

# Acceptability of Dating Violence and Expectations of Relationship Harm Among Adolescent Girls Exposed to Intimate Partner Violence

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**Objective:** Little is known about the factors that contribute to adolescents' perceptions of the acceptability of dating violence, particularly among girls who have witnessed intimate partner violence (IPV). Drawing on relevant theory, the current study tests a path model linking frequency of witnessing IPV in childhood, sexist beliefs, and automatic relationship-to-harm associations to acceptability of dating violence. **Method:** Participants were 79 female adolescents with a mean age of 16.08 years ( $SD = 1.52$ ) involved in the child welfare system. Participants self-reported frequency of witnessing IPV in childhood, ambivalent sexism, and acceptability of dating violence. A lexical-decision task assessed implicit relationship-to-harm priming, which reflects the degree to which people automatically assume that relationships include harm. **Results:** Consistent with hypotheses, frequency of witnessing IPV was significantly associated with strength of implicit relationship-to-harm associations. Implicit relationship-to-harm associations and hostile sexism were significantly associated with girls' attitudes that dating violence is acceptable. There was a significant indirect effect of witnessing IPV and acceptability of dating violence through relationship-to-harm associations. **Conclusion:** The current study provides information that is relevant to dating violence intervention among adolescent girls. Interventions that target girls' schema about relationships—making explicit that healthy relationships do not involve harm—and include education about sexism in society are likely to decrease dating violence risk over time.

**Keywords:** adolescents, dating violence, witnessing violence, hostile sexism, implicit associations

A recent survey of nationally representative youth in the United States found that 35% of adolescents witnessed intimate partner violence (IPV; i.e., violence between parents or primary caretakers) at some point in their lives (Finkelhor, Turner, Shattuck, & Hamby, 2013). Witnessing IPV is linked with a range of negative consequences, including in the domain of relationship outcomes (Centers for Disease Control and Prevention [CDC], 2015; Margolin & Gordis, 2000; Vagi et al., 2013). In particular, youth who witness IPV are more likely to perceive violence as acceptable in intimate relationships (Lichter & McCloskey, 2004), which may increase victimization in later dating relationships (Foshee, Bauman, & Linder, 1999). Thus, acceptability of dating violence has emerged as a key concept in violence prevention efforts (e.g., Banyard, Moynihan, & Plante, 2007; Wolfe et al., 2003). Despite its conceptual importance in prevention, little is known about the

mechanisms by which witnessing IPV influences beliefs about the acceptability of dating violence, although evidence points to two potentially important and theoretically distinct variables: interpersonal schemas and ambivalent sexism. The current study tests the relative contributions of these two variables to dating violence acceptability in a sample of girls at high risk for victimization in dating relationships: adolescents in the child welfare system previously exposed to IPV.

## Implicit Relationship-to-Harm Associations

Exposure to IPV may teach girls to expect that relationships involve harm (Cloitre, 1998; Cloitre, Cohen, & Scarvalone, 2002), increasing risk for victimization in intimate relationships later in life. Expectations about relationships can be thought of as “schema,” automatically activated sets of associations that affect thoughts and behavior (see Bartlett, 1932; Piaget, 1952). Researchers have proposed that interpersonal traumas involving close others—including witnessing IPV—early in life can disrupt the development of healthy schemas about relationships and attachment (Calvete, Estévez, & Corral, 2007; Cloitre et al., 2002; Crawford & O'Dougherty-Wright, 2007; Freyd, DePrince, & Gleaves, 2007). For example, a child who witnesses parents engaging in attachment behaviors in the context of abuse may develop templates for future relationships that automatically associate relationships with harm. In particular, Cloitre et al. (2002) argued that children exposed to abuse by caregivers and close others may develop schemas that “reflect the learned contingency that to be interpersonally engaged means to be abused, and that abuse is a way to be connected” (p. 92).

