Childhood Abuse and Later Marital Outcomes: Do Partner Characteristics Moderate the Association?

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Although people with a history of child abuse are known to be at elevated risk for later difficulties in relationships, there is debate over whether these effects are enduring and relatively immutable or are moderated by characteristics and behaviors of the partner. To reconcile these competing perspectives, we conducted a longitudinal study of 414 newlywed couples living in low-income neighborhoods, testing whether the association between abuse history and relationship satisfaction is dependent on the partners' aggression, depression, substance abuse, observed communication, and other demographic risk factors. Spouses who had been abused as children (25% of husbands, 31% of wives) reported more symptoms of depression and substance abuse and, among husbands, displayed more negative communication. Spouses with a history of child abuse were also less satisfied with their marriage, even as newlyweds; abused wives also declined in satisfaction over time compared to those without this history. However, interactions between abuse history and all of the proposed moderators were not significant, indicating that partner and relationship characteristics failed to strengthen or weaken the association between abuse history and relationship satisfaction. Childhood experiences of abuse appear to have lasting and broad effects on individual and relational outcomes, and these effects are neither heightened nor mitigated by the partner's characteristics or behaviors.

Keywords: child maltreatment, child sexual abuse, child physical abuse, relationship satisfaction, longitudinal

Although the experience of abuse in childhood increases later risk for relationship distress and dissolution (e.g., DiLillo et al., 2009; Whisman, 2006), the impact of abuse on later intimacy is also highly heterogeneous (e.g., Oddone Paolucci, Genuis, & Violato, 2001; Rind, Tromovitch, & Bauserman, 1998). Partner and relationship characteristics are thought to be critical to understanding the later health and well-being of individuals abused as children (Evans, Steel, Watkins, & DiLillo, 2014) in that the effects of early abuse might be mitigated by the presence of compassionate partners but exacerbated by mates who are prone to hostility and insensitivity. The present article aims to clarify which attributes of intimate partners and relationships, if any, heighten or reduce the association between early abuse history and relationship satisfaction, while testing this perspective against the competing possibility that partner characteristics exert little to no effect on abuse history. This latter possibility merits consideration because, as we

note later, the consequences of abuse on mental health are evident early and can be severe, broad, and enduring (e.g., Widom, Czaja, Bentley, & Johnson, 2012).

The premise that partner and relationship characteristics might moderate preexisting vulnerabilities of abused individuals finds general support in the large literature documenting the powerful effects of social connections and intimate bonds on well-being (e.g., Feeney & Collins, 2015). Preliminary empirical support for the overriding influence of relationships is also evident in research on individuals with a history of abuse. For example, female victims of childhood abuse are less likely to experience depression as adults to the extent that they report higher quality relationships (Whiffen, Judd, & Aube, 1999), and individuals with varying forms of childhood abuse and neglect experience better mental health and more extensive social engagements when they report having a close and confiding partner (DuMont, Widom, & Czaja, 2007). Similarly, higher quality spousal support reduces the association between traumatic experiences in childhood and symptoms of trauma in adulthood for husbands but not wives (Evans et al., 2014). In short, although the evidence base is small, positive characteristics of the partner appear to mitigate the effects of abuse on mental health outcomes, and it is possible that partner characteristics could also alter the effects of abuse on intimate relationship outcomes. That is, characteristics of the mate appear to moderate the association between individuals' abuse history and their emotional well-being, and by extension of this prior work, characteristics of the mate could possibly alter the effects of abuse on relationship distress as well.

An alternative view, however, is that the experience of abuse in childhood sets in motion a host of biological and psychological

changes that unfold through adolescence and into adulthood, providing little opportunity for later partner and relationship characteristics to offset any effects of abuse on intimate relationship functioning. Large literatures now indicate that adverse experiences in childhood, including sexual and physical abuse, are associated with heightened sensitivity to threat, social mistrust, and mood-related changes and may help explain why childhood abuse eventuates in poor relationships (Colman & Widom, 2004; DiLillo et al., 2009). These effects, as well as the enduring changes in other domains such as brain structure and function (e.g., smaller volume of the prefrontal cortex and hippocampus), the endocrine system (e.g., greater activation of the HPA axis), and the immune system (e.g., greater levels of somatic inflammation) cast doubt on the possibility that partner and relationship characteristics will alter their course (for review see Danese & McEwen, 2012). From this perspective, childhood abuse is a singularly potent experience that foreshadows adverse relationship outcomes, largely independent of partner characteristics.

Resolving these competing perspectives—whether the effects of childhood abuse on relationship satisfaction are enduring and relatively immutable or are moderated by characteristics and behaviors of the partner—is important for two main reasons. First, from a theoretical standpoint, models of intimacy assume that couples' ability (or failure) to adapt to enduring vulnerabilities such as an abuse history should influence important interpersonal outcomes (e.g., Karney & Bradbury, 1995), yet as our literature review suggests, this assumption is rarely tested directly. Second, from an applied perspective, evidence in support of moderation would identify specific ways in which partners might enable and support an individual with a history of abuse. On the other hand, the absence of such evidence would help clarify how an abuse history might be better viewed as an early experience that is better accepted and acknowledged within a relationship rather than as a malleable and modifiable experience that can be fundamentally altered through dyadic processes.

Current Study

This article aims to address two questions: First, what is the effect of childhood abuse on newlyweds' initial levels of satisfaction and on changes in satisfaction over time? Second, is the effect of abuse history moderated by positive or negative characteristics of the partner? On the basis of the findings just reviewed, in our study we expected to replicate previous cross-sectional associations between abuse history and satisfaction while extending this work by demonstrating longitudinal effects of abuse history. For our second aim, we predicted that characteristics of the partner and the marriage have the potential to either attenuate or exacerbate the negative effects of abuse, given other work linking positive partner characteristics to lower individual psychopathology.

