on how accurately the participants reported the events. In this line, White et al. (2010) assert that the self-report is not inherently limiting in the assessment of interpersonal violence, and clearly on many occasions is the only way to obtain

information. Reports by mothers about their offspring's behavior problems may be influenced by depressive symptoms. Nevertheless, research has shown that only a small proportion of the variance in ratings of children's behavior is explained by effects of maternal bias (Youngstrom, Izard, & Ackerman, 1999), and high internal consistency has been found between the information from depressed mothers and teachers on children's disruptive problems (Kim-Cohen, Moffitt, Taylor, Pawlby, & Caspi, 2005). As Graham-Bermann et al. (2009) point out, in the area of family violence, the reliability of mothers in distress as reporters is still a matter of debate. Further studies that include multiinformant and observational methods would be useful. Data on IPV were based only on offspring's report of exposure to physical violence between their parents. This study attempts to answer the call of many researchers to explore directly children's and adolescents' experience of exposure to IPV (Buckley, Holt, & Whelan, 2007; Holt et al., 2008). Previous research has shown that parents may not provide accurate estimates of offspring's awareness of conflict (Grych et al., 1992). Future research would benefit from the use of tools to assess more comprehensively different types of violence across the lifespan (White et al., 2010), and to examine in detail the specific effects of each type on children, mothers, and family functioning Third, in spite of the large initial sample, relatively small groups emerge for the different types of violence examined, which could reduce the statistical power of the analyses. Additional research with larger samples should continue to focus on violence experienced over the lifetime and its consequences for mothers and offspring. A key direction for future research is to explore different pathways that could explain the outcomes of children whose mothers have suffered violence in two periods of life. Even though in this study only a small sample was analyzed for this group (cumulative violence), the findings show significantly increased risks for mental health problems in these children. And fourth, the current results could only be generalized to children and adolescents who consult mental health services. However, recent meta-analyses on consequences of IPV show no significant differences in the results obtained with clinical, community, shelter, or scholar samples (Evans, Davies & Dilillo, 2008; Kitzmann, Gaylord, Holt, & Kenny, 2003).

Despite these limitations, the study's findings have important clinical implications. First, they identify several contextual and familial factors as important mechanisms underlying psychopathology problems in offspring of mothers with violent experiences, suggesting possible targets for healthcare interventions. Clinicians and mental health providers who work with behaviorally disordered children should routinely inquire about mothers' history of violence. If maternal CA and/or violent partner relationships are detected, screening for maternal depression, parental harsh discipline strategies, as

well as stressful events faced by children, would be recommended, with a view to distinguishing specific treatment needs for the family. Second, they underscore the clinical relevance of assessment and interventions designed to reduce risk for aggressive behaviors in offspring of mothers who have suffered violence in childhood and/or adulthood, in an attempt to stop the circle of violence. The multiple risk factors found in families of women with a history of violence suggest that plans for interventions must be aimed at both mothers and children, in order to help them make progress toward violence-free lives. And finally, they support the need to extend our knowledge about the complex interconnections between different types of violence and their harmful effects on both women's and their offspring's mental health.

Declaration of Conflicting Interests

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References

Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for the ASEBA school-age forms & profiles*. Burlington: University of Vermont, Research Center for Children, Youth & Families.

Banyard, V. (1997). The impact of childhood sexual abuse and family functioning on four dimensions of women's later parenting. *Child Abuse & Neglect*, *21*, 1095-1107.

Banyard, V., Williams, L., & Siegel, J. (2001). The long-term mental health consequences of child sexual abuse: An exploratory study of the impact of multiple traumas in a sample of women. *Journal of Traumatic Stress*, *14*, 697-715.

Banyard, V., Williams, L., & Siegel, J. (2003). The impact of complex trauma and depression on parenting: An exploration of mediating risk and protective factors. *Child Maltreatment*, *8*, 334-349.

Baron, R., & Kenny, D. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173-1182.

Becker, K., Stuewig, J., & McCloskey, L. (2010). Traumatic stress symptoms of women exposed to different forms of childhood victimization and intimate partner violence. *Journal of Interpersonal Violence*, *25*, 1699-1715.

Buckley, H., Holt, S., & Whelan, S. (2007). Listen to me! Children's experiences of domestic violence. *Child Abuse Review*, *16*, 296-310.

Byrne, B. (2001). *Structural equation modelling in Amos: Basic concepts, applications, and programming*. Mahwah, NJ: Lawrence Erlbaum.

Casanueva, C., Martin, S. L., Runyan, D., Barth, R., & Bradley, R. (2008). Quality of maternal parenting among intimate-partner violence victims involved with the child welfare system. *Journal of Family Violence*, *23*, 413-427.

Castro, J., de Pablo, J., Gómez, J., Arrindell, W. A., & Toro, J. (1997). Assessing rearing behaviour from the perspective of the parents: a new form of the EMBU. *Social Psychiatry and Psychiatric Epidemiology*, *32*, 230-235.