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Emerging research supports the link between violence exposure and relationship schema that include harm. DePrince, Combs, and Shanahan (2009) found that college-aged women ( $N = 97$ ) who experienced multiple instances of interpersonal violence demonstrate stronger automatic associations between relationship and harm as measured as compared with their peers. By using a lexical decision-making task, the researchers were able to measure automatic associations that occur outside of conscious awareness and may not be fully captured by explicit tasks such as self-report (e.g., due to socially desirable responding). Furthermore, Gay, Harding, Jackson, Burns, and Baker (2013) found that maladaptive schema (e.g., associations between significant others and abuse) mediate childhood abuse and IPV victimization among adult women, indicating that maladaptive schema related to early maltreatment experiences may increase risk of IPV victimization. Although existing literature supports the relationship among childhood maltreatment, negative relationship schema, and IPV victimization among adult women, we are aware of no research to date on automatic relationship-to-harm associations in adolescent girls, particularly those at high risk of victimization in dating relationships, such as girls who witnessed IPV in childhood.

### Ambivalent Sexism

In addition to influencing the development of relationship schema, the family context provides girls a host of messages about gender roles, with parents passing along their own beliefs, including potentially sexist messages about women's roles in heterosexual relationships (Witt, 1997). When witnessing heterosexual IPV between caregivers, girls are exposed to salient information about gender dynamics that may contribute to views of women that are overtly negative (e.g., that women are inferior) and/or overly romanticized (e.g., that women need protection). The potential for holding hostile and/or apparently benevolent views of women has been characterized as ambivalent sexism (Glick & Fiske, 1996). Although seemingly in opposition to one another, the hostile and benevolent subcomponents of ambivalent sexism are conceptually distinct but not necessarily mutually exclusive. Some individuals concurrently endorse both forms of sexism, and prior research has shown that hostile and benevolent subdomains are often significantly positively correlated at the 0.4–0.5 range (Glick & Fiske, 1996, 1997, 2011). Either type (hostile or benevolent) of sexism may contribute to the belief that dating violence is acceptable. Adolescent girls who witnessed IPV in childhood may develop negative attitudes (i.e., hostile sexist beliefs) about women's roles in relationships (Witt, 1997) that may influence how likely they are to accept violence in relationships and stay in aggressive relationships. However, to date we are aware of no research examining the links between witnessing IPV and benevolent sexist attitudes in adolescence.

Researchers have documented links between ambivalent sexism and acceptance of dating violence in adults (Forbes, Jobe, White, Bloesch, & Adams-Curtis, 2005; Viki & Abrams, 2002); for instance, individuals who endorse hostile sexism are more likely to minimize the seriousness of sexual assault by a dating partner (Yamawaki, 2007). Less is known about how the two components of ambivalent sexism relate to acceptability of dating violence in adolescent girls. For example, adolescent girls who endorse hostile sexism, such as men being rightful holders of authority, may be

more likely to accept dating violence perpetration toward girls or women. On the other hand, adolescent girls who endorse benevolent sexism, such as women as the fairer sex in need of men's protection, may find dating violence against women less acceptable. Thus, hostile sexism rather than benevolent sexism may be linked with acceptance of and involvement in dating violence; in fact, Allen, Swan, and Raghavan (2009) found that benevolent sexist attitudes may be a protective factor against dating violence victimization.

### Current Study

Although violence prevention programs highlight the importance of beliefs about dating violence acceptability, researchers know little about what predicts these beliefs among a key group of youth at high risk for dating violence victimization: girls exposed to IPV in childhood. With better understanding of specific factors linked to dating violence acceptability, prevention programs may be better able to target and affect these beliefs. Therefore, the current study tests the following hypotheses (see Figure 1):

*Hypothesis 1:* Frequency of witnessing IPV will be significantly associated with hostile sexism, relationship-to-harm associations, and acceptability of dating violence.

*Hypothesis 2:* Hostile sexism and relationship-to-harm associations will be significantly associated with acceptability of dating violence.

*Hypothesis 3:* Frequency of witnessing IPV will have a significant indirect effect on acceptability of dating violence through hostile sexism and relationship-to-harm associations.

Finally, benevolent sexism is included in models because of its potential theoretical importance; however, we did not make a priori directional predictions because of a lack of previous research.