A strong test of any such moderating influences requires dyadic data and assessment of a wide range of partner characteristics and behaviors. To select and organize potential moderators, we turned to the vulnerability–stress–adaptation model (VSA; Karney & Bradbury, 1995). Based on a meta-analytic summary of more than 100 longitudinal studies, the VSA model argues that relationship outcomes are a function of 1) the stable and enduring vulnerabilities and experiences that partners bring to any relationship, 2) the contexts and stressors that they encounter in their relationship, and

3) their adaptive processes, or the manner in which they communicate. In the present study, this perspective as well as supportive findings in the couples literature led us to study the following:

1. three enduring vulnerabilities known to covary with relationship functioning: symptoms of depression (e.g., Fincham, Beach, Harold, & Osborne, 1997), substance abuse (e.g., Homish & Leonard, 2007), and parental divorce (e.g., Halford, Sanders, & Behrens, 2000);

2. two indicators of the sociodemographic contexts known to affect relationship outcomes: socioeconomic status and educational attainment (e.g., Bramlett & Mosher, 2002); and

3. three aspects of couples' adaptive processes that foreshadow relationship change: positive communication (e.g., Johnson et al., 2005), negative communication (e.g., Markman, Rhoades, Stanley, Ragan, & Whitton, 2010), and intimate partner violence (e.g., Rogge & Bradbury, 1999; Stith, Green, Smith, & Ward, 2008).

Finally, because childhood abuse and relationship distress and dissolution are overrepresented (e.g., Brown, Cohen, Johnson, & Salzinger, 1998) but understudied (Evans et al., 2014) among economically disadvantaged and culturally diverse populations, we situated our study specifically within this population. Indeed, the variables we chose as moderators appear to be particularly influential or salient in relationships within diverse, lower income samples—for example, financial strain (Williamson, Karney, Bradbury, 2013), intimate partner violence (Tjaden & Thoennes, 2000), depression (Breslau, Kendler, Su, Gaxiola-Aguilar, & Kessler, 2005), alcohol use (Grant et al., 2004), and lower educational attainment (Kao & Thompson, 2003)—further justifying their inclusion in our analysis.

Method

Sampling

Sampling was undertaken to yield first-married newlywed couples in which partners were of the same ethnicity and living in low-income neighborhoods in Los Angeles County. Recently married couples were identified through names and addresses on marriage license applications. Addresses were matched with census data to identify applicants living in low-income communities, defined as census block groups wherein the median household income was no more than 160% of the 1999 federal poverty level for a four-person family. Next, names on the licenses were weighted using data from a Bayesian Census Surname Combination (Elliott et al., 2013), which integrates census and surname information to produce a multinomial probability of membership in each of four racial/ethnic categories (Hispanic, African American, Asian, and Caucasian/other). Couples were chosen using probabilities proportionate to the ratio of target prevalences to the population prevalences, weighted by the couples' average estimated probability of being Hispanic, African American, or Caucasian, which are the three largest groups of people living in poverty in Los Angeles County (U.S. Census Bureau, 2002; for

additional details on this specific sampling method, see Elliott et al., 2013).

Participants

The 431 identified couples participated in data collection four times over 36 months. At baseline, marriages averaged 4.8 months in duration ($SD = 2.5$) and 0.6 children ($SD = 1.0$). Husbands' mean age was 27.9 ($SD = 5.8$), and wives' mean age was 26.3 ($SD = 5.0$). Wives had a mean income of \$28,672 ($SD = $24,549$), and husbands had a mean income of \$34,153 ($SD = $27,094$). Twelve percent of couples were African American, 12% were Caucasian, and 76% were Hispanic, consistent with proportions of people living in poverty in Los Angeles County (12.9% African American, 14.7% Caucasian, and 60.5% Hispanic; U.S. Census Bureau, 2002). Of the Hispanic couples, 33% spoke Spanish in their interactions; all African American and Caucasian couples spoke English. Ten couples were not recorded because participants declined, and six because equipment malfunctioned, leaving 414 couples for analysis.

Procedure

At Time 1 (T1) couples were visited in their homes by two interviewers, who took spouses to separate areas to ensure privacy and orally administered self-report measures. Partners were then reunited for three 8-min videotaped discussions—a problem-solving discussion, husband social support discussion, and wife social support discussion. Interviewers returned 9 months (T2; $n = 375$), 18 months (T3; $n = 359$), and 27 months (T4; $n = 336$) after baseline and administered the same interview protocol. Couples were debriefed and paid \$75 for T1, \$100 for T2, \$125 for T3, and \$150 for T4. The RAND Corporation Institutional Review Board approved all procedures.

Behavioral Observation

Videotapes were scored by 16 trained coders using the Iowa Family Interaction Rating Scales (IFIRS; Melby et al., 1998), a macrocoding system that has been used successfully with diverse samples (e.g., Williamson, Bradbury, Trail, & Karney, 2011). Coders—five of whom were native Spanish speakers—coded only in their native language. Coders participated in 10 hr of training per week for 3 months and were required to pass written and viewing tests at an 80% accuracy level before coding tapes. Coders also participated in weekly 2-hr training meetings consisting of a variety of structured activities (e.g., watching examples of specific codes) designed to minimize drift and ensure fidelity to the IFIRS codes.

Coders viewed each of the interaction tasks three to four times using the Noldus Observer XT coding software (Noldus Information Technology, 2008), using the built-in capabilities to note behaviors of both spouses. Coders then used their recorded notations to tabulate the frequency and intensity of each type of behavior and used this information to assign a score for each spouse for each code, using the criteria from the IFIRS coding manual (Melby et al., 1998). The possible scores range from 1 to 9, with a score of 1 indicating that "the behavior did not occur" and 9 indicating that "the behavior occurs frequently or with significant intensity" (Melby et al., 1998, pp. 7–8).

