Published in final edited form as:

J Interpers Violence. 2021 June ; 36(11-12): NP6411–NP6440. doi:10.1177/0886260518814267.

Does Gottman's Marital Communication Conceptualization Inform Teen Dating Violence? Communication Skill Deficits Analyzed Across Three Samples of Diverse Adolescents

Heidi Adams Rueda¹, Monica Yndo², Lela Rankin Williams³, Ryan C. Shorey⁴

¹The University of Texas at San Antonio, USA

²Concordia University Texas, Austin, USA

³Arizona State University, Tucson, USA

⁴Ohio University, Athens, USA

Abstract

Communication skill deficits are thought to contribute to teen dating violence (TDV), parallel to the inclusion of these throughout prevention curricula. Communication research among adolescents is highly underdeveloped, although a preliminary study utilizing Gottman's marital communication conceptualization found that a majority of negative communication behaviors predictive of marital distress were also associated with relationship aggression among primarily White college students. Our aim was to replicate this study with diverse samples of adolescents (50.3% Latino, 23.5% Black; $M_{age} = 16.06$). Urban high school youth, pregnant and parenting youth in residential foster care, and youth in urban after-school programs self-reported on their use of maladaptive and adaptive communication behaviors, relationship quality (i.e., satisfaction, commitment), and emotional, physical, sexual, relational, and threatening dating violence. Across samples, maladaptive communication and particularly flooding (i.e., the tendency to become overwhelmed, leave the argument) and the four horsemen (i.e., a cascading and negative communication sequence) were associated with higher likelihood of multiple types of TDV. Relationship quality was associated with decreased likelihood for TDV among high school and after-school youth samples, but with increased likelihood among youth in foster care. Results indicate that youth utilize a wide range of both adaptive and maladaptive communication behaviors, and that similar maladaptive patterns predictive of relationship distress in young adulthood and in marriage are also associated with distress in adolescents' dating relationships. Equipping youth with adaptive communication skills as part of a comprehensive approach to reducing TDV and enhancing healthy relationships is meaningful for diverse adolescents. Further research is warranted concerning youth's perceptions of relationship quality and risk of TDV.

Corresponding Author: Heidi Adams Rueda, Department of Social Work, The University of Texas at San Antonio, 501 W. César E. Chávez Blvd., San Antonio, TX 78207, USA., Heidi.Rueda@utsa.edu.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Keywords

partner abuse; communication skills; situational factors; foster care; prevention education; relationship quality; Hispanic youth

Introduction

Teen dating violence (TDV) is commonly defined as a multidimensional construct inclusive of coercive or aggressive acts toward an intimate partner, ranging from verbal/emotional (e.g., ridicule), threatening (i.e., to harm a partner), or relational (e.g., harming one's reputation), to physical and/or sexual acts such as hitting, choking, or forced intercourse (D. A. Wolfe et al., 2001). TDV is a serious public health issue requiring attention to modifiable risk factors. Communication skill deficits have been associated with violence in a number of studies with adolescents (e.g., Antônio & Hokoda, 2009; Foshee et al., 2008; Messinger, Davidson, & Rickert, 2011; K. Wolfe & Foshee, 2003), paralleling the inclusion of conflict resolution content throughout many TDV prevention curricula (Malhotra, Guarda-Gonzalez, & Mitchell, 2015). However, communication research with adolescents is highly underdeveloped, particularly in comparison with marital literatures where communication behaviors have been studied extensively. Despite potential utility in applying marital literatures to adolescent programming, there is a gap in theory development and testing (Cornelius, Shorey, & Beebe, 2010). In the current study, we utilize Gottman's (1999) marital communication conceptualization to investigate whether conflict resolution behaviors found to be maladaptive among adult couples are utilized by adolescents within dating relationships, as well as to explore their associations with multiple forms of TDV. Findings can inform preventive interventions aimed at strengthening adolescents' interpersonal skills in an effort to reduce dating violence.