### Method

#### Participants

After approval of all study procedures by a university institutional review board, participants were recruited as part of a larger study examining interpersonal victimization risk among girls in the

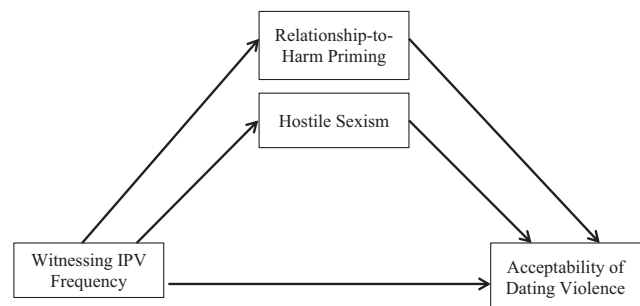


Figure 1. Path model for direct and indirect effects of witnessing IPV, relationship-to-harm priming, and hostile sexism on acceptability of dating violence. IPV = intimate partner violence.

child welfare system—the Healthy Adolescent Relationship Project (HARP; DePrince, Chu, Labus, Shirk, & Potter, 2015). As reported elsewhere (DePrince et al., 2015), adolescent girls were referred to this study by caseworkers, service providers, or legal guardians. From 214 referrals, 180 (84%) participated in the study. Participants completed self-report tasks (specifically demographic information, frequency of witnessing IPV, ambivalent sexist beliefs, and acceptability of dating violence) and a computer task (lexical-decision task) at university research offices. For adolescents younger than 18 years of age, parental or child welfare administrative consent was obtained as well as youth assent.

Of the 180 participants, 92 girls reported witnessing IPV (i.e., physical violence between parents or caretakers). Complete data for key variables (witnessing IPV frequency, relationship-to-harm associations, ambivalent sexism, acceptability of dating violence) were available for 79 girls. There was no significant difference between the 92 girls who witnessed IPV and the final sample of 79 girls (e.g., age:  $t(91) = -0.52, p = .60$ ). The average age of these 79 girls was approximately 16.08 years ( $SD = 1.52$ ), ranging from 13 to 20 years. Racial/ethnic identifications for the 79 girls were 37% Hispanic/Latina, 35% White/Caucasian, 29% Black/African American, 1% American Indian/Native Alaskan/Native American, 1% Asian/Asian American, and 32% other (including biracial and multiracial). Participants were able to choose more than one racial/ethnic identification. Approximately 43% of girls reported currently being in a serious/exclusive relationship, 24% reported dating but not seriously (e.g., “dating or seeing more than one person casually”), 32% reported not dating, and 1% did not answer.

**Materials**

**Traumatic Events Screening Inventory.** The Traumatic Events Screening Inventory—Child Version (TESI-C; National Center for PTSD/Dartmouth Child Trauma Research Group, 1996) was used to assess frequency of witnessing IPV. The TESI-C assesses victimization trauma (e.g., witnessing IPV, physical abuse) and nonvictimization trauma (e.g., car accidents) through a 15-item semistructured interview format. Given the scope of the current study, only the items related to witnessing IPV were used (see *Results* for model results with inclusion of other victimization variables). IPV was operationalized as physical violence between parents or primary caregivers (e.g., mom and dad, mom and boyfriend). Participants reported frequency of witnessing IPV (1 = *only once*, 2 = *once or twice*, 3 = *once every few months*, 4 = *once or twice a month*, 5 = *once a week*, 6 = *more than once a week*, 7 = *daily*). The TESI-C has shown to have adequate inter-rater reliability ( $\kappa = 0.73-1.00$ ), test-retest reliability ( $\kappa = 0.50-0.70$ ), and convergent validity ( $\kappa = 0.64-0.79$ ; Ford et al., 1999, 2000).

**Relationship-to-harm association: Lexical-decision task.** A lexical-decision task replicated from DePrince and colleagues (2009) was used to assess implicit automatic associations (i.e., priming) between relationship and harm. The task was administered using EPrime software. Participants were presented with two words at a time on a computer screen. For each pair of words presented, participants were asked to make key presses to indicate if both words are real or one or both are nonwords. For each trial, a fixation cross appeared in the center of the screen for 400 ms.