To assess reliability, we assigned 20% of the videos to be coded by two coders chosen at random from the pool of 16 coders. The scores of the two coders were compared, and any scores discrepant by more than one point were resolved by both coders working together. A factor analysis reduced the IFIRS codes to three scales: positivity, negativity, and effectiveness; for all three scales intraclass correlations (ICC) exceeded .70 for husbands and wives across all waves of the study (Williamson et al., 2011).

Measures

Childhood abuse history. Child abuse history was conceptualized as spouses' experience with maltreatment, which included sexual abuse and physical abuse. Individuals were identified as having a history of physical abuse with a self-report measure from the item "Before you turned 18, were you ever hit, beaten up, burned, assaulted with a weapon, or had your life threatened by a member of your family?" Individuals were identified as having a history of sexual abuse from the item "Before you turned 18, did anyone—a stranger, friend, acquaintance, date, or relative—ever try or succeed in doing something sexual to you or make you do something sexual to them against your wishes?" Type of abuse was collapsed into one global measure of child abuse (Colman & Widom, 2004). Participants' history of childhood abuse was represented by a dichotomous variable ($0 =$ no, $1 =$ yes).

Relationship satisfaction. Relationship satisfaction, conceptualized as spouses' global sentiment toward the relationship, was assessed by summing responses on an eight-item questionnaire. The measure was adapted from Rauer, Karney, Garvan, and Hou (2008) and included items from the General Social Survey (Davis, Smith, & Marsden, 2006). It has been used in large surveys with low-income couples (e.g., Rauer et al., 2008) and has been shown to covary systematically with observed communication, thus lending support to its validity as an indicator of relationship functioning (Williamson et al., 2013). Five items asked how satisfied the respondent was with certain areas of their relationship (e.g., "amount of time spent together") and were scored on a 5-point scale ranging from 1 (*very dissatisfied*) to 5 (*very satisfied*). Three items asked the degree to which the participant agreed with a statement about their relationship, (e.g., "How much do you trust your partner?") and were scored on a 4-point scale: 1 (*not at all*), 2 (*not that much*), 3 (*somewhat*), and 4 (*completely*). Scores are a summation of the item responses, with scores ranging from 8 (very dissatisfied) to 37 (very satisfied). Coefficient alpha exceeded .70 for husbands and wives across all waves of the study.

Intimate partner violence. Intimate partner violence (IPV) was assessed with a seven-item questionnaire adapted from the Verbal Aggression and the Violence subscales of the Conflict Tactics Scale (Straus, 1979). Individuals reported frequencies of their spouse's acts of verbal aggression (e.g., "insult or swear") and physical aggression (e.g., "slap, kick, bite, or punch") against them on a 4-point scale ranging from 0 (*never*) to 3 (*often*). Husbands' reports of wives' IPV was used to represent wives' characteristic levels of aggression; thus "wives' IPV" was derived from husbands' reports rather than her self-report. Similarly, wives' reports of husbands' aggression was used to represent husbands' characteristic levels of aggression. Responses were summed to create a score of intimate partner violence at a given wave of the study. Scores from T1 to T3 were averaged to create

a composite score. Scores on the measure of intimate partner violence range from 0 to 21. Coefficient alpha across waves ranged from .65 to .71 for husbands and from .58 to .62 for wives.

Observed communication. Using the Iowa Family Interaction Rating Scales (IFIRS; Melby et al., 1998), we created a composite negativity behavioral scale at each time point by averaging an individual's scores on the hostility, verbal attack, dominance, angry coercion, contempt, denial, disruptive process, and interrogation codes. To characterize partners' negativity overall, scores on negativity were averaged across all discussion conversations between T1 and T3. Scores on the measure of observed negativity range from 1 to 9. IFIRS ratings were also used to create a composite positivity behavioral scale by averaging an individual's scores on warmth/support, listener responsiveness, endearment, physical affection, enjoyment, positive mood, and humor/laugh codes. To characterize partners' positivity overall, we averaged scores on positivity across all discussion conversations between T1 and T3. Scores on the measure of observed positivity range from 1 to 9.

Depression. Depression was measured with nine items from the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977). Three questions assessed the presence of depressed mood over the past 9 months, 30 days, and 2 weeks. Six questions asked the degree to which participants experienced specific depressive symptoms (e.g., "worthlessness," "restlessness") on a 5-point scale ranging from 1 (*all of the time*) to 5 (*none of the time*). The measure was rescaled to have the zero value represent the mean level of depressed mood among the sample; negative values indicate less severity in depressed mood, and positive values indicate greater severity in depressed mood. To characterize partners' depression overall, we averaged scores on depression across Waves T1–T3. The CES-D has shown high validity and reliability across many samples, including Hispanic populations (Grzywacz, Hovey, Seligman, Arcury, & Quandt, 2006). Coefficient alpha exceeded .75 for husbands and wives across all waves of the study.

Substance abuse. Substance abuse was measured using four items adapted from the CAGE questionnaire for alcohol dependence (Mayfield, McLeod, & Hall, 1974) and three items based on diagnostic criteria for substance abuse disorder according to the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; *DSM–IV;* American Psychiatric Association, 1994). The three *DSM–IV* items assessed whether participants' drinking impaired functioning in areas such as family relationships (e.g., "Has your drinking caused trouble with a family member or friend?") and physical safety (i.e., "Have you been under the influence in situations where you could get hurt, like driving?"). Substance abuse was assessed by summing the seven dichotomous responses (0 = no, 1 = yes); scores range from 0 to 7. To characterize partners' substance abuse overall, scores were averaged across Waves T1–T3. Coefficient alpha exceeded .75 for husbands across all waves and ranged from .55 to .67 for wives.