Castro, J., Toro, J., Van der Ende, J., & Arrindell, W. A. (1993). Exploring the feasibility of assessing perceived parental rearing styles in Sapnish children with the EMBU. *International Journal of Social Psychiatry*, *39*, 47-57.

Collishaw, S., Dunn, O'Connor, T., & Golding, J. (2007). Maternal childhood abuse and offspring adjustment over time. *Development and Psychopathology*, *19*, 367-383.

Dehon, C. (2005). Modeling the effects of interparental violence on youth. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, *65*, 3743.

Derogatis, L. (1983). *SCL-90-R. Administration, scoring and procedures manual II*. Towson, MD: Clinical Psychometric Research.

DiLillo, D., & Damashek, A. (2003). Parenting characteristics of women reporting a history of childhood sexual abuse. *Child Maltreatment*, *8*, 319-333.

Dubowitz, H., Black, M. M., Kerr, M. A., Hussey, J. M., Morrel, T. M., Everson, M. D., & Starr, R. H. (2001). Type and timing of mothers' victimization: Effects on mothers and children. *Pediatrics*, *107*, 728-735.

Evans, S., Davies, C., & Dilillo, D. (2008). Exposure to domestic violence: A meta-analysis of child and adolescent outcomes. *Aggression and Violent Behavior*, *13*, 131-140.

Ezpeleta, L., Granero, R., & Doménech, J. (2005). Differential contextual factors of comorbid conduct and depressive disorder in Spanish children. *European Child and Adolescent Psychiatry*, *14*, 282-291.

Fergusson, D., Boden, J., & Hordwood, L. (2008). Developmental antecedents of interpartner violence in a New Zealand birth cohort. *Journal of Family Violence*, *23*, 737-753.

Golding, J. (1999). Intimate partner violence as a risk factor for mental disorders: A meta-analysis. *Journal of family violence*, *14*, 99-132.

Goodman, S. H., Hoven, C. W., Narrow, W. E., Cohen, P., Fielding, B., Alegria, M., & Dulcan, M. K. (1998). Measurement of risk for mental disorders and competence in a psychiatric epidemiologic community survey: The National Institute of Mental Health Methods for the Epidemiology of Child and Adolescent Mental disorders (MECA) Study. *Social Psychiatry and Psychiatric Epidemiology*, *33*, 162-173.

Graham-Bermann, S., Gruber, G., Howell, K., & Girz, L. (2009). Factors discriminating among profiles of resilience psychopathology in children exposed to intimate partner violence (IPV). *Child Abuse & Neglect*, *33*, 648-660.

Grych, J., Seid, M., & Finchman, F. (1992). Assessing marital conflict from the child's perspective: The child's perception of Interparental Conflict Scale. *Child Development*, *63*, 558-572.

Grych, J., Jouriles, E., & Swank, P. (2000). Patterns of adjustment among children of battered women. *Journal of Consulting and Clinical Psychology*, *68*(1), 84-94.

Guillamón, N. (1999). Fiabilidad entre entrevistadores del Protocolo de Factores de Riesgo-Versión niños [Reliability between interviewers protocol version risk factors-children]. Unpublished manuscript.

Guille, L. (2004). Men who batter and their children: An integrated review. *Aggression and Violent Behavior*, *9*, 129-163.

Hollingshead, A. B. (1975). *Four factor index of social status*. Unpublished manuscript, Department of Sociology, Yale University, New Haven, CT.

Holt, S., Buckley, H., & Whelan, S. (2008). The impact of exposure to domestic violence on children and young people: A review of the literature. *Child Abuse & Neglect*, *32*, 797-810.

Hughes, H., Humphrey, N., & Weaver, T. (2005). Advances in violence and trauma: Toward comprehensive ecological models. *Journal of Interpersonal Violence*, *20*, 31-38.

Hughes, H., & Luke, D. (1998). Heterogeneity in adjustment among children of battered women. In G. W. Holden, R. Geffner & E. N. Jouriles (Eds.), *Children exposed to marital violence: Theory, research, and applied issues* (pp. 185-221). Washington, DC: American Psychological Association.

Johnson, J. H., & McCutcheon, S. M. (1980). Assessing life stress in older children and adolescents: Preliminary findings with the life events checklist. In I. G. Sarason & C. D. Spielberger (Eds.), *Stress and anxiety* (pp. 111-125). Washington, DC: Hemisphere.

Kenny, D. A., Kashy, D. A., & Bolger, N. (1998). Data analysis in social psychology. In D. Gilbert, S. Fiske & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., pp. 233-265). Boston, MA: McGraw-Hill.

Kim-Cohen, J., Moffitt, T., Taylor, A., Pawlby, S., & Caspi, A. (2005). Maternal depression and children's antisocial behavior. Nature and nurture effects. *Archives of General Psychiatry*, *62*, 173-181.

Kitzmann, K. M., Gaylord, N. K., Holt, A. R., & Kenny, E. D. (2003). Child witnesses to domestic violence: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, *71*, 339-352.