After a 150-ms intertrial interval, two words appeared in the center of the screen. Word pairs remained on the screen until participants made a response for a maximum of 5000 ms.

Three types of words were presented: neutral, harm, and relationship. Words (e.g., “lettuce”) and nonwords (“dorb”) were replicated from prior studies (DePrince et al., 2009; McNally, Metzger, Lasko, Clancy, & Pitman, 1998; Zurbriggen, 2000). Harm words reflected concepts related to physical, emotional, and verbal maltreatment: examples include “assault,” “hurt,” and “shame.” Relationship words included “love,” “romance,” and “valentine.” Neutral words included semantically related pairs from Meyer, Schvaneveldt, and Ruddy (1975), such as “lettuce,” “color,” and “socks.” Lengths of words were matched across categories. The 10 word trial types were Harm-Relationship (HR-a), Harm-Relationship (HR-b), Relationship-Harm (RH-a), Relationship-Harm (RH-b), Neutral-Relationship (NR), Neutral-Harm (NH), Harm-Neutral (HN), Relationship-Neutral (RN), Semantically Unrelated (UR-a), and Semantically Unrelated (UR-b). HR-a and HR-b, RH-a and RH-b, and UR-a and UR-b are logically equivalent trial types that were set up separately to allow all words to appear three times. Neutral stimuli pairs consisted of the semantically unrelated (UR) trials.

Three experimental blocks contained 24 trials of words and 24 trials of nonwords. Trials consisted of the following mutually exclusive combinations: HR, NR, HN, RH, NH, RN, and UR. Each word appeared only once per experimental block. Thus, words were randomly assigned to be either primes or targets in three trial types. For example, the word “hurt” was the prime in HR-a, HR-b, and HN trials (i.e., “hurt” appeared before a relationship or neutral word). If “hurt” appeared in the experimental block as the prime in the HR-a trial, then the HR-b and HN trials of the same block used a different harm word prime instead of “hurt.” Thus, the word “hurt” might appear as the prime of the HR-a trial in experimental block 1a, as the prime of the HR-b trial in experimental block 1b, and as the prime of the HN trial in experimental block 1c. In each experimental block, the corresponding word was different (e.g., “love,” “romance,” “lettuce”). Each experimental block was repeated three times, and each word appeared in a new trial type with a new pair. To maximize time between representation of any stimulus, experimental blocks were not repeated until the other two experimental blocks had been administered. The order of trials within each block was randomized for each participant.

The following equations were used to calculate priming (see Zurbriggen, 2000):

$$\begin{aligned} \text{harm-to-relationship} &= \text{NR} - [(\text{HRa} + \text{HRb})/2] - \text{URa} + \text{HN} \\ \text{relationship-to-harm} &= \text{NH} - [(\text{RHa} + \text{RHb})/2] - \text{URb} + \text{RN} \end{aligned}$$

Priming scores were calculated in this manner because reaction times (RTs) could be affected by simply seeing a harm word appear on the screen. For instance, when the word “assault” appears on the screen, RT may increase because of the surprising or distracting nature of the word. We used these calculations to control for general effects of seeing these words throughout the experiment. Thus, we were able to examine the change in RT caused by seeing the relationship and harm words together compared with seeing other combinations of words. A relationship-to-harm (RH) priming score of zero would indicate that RTs when a relationship word was presented immediately before a harm word did not differ compared with other conditions in which relationship

words were primes. Higher RH priming scores would indicate facilitation of the target response (i.e., harm word) caused by the prime (i.e., relationship word). In other words, higher RH priming scores represent a decrease in RT when harm words are primed by relationship words accounting for other conditions in which harm and relationship words are presented. Thus, higher RH priming scores indicate stronger implicit relationship-to-harm associations.

Participants completed the lexical-decision task individually in a quiet, private room. A graduate-level examiner explained to participants that they would complete a task on the computer that involved judging a pair of words presented on the screen as either words or nonwords. They were told to press a button on the keyboard marked “W” if both words of the pair were real words and to press a button on the keyboard marked “NW” if one or both of the words of the pair were nonwords. Participants were asked to respond as quickly as possible while maintaining accuracy. Two practice blocks consisting of three harm and relationship words were administered before the nine experimental blocks.