Education. Participants reported their highest educational degree at the time of the initial assessment, T1. Education scores range from 0 (*kindergarten*) to 19 (*beyond college*).

Parental divorce history. Participants reported whether their parents ever divorced or permanently separated at the time of the initial assessment, T1 (0 = no, 1 = yes).

Individual income. Participants reported how much they as an individual earned from all work in the past year, before taxes and deductions. To characterize individuals' earning potential overall, scores on individual income were averaged across Waves T1–T3.

Analytic Plan

To test our research hypotheses, we applied the actor–partner interdependence model (APIM; D. A. Kenny, Kashy, & Cook, 2006) to predict changes in relationship satisfaction. This approach treats partner data as nonindependent, and a test of the intraclass correlation of the data revealed that spouses' relationship satisfaction was significantly nonindependent (ICC = .47, $p < .01$). As seen in Figure 1, APIM analyses allowed us to examine *actor effects* (e.g., *a* paths or the effect of an actor's child abuse history on an actor's own relationship satisfaction; see *w* and *h* subscripts for wives and husbands, respectively) and *partner effects* (e.g., *p* paths or the effect of the partner's child abuse history on the actor's relationship satisfaction; see *w* and *h* subscripts for wives and husbands, respectively). In addition, *interaction effects* between actor and partner variables could be estimated; the curved arrows in Figure 1 capture our hypothesis that partner characteristics might moderate the actor effects of abuse history. That is, husbands' characteristics may moderate the effect of wives' abuse history on wives' satisfaction (moderation of path a_w), and wives' characteristics may moderate the effect of husbands' abuse history on husbands' satisfaction (moderation of path a_h). To examine interaction effects of each partner characteristic (e.g., Partner Positivity × Actor Abuse History) over and above any main effect of a partner characteristic, each analysis entered the one corresponding characteristic (e.g., positivity) as a covariate. To predict changes in relationship satisfaction from T1 to T4, the model adjusts for T1 relationship satisfaction (see Figure 1). All covariates are depicted as dashed lines.

APIM analyses were calculated using multilevel models (MLMs) with the Hierarchical Linear Modeling Version 7.0 software program (Raudenbush, Bryk, Cheong, Congdon, & du Toit, 2011), nesting each partner's responses within a couple; the MLM approach is especially effective for models that test for interaction effects (Campbell & Kashy, 2002). For each of the eight potential moderators outlined in the introduction, we conducted eight separate APIM analyses to test whether each partner characteristic significantly moderated the association of an actor's abuse history on that actor's relationship satisfaction. Each model included the actor and partner effects of child abuse history and one partner characteristic (e.g., positivity) at a time. An interaction term between an actor's abuse history and one partner characteristic was also entered into the model. For example, to test whether husbands' positivity could attenuate or exacerbate the effect of wives' child abuse history on wives' relationship satisfaction, the product of husbands' positivity and wives' abuse history was entered into the model as an interaction term (actor–partner interaction effect). A deviance test revealed that the data were distinguishable by gender such that the parameters for actor and partner differed between husbands and wives. As such, the effects for husbands and wives were simultaneously included in the model but were estimated separately using a two-intercept multivariate technique (Raudenbush, Brennan, & Barnett, 1995); the results shown in the
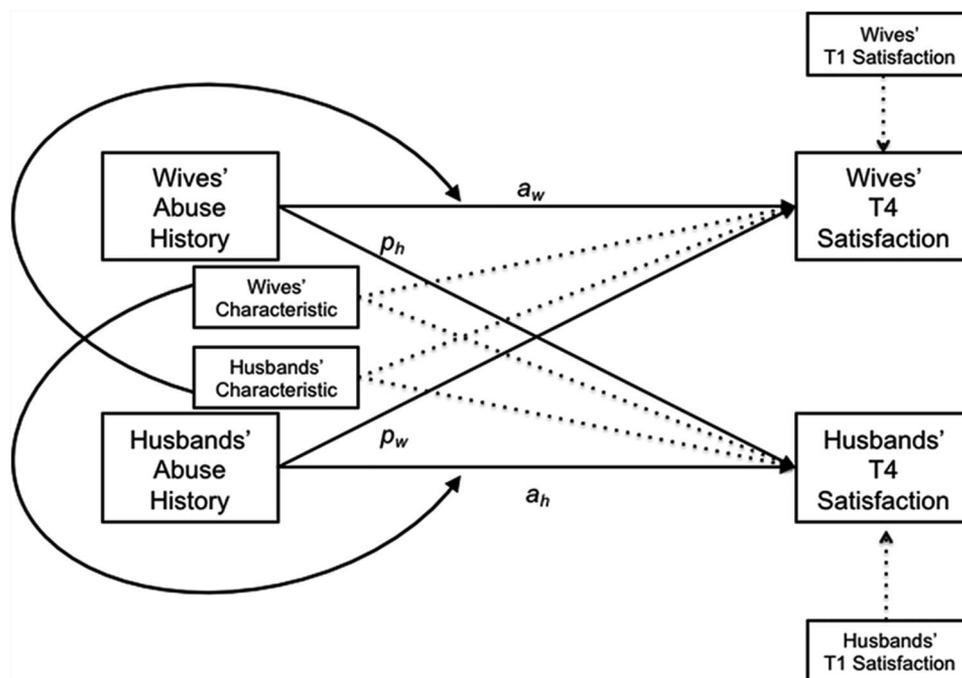
Figure 1. Conceptual actor–partner interdependence model. Actor effects of childhood abuse are shown in the *a* paths, and partner effects of childhood abuse are shown in the *p* paths, with *w* and *h* subscripts marking paths for wives and husbands, respectively. Curved arrows represent the moderating influences of partner characteristics on the association between an actor's abuse history and relationship satisfaction. Covariates are represented with dashed lines.

next section provide parameter estimates for each spouse. Variables were grand-mean-centered to address violations of multicollinearity between predictors.