Conceptual Framework

Although having received only peripheral attention within the field of violent dating relationships, specific maladaptive communication behaviors have been extensively studied within the marital field as contributing to marital dissolution and divorce. Gottman's (1999) marital communication conceptualization was derived from observational research with married couples and reflects key components of clinical trainings delivered worldwide (Shapiro, Gottman, & Fink, 2015). Communication skills derived from this framework are central to interventions that have demonstrated success in improving marital quality and satisfaction, including among young parents (Shapiro & Gottman, 2005), as well as reducing situational violence among low-income couples (Bradley, Friend, & Gottman, 2011; Bradley & Gottman, 2012). Furthermore, this conceptualization forms the basis for an observational coding system that has been utilized with young adults to understand the role of communication processes as affecting relationship quality and to understand risk of intimate partner violence (Shortt, Capaldi, Kim, & Laurent, 2010).

Gottman's (1999) framework identifies specific communication deficits related to relationship distress, which include harsh start-up, flooding, and gridlock. Harsh start-up denotes raising issues forcefully, involving a rapid escalation from neutral to negative affect.

Flooding refers to how a partner thinks and feels during an interaction, specifically that arguments erupt from seemingly minor issues, that a partner says something that they regret by launching loud and heated insults, and, most notably, that a person feels overwhelmed by an inability to think or communicate calmly. This may result in distancing entirely or leaving the argument altogether. Gridlock refers to a couple reaching a point of stagnancy where problems seem unsolvable and basic needs and values are not understood. In addition, a particularly detrimental series of cascading behaviors beginning with criticism and ending with partner withdrawal is labeled as the “Four Horsemen of the Apocalypse” (herein termed “four horsemen”). This sequence captures multiple maladaptive behaviors, including criticism, defensiveness, resentment, argumentativeness, and withdrawal, and is distinguished by the culmination of these alongside a marked overall dissatisfaction in one’s perceived ability to negotiate conflict. Communication behaviors that may help to restore harmony during conflictual episodes and are therefore considered adaptive include accepting influence and repair attempts. Accepting influence reflects an attitude of give-and-take, finding things to agree about, and being genuinely interested in a partner’s point of view. Repair attempts are bids to de-escalate conflict via the use of humor, taking breaks, or minimization of issues.

Despite its prominence in the field of adult marital research, we are aware of only one study utilizing Gottman’s (1999) communication conceptualization to study dating violence. In their study of freshmen college students (86% White, 80% female), Cornelius and colleagues (2010) examined the role of maladaptive communication behaviors in the perpetration of physical and psychological dating violence. They found that flooding was predictive of physical violence perpetration, and the four horsemen predicted both physical and psychological violence victimization, as well as psychological violence perpetration. Although considered an adaptive communication behavior in marital literatures, repair attempts were predictive of both physical and psychological victimization. Relationship satisfaction was inversely related to violence. Theoretically grounded research with regard to communication and dating violence is needed with younger adolescent samples.

Adolescent Communication of Conflict

We do know that youth utilize a wide variety of conflict negotiation strategies with a dating partner ranging from facilitative (McIsaac, Connolly, McKenney, Pepler, & Craig, 2008) to minimization (Tuval-Mashiach & Shulman, 2006), avoidance (Messinger et al., 2011; Shulman, Mayes, Cohen, Swain, & Leckman, 2008), withdrawal (Bonache, Gonzalez-Mendez, & Krahé, 2017), and blaming and criticism (Tuval-Mashiach & Shulman, 2006; Rueda & Williams, 2015). One comparative study found that, compared with young adult couples, adolescents were more likely to minimize or deny the existence of disagreement in their relationship and to spend less time in discussion over conflict (Tuval-Mashiach & Shulman, 2006). In addition, adolescents were more likely to criticize or blame their partners for relationship problems. In discussing areas of conflict, jealousy or infidelity concerns are common issues for adolescents (Giordano, Copp, Longmore, & Manning, 2015; Rueda, Lindsay, & Williams, 2015). Compared with marital relationships, superficial levels of conflict negotiation among adolescent couples may stem from inexperience in romantic relationships and the ability to more easily dissolve partnerships that are no longer