**Ambivalent sexism.** The Ambivalent Sexism Inventory (ASI; Glick & Fiske, 1996, 2001) is a 22-item self-report measure that assesses two types of sexism: hostile (e.g., “Most women fail to appreciate all that men do for them”) and benevolent (e.g., “A good woman ought to be set on a pedestal by her man”). Participants indicated how much they agreed or disagreed with each statement on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

The ASI demonstrated high reliability and established convergent, discriminant, and predictive validity throughout its psychometric development process, with coefficient  $\alpha$ s ranging from 0.83 to 0.92 across six separate samples for the full ASI scale (Glick & Fiske, 1996). In the current sample, coefficient  $\alpha$  for the full ASI scale was 0.68. Of note, the ASI has been used in studies examining close relationships, women’s endorsement of sexism, women’s health, and in research with adolescents (Becker, 2010; Begun & Walls, 2015; Chen, Fiske, & Lee, 2009; Fernández, Castro, & Torrejon, 2001; Lee, Fiske, & Glick, 2010; Sibley, Overall, & Duckitt, 2007).

**Acceptability of dating violence.** Acceptability of dating violence was assessed by the Acceptability of Dating Violence measure (ADV-F; adapted from Foshee et al., 1999). Adolescents were presented with statements such as “It’s okay for a boy to hit his girlfriend if she insults him” and responded from 0 (*strongly disagree*) to 3 (*strongly agree*). A total ADV-F score was calculated by averaging across all 14 items. Previous research examining attitudes about dating violence among adolescents (e.g., Ulloa, Jaycox, Skinner, & Orsburn, 2008) found a coefficient  $\alpha$  of 0.80 in this scale. In the current sample, the coefficient  $\alpha$  for the ADV-F was 0.72.

## Procedure

Adolescent girls were referred to the HARP by caseworkers, service providers, or legal guardians. The study took place at university research offices. Participants received assent/consent information verbally and in writing about the scope of the study (e.g., questions about interpersonal trauma) and their rights as participants (e.g., participants can skip any questions). Parental or child welfare administrative consent was obtained for adolescents younger than 18 years of age. An “assent/consent quiz” designed

to assess understanding of the information was administered after the assent/consent process. Adolescents were considered assented/consented into the study if they correctly answered the quiz questions and provided written assent/consent, depending on their age.

After assent/consent procedures, participants completed the testing session in person with an interviewer who was either a graduate research assistant or a PhD-level psychologist. To address potential differences in reading ability and attention to measures, self-report items were read to participants by the interviewer. Despite the potential for socially desirable answers in an interview format, participants’ responses on the Marlowe-Crowne Social Desirability Scale ( $M = 7.33$ ,  $SD = 2.06$ ; Crowne & Marlowe, 1960) on average were not in the high range of scorers (20–33) who tend to be highly concerned about social desirability and answering in socially desirable ways. At the end of the session, participants were debriefed and compensated \$40 for their participation plus \$10 to offset transportation costs.

## Results

Table 1 reports descriptive statistics for all measures. The average frequency of witnessing IPV was approximately once a week; frequency of IPV exposure ranged from only once in their lives to witnessing IPV daily. Witnessing IPV was normally distributed, with skewness of  $-0.73$  ( $SE = 0.27$ ) and kurtosis of  $-0.50$  ( $SE = 0.27$ ). On average, results indicated positive relationship-to-harm priming, but not harm-to-relationship priming, consistent with previous research (DePrince et al., 2009). Two one-sample  $t$  tests were used to assess whether participants’ priming scores differed from zero. Results from two one-sample  $t$  tests indicated that relationship-to-harm priming significantly differed from zero.  $t(75) = 3.01$ ,  $p < .005$ , but harm-to-relationship priming did not,  $t(75) = -1.32$ ,  $p = .19$ .