Results

Descriptive Statistics

Overall, 31.1% ($n = 134$) of wives and 24.6% ($n = 106$) of husbands experienced child abuse; in 10% of the couples, both spouses experienced child abuse. A chi-square test of independence examining the association between the abuse history of one partner and the abuse history of the other partner revealed that individuals reporting childhood abuse were more likely to marry partners who were also abused, $\chi^2(1, N = 431) = 5.89$, $p = .02$. Given this interdependence, descriptive APIM analyses were conducted to examine whether individuals' abuse history significantly influenced their partner's relationship satisfaction (e.g., wives' abuse history affecting husbands' satisfaction) and whether this partner effect interacted with the partner's own abuse experiences (interaction effect; husbands' own abuse history moderating the influence of wives' abuse history on his satisfaction). The APIM analyses for wives indicated that their marital satisfaction was not significantly impacted by husbands' abuse history, that is, a nonsignificant partner effect of abuse ($b = .78$), $t(852) = 1.77$, $p = .07$. An examination of the partner effect for husbands revealed a significant two-way interaction between his partner's abuse history and his own abuse history ($b = 1.82$), $t(852) = -2.08$, $p = .04$.

Specifically, husbands without an abuse history who were married to abused wives had significantly lower relationship satisfaction than did husbands in partnerships in which both experienced child abuse.

By T4, 37 couples had either divorced or separated. An examination of abuse history among the 37 dissolved couples revealed that 24.3% of wives and 16.2% of husbands experienced child abuse. A chi-square test of independence was performed to examine the relationship between divorce status and abuse history and to test for higher attrition among abused individuals. Abuse history was unrelated to divorce for wives, $\chi^2(1, N = 374) = 0.80$, $p = 0.46$, and for husbands, $\chi^2(1, N = 374) < 0.01$, $p = .99$.

Associations Between Abuse History and Intrapersonal Outcomes

Table 1 presents correlations between abuse history and eight intrapersonal characteristics that were predicted to either exacerbate or attenuate the negative effects of abuse history. Correlations among husbands' characteristics are reported above the diagonal, and correlations among wives' characteristics are reported below the diagonal; the correlation between husbands and wives is reported along the diagonal. As seen in Table 1, abuse history was significantly and positively correlated with depression, substance abuse, parental divorce history, and, among husbands, negative communication as well. Table 1 also presents descriptive statistics for abuse history, relationship satisfaction, and partner characteristics.

Table 1
Descriptive Statistics and Bivariate Correlations Between Husbands and Wives' Characteristics, Abuse History, and Relationship Satisfaction

Variable	1	2	3	4	5	6	7	8	9	10	11
1. T1 satisfaction	**.32****	.56**	−.19**	−.18**	.20**	−.39**	−.10*	−.01	.06	<.01	−.21**
2. T4 satisfaction	.52**	**.48****	−.23**	−.16**	.16**	−.20**	−.06	−.11*	−.02	−.05	−.14*
3. IPV	−.21**	−.16**	**.45****	.15**	−.22**	.26**	.07	.02	.07	−.06	.21**
4. Negativity	−.19**	−.13*	.22**	**.58****	−.22**	.15**	.13**	−.05	.05	−.17**	.13**
5. Positivity	.29**	.20**	−.17**	−.22**	**.82****	−.12*	−.02	.24**	.03	.20**	−.07
6. Depression	−.33**	−.33**	.12*	.13**	−.15**	**.26****	.21**	−.13**	.03	−.18**	.31**
7. Abuse history	−.16**	−.18**	.06	−.01	.07	.22**	**.12***	.02	.14**	−.09	.15**
8. Education level	.06	.03	.04	−.15**	.18**	−.09	.02	**.46****	−.09	.44**	−.08
9. Parental divorce	−.12*	−.07	.16**	.08	−.06	.10	.10*	−.06	**.09**	−.11*	−.07
10. Income	.05	<.01	−.06	−.13*	.14**	−.16**	.01	.43**	−.04	**.46****	−.09
11. Substance use	−.12*	−.01	.10*	.04	.04	.24**	.13**	.03	.01	.08	**.20****
Husbands: M (SD)	33.90 (3.05)	33.02 (4.06)	1.56 (1.88)	1.91 (.52)	2.32 (.55)	.03 (5.04)	.25 (.43)	14.52 (3.23)	.43 (.50)	35,348 (27,146)	.68 (1.16)
Wives: M (SD)	33.15 (3.39)	32.30 (4.15)	1.09 (1.40)	1.84 (.50)	2.31 (.60)	.01 (4.79)	.31 (.46)	15.15 (3.02)	.40 (.49)	27,337 (24,141)	.20 (.59)

Note. Intercorrelations between husbands' characteristics are reported above the diagonal, and wives' characteristics are reported below the diagonal. Values in bold along the diagonal represent correlations between husbands' and wives' characteristics. T1/T4 = Time 1/Time 4; IPV = intimate partner violence.
* $p < .05$.   ** $p < .01$.