Koverola, C., Papas, M., Pitts, S., Murtaugh, C., Black, M., & Dubowitz, H. (2005). Longitudinal investigation of the relationship among maternal victimization, depressive symptoms, social support and children's behaviour and development. *Journal of Interpersonal Violence*, *20*, 1523-1546.

Levendosky, A., & Graham-Bermann, S. (2001). Parenting in battered women: The effects of domestic violence on women and their children. *Journal of Family Violence*, *16*(2), 171-192.

Martinez-Torteya, C., Bogat, G., von Eye, A., & Levendosky, A. (2009). Resilience among children exposed to domestic violence: The role of risk and protective factors. *Child Development*, *80*, 562-577.

McCloskey, L., Figueredo, A., & Koss, M. (1995). The effects of systemic family violence on children's mental health. *Child Development*, *66*, 1239-1261.

Miranda, J., de la Osa, N., Granero, R., & Ezpeleta, L. (2011). Maternal experiences of childhood abuse and intimate partner violence: Psychopathology and functional

impairment in clinical children and adolescents. *Child Abuse & Neglect*, *35*, 700-711.

Miranda, J., de la Osa, N., Granero, R., & Ezpeleta, L. (2013). Maternal childhood abuse, intimate partner violence and child psychopathology: The mediator role of mothers' mental health. *Violence Against Women*, *19*(1), 50-68.

Morrel, T., Dubowitz, H., Kerr, M., & Black, M. (2003). The effect of maternal victimization on children: A cross-informant study. *Journal of Family Violence*, *18*(1), 29-41.

Perris, C., Jacobson, L., Lindström, H., VonKnorring, L., & Perris, H. (1980). Development of a new inventory for assessing memories of parental rearing behaviour. *Acta Psychiatrica Scandinava*, *61*, 265-274.

Olaya, B., Ezpeleta, L., de la Osa, N., Granero, R., & Doménech, J. M. (2010). Mental health needs of children exposed to intimate partner violence seeking help from mental health services. *Children and Youth Services Review*, *32*, 1004-1011.

Roberts, R., O'Connor, Dunn, J., & Golding, J. (2004). The effects of child sexual abuse in later family life; mental health, parenting and adjustment of offspring. *Child Abuse & Neglect*, *28*, 525-545.

Robles, J., Andreu, J., & Peña, M. (2002). SCL-90-R: Aplicación y análisis de sus propiedades psicométricas en una muestra de sujetos clínicos españoles [SCL-90-R: Application and analysis of its psychometric properties in a sample of Spanish clinical subjects]. *Psicopatología Clínica, Legal y Forense*, *2*, 5-19.

Rossman, R. (2000). Time heals all. *Journal of Emotional Abuse*, *2*(1), 31-50.

Rutter, M. (1979). Protective factors in children's responses to stress and disadvantage. In M. W. Kent & J. E. Rolf (Eds.), *Primary prevention of psychopathology Vol.3: Social competence in children* (pp. 49-74). Hanover, NH: University of New England Press.

Salzinger, S., Feldman, R., Ng-Mak, D., Mojica, E., Stockhammer, T., & Rosario, M. (2002). Effects of partner violence and physical child abuse on child behavior: A study of abused and comparison children. *Journal of Family Violence*, *17*(1), 23-52.

Sardinero, E., Pedreira, J., & Muñiz, J. (1997). El cuestionario CBCL de Achenbach: Adaptación española y aplicaciones clínico-epidemiológicas [The Achenbach CBCL questionnaire: Spanish Adaptation and clinical and epidemiological applications]. *Clínica y Salud*, *8*, 447-480.

Sobel, M. (1982). Asymptotic confidence intervals for indirect effects in structural models. In S. Leinhardt (Ed.), *Sociological methodology 1982* (pp. 290-312). San Francisco, CA: Jossey-Bass.

Unitat d'Epidemiologia I Diagnòstic en Psicopatologia del Desenvolupament. (1997). Protocolo de Factores de Riesgo [Risk factors protocol]. Unpublished manuscript.

White, J. W., Koss, M. P., & Kazdin, A. E. (Eds.). (2010). *Violence against women and children. Mapping the terrain*. Washington, DC: American Psychological Association.

Wise, L. A., Zierier, S., Krieger, N., & Harlow, B. L. (2001). Adult onset of major depressive disorder in relation to early life violent victimisation: A case–control study. *Lancet*, *358*, 881-887.

Wolfe, D., Crooks, C., Lee, V., McIntyre-Smith, A., & Jaffe, P. (2003). The effects of children's exposure to domestic violence: A meta-analysis and critique. *Clinical Child and Family Psychology Review*, *6*(3), 171-187.

Youngstrom, E., Izard, C., & Ackerman, B. (1999). Dysphoria-related bias in maternal ratings of children. *Journal of Consulting and Clinical Psychology*, *67*, 905-916.

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