Bivariate correlations were performed to explore relationships among all variables (see Table 2). Frequency of witnessing IPV was significantly, positively correlated with relationship-to-harm priming, but not with hostile sexism, benevolent sexism, or acceptability of dating violence. Relationship-to-harm priming was significantly, positively correlated with acceptability of dating

Table 1  
Descriptive Statistics for Measures

Measure	<i>M</i>	<i>SD</i>	Range
Witnessing IPV frequency	4.96	1.84	1.00–7.00
Relationship-to-harm priming	88.25	255.40	–538.67–718.42
Harm-to-relationship priming	–42.46	279.76	–872.17–555.92
Hostile sexism	3.10	0.45	1.69–4.09
Benevolent sexism	3.19	0.48	1.82–4.45
Acceptability of dating violence	0.98	0.35	0.21–1.83

*Note.* IPV = intimate partner violence; TESI-C = Traumatic Events Screening Inventory—Child Version; ASI = Ambivalent Sexism Inventory; ADV-F = Acceptability of Dating Violence measure. Frequency of witnessing IPV was assessed by the TESI-C (National Center for PTSD/Dartmouth Child Trauma Research Group, 1996). A lexical-decision task was utilized to measure relationship-to-harm priming and harm-to-relationship priming. Hostile sexism and benevolent sexism were assessed by the ASI (Glick & Fiske, 1996, 2001). Acceptability of dating violence was assessed by the ADV-F (adapted from Foshee, Bauman, & Linder, 1999).

Table 2  
*Bivariate Correlations for Measures*

	Witnessing IPV frequency	RH priming	HR priming	Hostile sexism	Benevolent sexism
RH priming	.33**				
HR priming	.67	.07			
Hostile sexism	.50	-.08	-.04		
Benevolent sexism	.01	.02	-.09	.31**	
Acceptability of dating violence	.14	.38**	.16	.21	.14

*Note.* IPV = intimate partner violence. Frequency of witnessing IPV was assessed by the TESI-C (National Center for PTSD/Dartmouth Child Trauma Research Group, 1996). A lexical-decision task was utilized to measure relationship-to-harm priming and harm-to-relationship priming. Hostile sexism and benevolent sexism were assessed by the ASI (Glick & Fiske, 1996, 2001). Acceptability of dating violence was assessed by the ADV-F (adapted from Foshee, Bauman, & Linder, 1999).

\*\*  $p < .01$ .

violence. The ASI subscales were significantly, positively correlated with each other, consistent with prior research findings (Glick & Fiske, 1996, 1997, 2011).

Analysis of the path model and tests of direct and indirect effects were conducted using Mplus (Muthén & Muthén, 1998–2011). Analysis with Mplus involves calculation of maximum likelihood parameter estimates for missing values (Dempster, Laird, & Rubin, 1977), thus making use of all available data. Unlike other modeling software, Mplus provides  $p$  values for direct and indirect effects and the ability to bootstrap data and determine confidence intervals for indirect effects. The current model utilized 2000 bootstrap samples. The proposed model fit the data well:  $\chi^2(1) = 0.87, p = .35$ ; comparative fit index (CFI) = 1.00; root mean square error of approximately (RMSEA) = 0.00 (90% confidence interval [CI] [0.00 – 0.29]); standardized root mean square residual (SRMR) = 0.03. Results (see Table 3) indicate a significant direct effect of frequency of witnessing IPV on relationship-to-harm priming. There are also significant direct effects of relationship-to-harm priming and hostile sexism on acceptability of dating violence. It is important to note that there was a significant indirect effect of witnessing IPV on acceptability of dating violence via relationship-to-harm priming. In other words, witnessing IPV was indirectly associated with acceptability of dating violence in adolescence through relationship-to-harm priming.

To rule out an alternative hypothesis that girls' experiences of physical abuse—rather than witnessing IPV—better explain the paths to acceptability of dating violence, physical abuse frequency scores were included in the model.<sup>1</sup> Girls reported on frequency of physical abuse by a family member from only once to daily; if they reported perpetration by more than one family member, then the frequency scores were averaged across perpetrators. Unsurprisingly (Finkelhor, Turner, Ormrod, & Hamby, 2009), physical abuse and witnessing IPV scores were highly correlated,  $r = 0.48, p < .01$ . Physical abuse also had a direct effect on acceptability of dating violence ( $\beta = 0.74, SE = 0.04, p < .001$ ). However, including physical abuse in the model did not change the significance of the indirect effect of witnessing IPV to acceptability of dating violence through relationship-to-harm priming ( $\beta = 0.22, SE = 0.10, p < .05$ ). Furthermore, physical abuse did not have an indirect effect on acceptability of dating violence through relationship-to-harm priming ( $\beta = -0.13, SE = 0.11, p = 0.22$ )