Aim 1: Associations Between Abuse History and Changes in Relationship Satisfaction

To replicate and extend prior findings linking individuals' own child abuse history and later marital outcomes, APIM analyses examined the actor effects of abuse at T1 as well as changes in satisfaction over time by T4. Husbands' abuse history significantly predicted lower initial relationship satisfaction at T1 ($b = -.69$), $t(856) = -1.92$, $p = .05$, but did not predict further changes in their relationship satisfaction by T4, 3 years into their marriage ($b = -.66$), $t(852) = -1.30$, $p = .19$. Wives' abuse history significantly predicted lower relationship satisfaction at T1 ($b = -1.13$), $t(856) = -3.37$, $p < .01$, and also predicted further declines in their relationship satisfaction by T4 ($b = -.97$), $t(852) = -2.32$, $p = .02$.

Aim 2: Do Partner Characteristics Moderate the Association Between Abuse History and Marital Satisfaction?

To test whether the strength of the association between early abuse history and relationship satisfaction is dependent on attributes and behaviors of the partner, we conducted eight separate APIM models to examine eight partner characteristics as potential moderators: intimate partner violence, observed negativity, observed positivity, depression, education level, parental divorce history, individual income, and substance abuse.

Table 2 depicts eight APIM models for each partner characteristic in predicting changes in relationship satisfaction from T1 to T4.[1] Specifically, the interaction effect between an actor's abuse history and one characteristic of the partner is shown in Table 2. Because of significance of higher order moderation of actor and partner effects by gender, Table 2 presents results for husbands and wives separately.

The results for husbands indicate that all eight of wives' characteristics were nonsignificant moderators ($p > .05$). Specifically, the effect of husbands' abuse history on husbands' relationship satisfaction (actor effect) was not exacerbated by wives' negative characteristics or risk factors and was not buffered by wives' positive characteristics (nonsignificant Actor × Partner interaction effect).

The results for wives indicate that all eight of husbands' characteristics were nonsignificant moderators. Specifically, the effect of wives' abuse history on wives' relationship satisfaction (actor effect) was not exacerbated by husbands' negative characteristics or risk factors and was not buffered by husbands' positive characteristics (nonsignificant Actor × Partner interaction effect). In sum, as was the case for husbands' outcomes, the association between wives' abuse history and relationship satisfaction was not moderated by characteristics of the partner across several domains.[2]

Discussion

Although individuals with a history of child abuse are at elevated risk for adverse outcomes, including relationship distress in adulthood, available research has failed to clarify whether this effect is largely stable and enduring or is malleable and responsive to later experiences within close social relationships. The current

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[1] The pattern of results remain consistent when predicting T1 relationship satisfaction.

[2] Given the qualitative and quantitative importance of understanding abuse as a spectrum (DiLillo, 2001), the test for moderation was also analyzed using a continuous measure of abuse history. Severity scores were derived from variables found to predict poor long-term outcomes: the number of abuse types, frequency of occurrence, and age of first perpetration (see Clemmons, Walsh, DiLillo, & Messman-Moore, 2007; DiLillo et al., 2010). Scores ranged from 1 to 12, with higher scores indicating greater abuse severity. The interaction between abuse severity and partner characteristics remained nonsignificant predictors of husbands' and wives' relationship satisfaction, consistent with results using the dichotomized abuse variable.

Table 2

Hierarchical Linear Modeling Coefficients for Actor and Partner Effects of Child Abuse History on Relationship Satisfaction

Characteristic	Husbands *b* (*SE*)	Wives *b* (*SE*)
Intimate partner violence (IPV)		
Fixed effects[a]		
Intercept	31.58 (1.67)***	33.81 (1.69)***
T1 relationship satisfaction	.71 (.07)***	.62 (.07)***
Actor effects		
Child abuse history	−.07 (.50)	−.93 (.41)*
IPV	−.25 (.16)	.02 (.12)
Partner effects		
Child abuse history	−.81 (.41)*	.77 (.43)
IPV	−.25 (.15)	−.64 (.17)***
Interaction effect		
Actor's Child Abuse × Partner's IPV	.05 (.21)	.19 (.75)
Negativity		
Actor effects		
Child abuse history	−.15 (.79)	−1.03 (.43)*
Negativity	−.20 (.49)	−.41 (.49)
Partner effects		
Child abuse history	−.93 (.41)*	.81 (.44)
Negativity	−.34 (.49)	−.03 (.49)
Interaction effect		
Actor's Child Abuse × Partner's Negativity	.08 (.43)	−.09 (.68)
Positivity		
Actor effects		
Child abuse history	−.34 (.84)	−.99 (.43)*
Positivity	−.01 (.62)	−.10 (.65)
Partner effects		
Child abuse history	−.93 (.41)*	.79 (.44)
Positivity	.39 (.66)	.58 (.62)
Interaction effect		
Actor's Child Abuse × Partner's Positivity	.12 (.37)	−.33 (.60)
Depression		
Actor effects		
Child abuse history	−.18 (.44)	−.78 (.42)
Depression	.03 (.04)	−.15 (.04)***
Partner effects		
Child abuse history	−.80 (.42)	.60 (.44)
Depression	−.08 (.05)	−.02 (.04)
Interaction effect		
Actor's Child Abuse × Partner's Depression	.12 (.10)	.22 (.18)
Education level		
Actor effects		
Child abuse history	−.66 (.86)	−.98 (.42)*
Education	−.17 (.07)*	−.06 (.07)
Partner effects		
Child abuse history	−.89 (.41)*	.80 (.44)
Education	−.08 (.07)	−.08 (.07)
Interaction effect		
Actor's Child Abuse × Partner's Education	.08 (.43)	−.07 (.10)
Parental divorce		
Actor effects		
Child abuse history	−.15 (.56)	−.81 (.45)
Parental divorce	−.49 (.42)	−.17 (.43)
Partner effects		
Child abuse history	−.97 (.44)*	1.11 (.48)*
Parental divorce	−.60 (.47)	−.11 (.42)
Interaction effect		
Actor's Child Abuse × Partner's Parental Divorce	1.14 (1.01)	.09 (2.47)