desired by either or both partners (Connolly & McIsaac, 2009). However, adolescents experience peer pressure that can at times be extreme and that can encourage them to stay in relationships that may be unhealthy or violent (Smith & Donnelly, 2001). Furthermore, youth cite difficulty leaving unhealthy relationships for reasons of attachment, feelings of love and closeness, and fear of partner retaliation (Williams, Rueda, & Nagoshi, 2015).

Studies with adolescents suggest that specific communication strategies are particularly detrimental in that they play an escalating role in violence perpetration. In a longitudinal study, Foshee and colleagues (2008) found that destructive communication behaviors (e.g., screaming insults) played a mediating role between adolescents' minority status and perpetration of both moderate and physical dating violence. Messinger and colleagues (2011) further found that violence was associated with youth's use of accusation, purposefully saying something to make a partner jealous, using negative vocal tone, blaming, and insults. Research suggests that some youth learn these communication styles through exposure to family violence. Wolfe and Foshee (2003), for example, found that direct anger expressions inclusive of yelling, screaming insults, and throwing things mediated both males' and females' exposure to family violence and physical dating violence perpetration. Among a sample of Mexican youth, Clarey, Hokoda, and Ulloa (2010) similarly found that anger dysregulation and violence acceptance beliefs mediated youth's exposure to parental violence and dating violence perpetration. Research suggests that although control attempts are part of these interactions, youth typically struggle to regulate anger over specific topic domains (e.g., infidelity; Giordano et al., 2015). Psychological and physical violence are commonly experienced by both members of the couple involved in situationally violent relationships, reflecting our focus in this study on relational contexts. This may be compared with experiencing one-sided patterns of fearful control which occurs less commonly although may involve more serious acts of violence (Giordano et al., 2015; Johnson, 2006; Messinger et al., 2011).

Diversity Considerations

Much of what we have learned about adolescents' interactions regarding conflict stems from research of White youth samples. Hispanic youth, however, experience competing cultural norms from the U.S. and Latin origin countries with regard to values and expectations within dating contexts (Raffaelli, 2005), and these contribute to differing proscriptions for appropriate communication of thoughts and feelings (Arciniega, Anderson, Tovar-Blank, & Tracey, 2008; Castillo, Perez, Castillo, & Ghosheh, 2010). An observational study of Mexican American adolescent dating couples found a similar type of conversational style to the four horsemen whereby partners blamed and criticized one another, exhibited one-sided failed attempts at problem resolution, and became frustrated at how the interactions were unfolding (Rueda & Williams, 2015). These interactions were contextualized by cultural considerations as adolescent boys evidenced positive (i.e., emotional attentiveness) and negative (i.e., domineering) aspects of *machismo* and topic domains reflected traditional gendered courtship rituals (i.e., the importance of meeting a partner's parents). Verbally aggressive communication tactics are common among adolescent couples, including among Spanish-speaking adolescents (Muñoz-Rivas, Grana, O'Leary, & Gonzalez, 2007). Research with adolescents in Monterrey, México, found that verbal/emotional abuse was associated

with physical violence perpetration and negatively associated with positive conflict behaviors (Antônio & Hokoda, 2009). Qualitative focus group research with Mexican American youth suggests that emotional abuse can escalate to physical violence perpetration by way of becoming overwhelmed during the argument (Adams & Williams, 2014), paralleling what Gottman (1999) terms as flooding.