or hostile sexism ( $\beta = -0.03, SE = 0.10, p = 0.70$ ). In summary, we found a significant association between physical abuse and dating violence acceptability/victimization, consistent with prior research (Foshee, Benefield, Ennett, Bauman, & Suchindran, 2004); however, the current study demonstrates that among girls who witnessed IPV, witnessing violence—over and above physical abuse—is indirectly linked to acceptability of dating violence through relationship-to-harm associations.

### Discussion

Among adolescent girls in the current study, more frequent exposure to IPV did not have a direct effect on acceptability of dating violence; however, results from a path analysis points to the importance of studying social learning and cognitive variables in the development of beliefs about the acceptability of dating violence. In particular, more frequent witnessing of IPV between parents/caregivers was linked with stronger relationship-to-harm priming as measured by an implicit schema task. Thus, with more frequent exposure to IPV, girls' expectations that relationships include harm also increased. In turn, the stronger relationship-to-harm priming was linked with greater acceptability of dating violence. These findings are especially striking because schematic representations of relationships were tested using an implicit task, demonstrating that adolescent girls who witness IPV have expectations or beliefs about harm in relationships at an automatic, nonconscious level.

Although hostile sexism was unrelated to IPV exposure and did not indirectly link IPV exposure to acceptability of dating violence, girls' own negative views of women were directly and positively related to acceptability of dating violence. That is, as adolescent girls' hostile sexist views increased, so did their beliefs that dating violence is acceptable. However, benevolent sexism was unrelated to IPV exposure and acceptability of dating violence. This finding suggests that hostile sexism should be addressed in programs seeking to prevent dating violence with an

<sup>1</sup> Frequency of emotional and sexual abuse, age of onset for witnessing IPV, and length of time witnessing IPV were also tested in an alternative model as potential covariates; however, because inclusion of these variables did not change results, we report the original model as predicted a priori.

Table 3  
Standardized and Unstandardized Direct and Indirect Effects of Model

Effect	$\beta$ (95% CI)	<i>B</i>	<i>SE</i>
Witnessing IPV frequency → RH priming			
Direct	.32**	44.22	2.76
Witnessing IPV frequency → Hostile sexism			
Direct	.01	0.05	0.03
RH priming → ADV-F			
Direct	.40**	0.001	0.00
Hostile sexism → ADV-F			
Direct	.24**	0.19	0.07
Witnessing IPV frequency → ADV-F			
Direct	-.002 (-.17-.17)	0.00	0.02
Total indirect	.14 (.03-.25)	0.03	0.01
IPV frequency → RH → ADV-F	.13* (.03-.23)	0.02	0.01
IPV frequency → Hostile → ADV-F	.01 (-.04-.06)	0.002	0.01

*Note.* IPV = intimate partner violence. Frequency of witnessing IPV was assessed by the TESI-C (National Center for PTSD/Dartmouth Child Trauma Research Group, 1996). A lexical-decision task was utilized to measure relationship-to-harm priming and harm-to-relationship priming. Hostile sexism and benevolent sexism were assessed by the ASI (Glick & Fiske, 1996, 2001). Acceptability of dating violence was assessed by the ADV-F (adapted from Foshee, Bauman, & Linder, 1999).

\*  $p < .05$ . \*\*  $p < .01$ .

emphasis on sources of those messages outside of the IPV context, such as from media and peer groups (see Wolfe et al., 1996, for an example).