(table continues)

Table 2 (*continued*)

Characteristic	Husbands *b* (*SE*)	Wives *b* (*SE*)
Income		
Actor effects		
Child abuse history	−.40 (.68)	−.77 (.43)
Income	<−.01 (<.01)	<−.01 (<.01)
Partner effects		
Child abuse history	−.89 (.43)*	.71 (.47)
Income	<−.01 (<.01)	.01 (<.01)
Interaction effect		
Actor's Child Abuse × Partner's Income	<.01 (<.01)	.01 (<.01)
Substance abuse		
Actor effects		
Child abuse history	−.12 (.46)	−.99 (.42)*
Substance abuse	−.13 (.19)	.53 (.37)
Partner effects		
Child abuse history	−.87 (.41)*	.90 (.44)*
Substance abuse	−.34 (.43)	−.21 (.20)
Interaction effect		
Actor's Child Abuse × Partner's Substance Abuse	.42 (.76)	−.74 (.61)

Note. T1 = Time 1.
[a] The values of the fixed effects for each subsequent model are not repeated in the table.
* $p < .05$.   *** $p < .001$.

study aimed to reconcile these views by examining first whether childhood abuse history is related to relationship satisfaction and second whether any such association grows stronger or weaker as a function of partner and relational characteristics. Data were collected during four in-home visits with 431 low-income, Hispanic, African American, and Caucasian newlywed couples over the first 3 years of marriage, recognizing that low-income, diverse couples are an understudied segment of the population and that the prevalence of child abuse and relationship distress are higher in these communities.

Descriptively, it bears noting that within this sample of 431 couples, 197 (45.7%) had at least one spouse report a history of abuse. Breaking this down by type of abuse, we found that the prevalence of physical abuse during childhood was 18.5% across husbands and wives, a rate that falls between the rates in two other studies sampling from married couples (30.0% for DiLillo et al., 2009, and 4.6% for Whisman, 2006). The rate of sexual abuse found here (15.4%), however, was notably higher than the 6.4% prevalence rate reported by previous studies of married couples (DiLillo et al., 2009; Whisman, 2006). In addition, we found that abuse history, despite being assessed with retrospective reports, was significantly associated with key outcomes, including their symptoms of depression, substance abuse, and observed negative behavior for husbands, when partners were in their mid to late 20s.

We descriptively found, in addition to the high prevalence of abuse history among the spouses, significant concordance between spouses' abuse histories such that abused individuals were significantly more likely to marry a partner with the same history. As such, we examined the potential for individuals' relationship satisfaction to be influenced by their partner's abuse history and for the individuals' own abuse history to interact with their partner's abuse history. Our descriptive analyses suggest that whereas nonabused husbands married to abused wives were negatively impacted by their wives' abuse history, husbands who shared the same abuse history as their wives were not negatively affected by

the wives' childhood abuse. It is notable that the occurrence of abuse in both partners did not show an exacerbating effect in which spouses' abuse histories (and the correlates of distrust, psychopathology, etc.) were compounded to create worse relationship outcomes. Instead, the co-occurrence of abuse was associated with higher relationship satisfaction for husbands compared to nonabused husbands married to abused wives. Although this finding awaits replication, it suggests that a shared experience of abuse can confer benefits to the extent that it facilitates empathy and understanding. This may be consistent with other studies revealing that victims of abuse benefit most from forms of social support that increase their perception of self-worth and ability to obtain advice (Hyman, Gold, & Cott, 2003).

With regard to the first of our two main research aims, we found support for the first hypothesis by replicating prior findings with longitudinal data, demonstrating the effects of abuse history on changes in relationship satisfaction. Specifically, abuse history significantly predicted newlyweds' initial relationship satisfaction (for both husbands and wives) and predicted declines in relationship satisfaction over the first 3 years of marriage (for wives only). Although abuse history was not related to other indicators of relationship distress (e.g., intimate partner violence; see Table 1), these findings are consistent with models arguing that relational experiences and outcomes are rooted in relationships from early childhood.

Contrary to our second hypothesis, we found that characteristics of the partner and the relationship—including intimate partner violence, negative communication, positive communication, depression, education, parental divorce history, income, and substance abuse—do not moderate the negative association between abuse history and relationship satisfaction. Specifically, among wives and husbands reporting an abuse history, adverse characteristics in their partner did not show a potentiating effect on abuse history, nor did beneficial partner characteristics show a buffering effect on abuse history. Thus, the results suggest that individuals

with an abuse history are not reactive to the characteristics of their partners in a way that heightens or attenuates the negative effects of child abuse.