Adolescents in foster care are also at increased odds of experiencing TDV (Jonson-Reid, Scott, McMillen, & Edmond, 2007). Youth in the foster care system may not have had significant exposure to cultural traditions, norms, and expectations from within their ethnic group of origin as they are moved from placement to placement. Rather, an understudied culture of collective maltreatment experiences denotes an aspect of diversity in itself as youth bond through this shared identity (Samuels & Pryce, 2008). Furthermore, some research has found a higher proportionality of lesbian, gay, bisexual, and transgender youth in foster care settings than would be expected from the general population (Wilson, Cooper, Kastanis, & Nezhad, 2014). Youth who deviate from heteronormativity are at heightened risk of experiencing dating violence (Dank, Lachman, Zweig, & Yahner, 2014; Reuter, Sharp, & Temple, 2015).

Cumulative stressors can increase risk of involvement in violent dating relationships (Chen & Foshee, 2015). Studies suggest that it may be through insecure bonds formed in childhood that youth experience difficulty negotiating conflict with romantic relationship partners, particularly as associated with avoidant and anxious attachment styles (Burk & Seiffge-Krenke, 2015; Steinberg, Davila, & Fincham, 2006; Weiss, MacMullin, Waechter, Wekerle, & Research Team, 2011). Furthermore, using data from the International Study of Teen Dating Violence, Rebellon, Straus, and Medeiros (2008) found that parental neglect was negatively associated with self-control among diverse youths of 32 nations. Other cross-cultural research has pointed to poor self-control and child maltreatment as predictors of both psychological and physical dating violence perpetration and victimization (Gover, Jennings, Tomsich, Park, & Rennison, 2011). Despite the well-documented relationship between child maltreatment and involvement in violent relationships (Renner & Slack, 2006; Richards, Tillyer, & Wright, 2017; K. Wolfe & Foshee, 2003), as well as evidence that a majority of violent episodes begin with verbal argument (Giordano et al., 2015; Muñoz-Rivas, Graña, O'Leary, & González, 2009), very little research exists concerning conflict negotiation among youth in foster care.

Although an exhaustive review is beyond the scope of this article, it is important to note that each of the samples included in the present study is at risk of communication tactics that may contribute to violence, given low socioeconomic status, higher likelihood of violence in their schools and neighborhoods, discrimination, and, for Hispanic youth in particular, acculturative stressors (see Horevitz & Organista, 2013; Smokowski, David-Feron, & Stroupe, 2009, for reviews).

The Present Study

The purpose of the present study was to examine associations between communication behaviors and TDV in three diverse samples of adolescents inclusive of those attending an

urban public high school, a residential foster care for pregnant and parenting female adolescents, and urban after-school programs. This is the first study to our knowledge to utilize a marital conceptualization to explore associations between communication and TDV, and we replicate the work of Cornelius and colleagues (2010) who studied these relationships among college students. Whereas prior research has tended to include psychological and physical violence perpetration only (e.g., Cornelius et al., 2010), we aimed to expand research in this area by including sexual, relational, and threatening violence perpetration and victimization. These forms of violence, particularly relational and threatening, are highly understudied within the adolescent literature although grounded in adolescents' focus group descriptions as constitutional of TDV in the original validation of the Conflict in Adolescent Dating Relationships Inventory (Wolfe et al., 2001).

Given that this is the first to study Gottman's (1999) communication conceptualization among adolescents, our hypotheses are derived from study of college-age youth (Cornelius et al., 2010) and literature regarding adolescent conflict negotiation. We hypothesized that self-reported maladaptive communication behaviors would be associated with increased likelihood of experiencing multiple forms of dating violence. Specifically, we expected that flooding and the four horsemen would predict youth's higher likelihood of experiencing emotional and physical victimization and perpetration. This would mirror findings of the study we are replicating, as well as the salience placed on the four horsemen as the most toxic of communication patterns to a relationship. We further explored whether maladaptive communication behaviors were able to predict youth's likelihood of experiencing other less studied forms of violence (i.e., threatening, relational, sexual). Finally, we explored whether adaptive forms of communication were related to youth's likelihood of experiencing violence. Although research with adults suggests that adaptive communication behaviors can serve as protective in conflict episodes, research with young adults has yielded contradictory findings (Cornelius et al., 2010). We included relationship quality components in our analyses given that Gottman's (1999) marital conceptualization emphasizes the deterioration of these as a facet of poor communication and of violence within a relationship.