### Limitations and Future Directions

Several issues should be taken into account in interpreting the current findings. The current study recruited adolescent girls in the child welfare system, who are at higher risk compared with girls in the general population to experience multiple types of stressors, including interpersonal and community violence (Stein et al., 2001). Before broadly generalizing findings to adolescent girls, replication is required in typically developing samples as well as replication with a larger sample. Because of the focus of the larger project from which data were drawn, these analyses focused on girls' experiences of victimization and cannot speak to girls' perpetration of dating violence or boys' experiences or beliefs. Future studies may examine these variables in adolescent boys, as well as their role in girls' perpetration and boys' experiences of violence. Furthermore, data in this study were obtained from a single source in a cross-sectional design. Future studies may utilize data from multiple informants, such as dating partners, to examine convergence of data and utilize a longitudinal design to determine causal direction.

In addition, we did not find a significantly positive correlation between witnessing IPV and acceptability of dating violence as reported by Lichter and McCloskey (2004), although this may be due to differences in samples (e.g., difference in trauma exposure, inclusion of both girls and boys). Finally, although data from the current study support relationship-to-harm associations as a predictor of accepting dating violence, further research is needed to better understand the extent to which implicit associations translate into behaviors in interpersonal relationships (Greenwald & Banaji, 1995).

### Conclusion

Despite these considerations, the current study makes many novel contributions to existing research. Limited research has examined predictors of acceptability of dating violence, particularly in a vulnerable population such as adolescent girls from the child welfare system who have witnessed IPV. Results from the current study indicate that more so than exposure to violence in the home, social and cognitive factors later in life (influenced by IPV exposure or not) predict how likely adolescent girls are to accept violence in their own romantic relationships. Furthermore, although the link between experiences of physical abuse and acceptance of violence is well documented, the current study makes novel contributions regarding the indirect relationship of witnessing violence and adolescent acceptance of violence, through implicit relationship-to-harm associations.

We conceptualized acceptability of dating violence as a high risk factor for future involvement in relationships that utilize violence because girls who accept violence in relationships are likely to normalize violence when it occurs and stay in relationships when they become violent both in adolescence and in adulthood. Adolescent dating relationships provide a foundation for adult romantic relationships, including the use of violence in relationships (Crockett & Crouter, 1995; Magdol, Moffitt, Caspi, & Silva, 1998). Thus, better understanding adolescent girls' cognitive framework of relationships is critical for promoting healthy relationships in adolescence as well as in adulthood.

The current study is the first to identify girls' own hostile sexist beliefs about women and implicit relationship-to-harm associations as risk factors for acceptability of dating violence. This is also the first study to examine the role of witnessing IPV on both aspects of ambivalent sexism (hostile and benevolent sexism) as well as the relative contributions of the ambivalent sexism sub-components on acceptability of dating violence. The current study generalizes other findings on sexist attitudes and attitudes about violence against women (Berkel, Vandiver, & Bahner, 2004) and

the link between interpersonal violence experiences and implicit relationship-to-harm associations (DePrince et al., 2009) to an adolescent female population. The current study contributes to literature on sexist attitudes and violence against women by specifically examining the role of sexist attitudes on dating violence. Findings of the current study also expand upon findings by DePrince and colleagues (2009) by examining the role of implicit associations on self-reported ratings of acceptability of dating violence.

The current study is also the first to utilize implicit and self-report measures in examining the relationship between early witnessing of IPV and later acceptability of dating violence in adolescent girls. Evidence that implicit relationship-to-harm associations link the relationship between IPV exposure and acceptability of dating violence highlights the importance of utilizing both types of methods in examining beliefs about dating violence. Both explicit beliefs about gender roles and implicit, nonconscious beliefs about relationships matter in how likely adolescent girls are to accept violence in dating relationships, findings that warrant continued investigation.

Findings from the current study have several implications for dating violence intervention. Interventions may need to directly target girls' expectations about relationships, making explicit that healthy relationships do not involve harm. Cognitive-behavioral interventions that target schemas may be particularly useful approaches to incorporate. Furthermore, intervention programs that include education about sexism in society and the ways in which it perpetuates dating violence (e.g., Wolfe et al., 2003) have been effective in reducing dating violence. As such, these programs may benefit from specifically targeting hostile sexist beliefs to reduce attitudes about the acceptability of dating violence. As research continues to more deeply understand these and related findings, more effective interventions may be crafted to prevent individuals' experiences of interpersonal and relationship violence.

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