Before considering the implications of this study, we provide some reasons for caution in interpreting the results. Although abuse history did covary reliably, albeit weakly, with lower initial satisfaction for newlywed husbands, it did not predict further changes in their relationship satisfaction over the course of their first 3 years of marriage. Although this may indicate that the passing of time in a stable partnership can neutralize the effects of abuse on satisfaction for men, another possible explanation for this result is that our measure of child abuse did not include psychological abuse and neglect. In addition to physical and sexual abuse, experiences with psychological abuse and neglect are associated with poorer marital outcomes, especially for husbands (DiLillo et al., 2009). Future studies on the effect of abuse on marital satisfaction should include these other forms of maltreatment as important vulnerabilities for husbands in their intimate relationships. A second limitation is that abuse was assessed using a retrospective, self-report measure. Though retrospective measures of child maltreatment show convergent validity with documented abuse cases (Goodman et al., 2003), participant recollection of traumatic experiences can be susceptible to underreporting. Moreover, although our measure of child abuse history captured some aspects of the severity of the trauma (see Footnote 2), more extensive measures such as the CAMI (DiLillo et al., 2010) provide a better assessment of maltreatment severity on the basis of other information about the duration, nature of acts, relationship to perpetrator, and number of perpetrators and should be used in future studies (Clemmons, Walsh, DiLillo, & Messman-Moore, 2007). Third, participants were not asked whether they had disclosed their abuse history to their partners and if so, how their partner reacted to the disclosure. Negative reactions to disclosure are a risk factor for increased distress among abused individuals (Ullman, 2002), and these sorts of exchanges were not evaluated as a potential moderator in this study. Fourth, though couples in the sample varied from one another in their levels of intimate partner violence and negative communication, the severity of these issues for the overall sample was relatively low. It is possible that a moderation effect would exist at higher levels of negative partner behaviors. Last, although our findings indicate that partner characteristics and behaviors do not moderate the association between abuse and relationship outcomes in the early stages of first marriages between husbands and wives, we cannot make any claims about gay and lesbian couples, couples at later stages in their relationships, or, more critically, formerly abused individuals who do not go on to marry. Abused individuals are generally less likely to pursue long-term partnerships (Cherlin, Burton, Hurt, & Purvin, 2004), and thus the unmarried individuals most severely influenced by the abuse may not be reflected in our sample of newlywed couples.

Notwithstanding these limitations and alternative perspectives, the results of this study have research and theoretical implications regarding the role of early experiences in later intimate relationship functioning. It is generally assumed that enduring vulnerabilities such as child abuse influence intimate relationships through interdependent exchanges, and this viewpoint is supported by leading models such as the vulnerability, stress, and adaptation model (Karney & Bradbury, 1995). Though these models predict that couples benefit when partners successfully adapt to the vul-

nerabilities of the abused individual through high levels of support and low levels of hostility, this prediction is often not directly tested. Our findings are at odds with the perspective that partner characteristics can moderate the effects of abuse. This suggests that at least some experiences prior to marriage function to set an upper bound on relationship functioning rather than to act as the repository of individual experiences that might, under some conditions, draw partners closer or force them further apart. Of course, this conclusion remains tentative until it has been replicated in other studies, especially given the paucity of research that has directly tested the impact of partners of formerly abused children (DiLillo, 2001).

Beyond simply underscoring how the prevention of child abuse could have lasting benefits for individuals even well into adulthood, these findings raise new questions about how early experiences of abuse manifest themselves at the onset of first marriages and how they can prove to be so resistant to influence once the marriage has begun. The literature linking abuse history to individual outcomes has provided important clues, because one might speculate that self-blame, feelings of shame, lowered self-esteem, and difficulties trusting others could contribute to reduced relationship satisfaction (Feiring, Taska, & Lewis, 2002). At the same time, such an interpersonal stance does not appear to confer any heightened susceptibility to partner influence; instead, abuse history is best understood as a persistent and modest drain on judgments of satisfaction, particularly for wives.

The study also has practical implications for clinicians seeking to increase personal and interpersonal well-being among victims of early abuse. The high prevalence of childhood abuse in our sample of low-income and ethnically diverse couples is consistent with prior work indicating that specific ethnic groups and those with low socioeconomic status are at elevated risk for child abuse (for review see M. C. Kenny & McEachern, 2000). Thus, early abuse will account for variance in individual and relational experiences across a large number of people in this population, and the present study helps to specify the nature of those effects. The covariation we observed among early abuse, individual challenges, and relationship satisfaction suggests that, in some instances, couples presenting with relational distress accompanied by depression and/or substance abuse issues may also be contending with abusive childhood histories. Most practitioners would be sensitive to such a possibility, of course, but our data suggest further that improvements in the relationship or in the partner's behaviors may not offset any effects the abuse might be exerting on global judgments of relationship functioning. Although unique features of each case will no doubt dictate key treatment decisions, greater success might be achieved through individual therapies that reduce distress, promote feelings of trust and safety, and enhance emotion regulation (e.g., Pistorello & Follette, 1998).

Our findings suggest that when appropriate treatment does involve both partners and when abuse is openly acknowledged, efforts to change communication patterns might prove less fruitful than would interventions designed to promote acceptance of the unique histories and experiences that partners bring to the relationship (e.g., Doss, Thum, Sevier, Atkins, & Christensen, 2005). Acceptance may be particularly helpful among spouses who adopt the view that their own or their partner's sensitivity, symptomatology, or trust difficulties can fundamentally change or similarly believe that the nonabused partner can and should alleviate the

interpersonal difficulties of the abused individual. Such optimistic and positive expectations of change can in fact be detrimental to the couple if they lack the ability, as this article highlights, to enact those changes. Indeed, positive expectations for the partner and relationship that are disconfirmed are associated with steeper declines in relationship satisfaction (McNulty & Karney, 2004). Acceptance-based interventions therefore may help reduce disappointments or accusations when faced with violations to their unfounded expectations. In addition, although characteristics of the partner appear to neither attenuate nor exacerbate the effects of abuse, the benefits of a shared experience of abuse provide some hope in the ability to use partners' background for mutual empathy. Thus assessment of both partners' abuse history rather than a single individual's history may be fruitful in improving relationship outcomes.

In sum, this study indicates that a history of abuse may generate a modest but reliable, cascading, and adverse effect on intimate relationships later in life and that this effect is largely independent of the characteristics of the partner. Though leading models of intimacy have predicted that relationship processes can alter the impact of enduring vulnerabilities on the development of the relationship, the present study directly tested and found little support for this prediction, at least when abuse in childhood is the vulnerability in question. Relationships may well be a powerful force in how individuals develop and change, yet our results suggest that abusive experiences at the hands of others early in life are particularly formative, whereas relationships later in life may do little to alter those experiences, for better or for worse.

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