Method

Samples and Procedures

Data collection across each of the three samples was led by the first author. Demographic information is presented for each sample in Table 1. Institutional review board permission was granted from each governing university prior to beginning data collection. Youth were given the same instructions to think of their most serious current dating relationship or, if they were not in a relationship, of a past relationship when answering the questions. Youth were reminded to think of the same relationship when answering questions across measures.

Study 1: Urban high school.—Adolescents ($N = 123$) in Grades 9 and 10 ($M_{\text{age}} = 15.70$; $SD = 1.56$) in an urban area of a Southwest state participated in a written survey about romantic relationships during their English class. Parents passively consented for their child to participate in the study, in that they were sent home information about the study and

given the opportunity to have their child opt out. All youth participated. Students were given a small incentive (i.e., a pencil with the university affiliation) for completing the survey.

Study 2: Foster care.—Adolescents ($N = 59$) between the ages of 13 and 20 ($M_{\text{age}} = 16.60$; $SD = 1.39$) were recruited from a religiously affiliated residential foster home for pregnant and parenting adolescent girls in an urban area of a large Southern state. Youth were placed either as a result of child maltreatment or involvement in the juvenile justice system. As part of a community-based participatory study seeking to understand and prevent TDV, the adolescents were invited to participate in a survey. In collaboration with the first author, the home led all recruitment activities. All residents were invited to participate in the survey and did so during what would have been a scheduled class. Youth signed written consent/assent forms, and the Clinical Director at the home signed as a legal guardian for youth who were under the age of 18. Youth were given a US\$15 gift card and a handout with information on healthy relationships for filling out the survey. All surveys were administered in English, although they were also available in Spanish.

Study 3: After-school programs.—Adolescents ($N = 99$) in Grades 8 to 12 ($M_{\text{age}} = 15.89$; $SD = 1.54$) were recruited in collaboration with three after-school programs serving high school youth from an urban area of a large Southern state. Youth were given a survey as part of a collaborative study about health and dating relationships. All interested youth obtained their parent's written consent to participate. Students who returned signed forms then provided their own written assent. During the survey, youth were given snacks and a handout with information on healthy relationships and resources. All but three surveys were administered in English, the former administered in Spanish.

Measures

Please see Table 2 for descriptive statistics and Cronbach's alpha reliability estimates for measures across each sample. These are not included for violence measures because, although subscales comprise acts of aggression constituent of the same violence class, perpetration may involve distinct and not necessarily various forms (e.g., punching, choking; Ryan, 2013).

Communication skills.—We adapted Gottman's (1999) marital questionnaire for use with adolescent dating couples and piloted the adapted measure for understandability with youth at the residential foster care home. Wording changes were minor and included changing "my spouse" to "my partner" and adding clarifying words to the existing statements (e.g., "I usually feel like my personality is being assaulted" where the latter became "assaulted/attacked"). The Flesch–Kincaid Grade Level (GL) readability test resulted in a 6.3, suggesting that an individual needs on average 6.3 years of education to easily understand the text (Onwuegbuzie, Mallette, Hwang, & Slate, 2013). Youth self-reported whether communication behaviors across six domains were true/false within their relationships. Adaptive communication domains included measures of repair attempts (20 items; tendency to use humor, take breaks, or minimize negative statements) and accepting influence (20 items; perception of shared decision making, give-and-take attitude). Maladaptive communication domains included measures of harsh start-up (20 items;

approaching conflict forcefully, rapid escalation from neutral to negative affect), gridlock (20 items; withdrawal, unwillingness to compromise), flooding (15 items; feelings of overwhelm, inability to think straight, feeling that small issues will escalate, leaving the argument), and four horsemen (30 items; a cascading negative sequence of responses beginning with criticism and ending in partner withdrawal). All three studies included all communication measures with the exception of Study 3, which due to space limitations only included the four horsemen subscale. Responses within each subscale were summed, totals indicating the number of items endorsed.

Relationship satisfaction and commitment.—We measured relationship satisfaction and commitment via subscales of the Perceived Relationship Quality Components (PRQC; Fletcher, Simpson, & Thomas, 2002). These subscales consisted of three items each. Likert scale responses ranged from 1 (*not at all*) to 7 (*extremely*) and were averaged to indicate overall satisfaction and commitment.

Dating violence.—We utilized the Conflict in Adolescent Dating Relationships Inventory–Short Form (CADRI-SF; Fernández-González, Wekerle, & Goldstein, 2012) to assess our dependent variables of perpetration and victimization of dating violence across five domains: emotional (e.g., using put-downs, hostility), physical (e.g., hitting, pulling hair), sexual (e.g., forced intercourse, unwanted touching), relational (e.g., spreading rumors, turning friends against a partner), and threatening (e.g., to hurt, to throw something) behaviors. Participants were asked whether the statements had occurred within the last 12 months during a conflict or argument with their partner. This measure includes 20 items with options including *never*, *seldom* (1–2 times), *sometimes* (3–5 times), and *often* (6 or more times). Responses were coded 1 through 4 and averages were calculated for each of the 10 subscales. Rates of violence across samples are presented in Table 3. High rates of bidirectionality are consistent with other research of adolescent (e.g., Messinger, Fry, Rickert, Catallozzi, & Davidson, 2014) and young adult samples (e.g., Cornelius et al., 2010).

Plan of Analysis

We first assessed for missing data across samples. Urban high school youth had 86.2% completion of TDV measures and 96.7% completion of all other measures. Foster youth had 88.95% completion of TDV measures, 91.6% completion of communication measures, and 94.9% completion of relationship measures. Youth enrolled in after-school programs had 76.48% completion of TDV and relationship measures and 86.32% completion of communication measures. Although youth were told to think of a past relationship if they were not currently involved, more youth from after-school programs reported being single. It may be because some lacked dating experience and thus did not complete the relationship measures. Furthermore, the TDV measures were at the end of the survey, so it is possible that some participants across samples were not able to complete this portion due to time constraints.

We then dichotomized our dependent TDV variables; specifically, participants who reported the presence of any violence within each violence subscale were identified as perpetrators

and/or victims of that respective subtype of TDV. Dichotomizing our dependent variable in this way results in the loss of some information. However, as noted by Cornelius and colleagues (2010), dichotomizing our violence subscales improves ease of interpretation and resolves issues which arise when examining nonnormal or skewed data. We then conducted point-biserial correlations between the communication, relationship, and TDV variables. Significant communication and relationship variables were entered into a series of logistic regressions. Logistic regression is favorable over other analyses as it avoids many of the restrictive assumptions of ordinary least squares (OLS) regressions (Cornelius et al., 2010). As such, it has been utilized in previous research examining dating violence (Cornelius et al., 2010; Luthra & Gidycz, 2006).

Data were analyzed with a series of logistic regressions using a stepwise likelihood ratio model. This allowed nonsignificant predictors to be dropped from the regression model, resulting in a more parsimonious model containing only significant predictors. In total, 10 logistic regressions were analyzed across each sample to examine perpetration and victimization of five subtypes of dating violence: emotional violence, physical violence, sexual violence, relational violence, and threatening behavior (see Table 4). Tests of the full models against the constant-only models in predicting violence are depicted in Table 5.

Results

Sample 1: Urban High School

In our sample of urban high school youth, the final model predicting physical violence victimization included the four horsemen. Youth who were victim of physical violence were 7% more likely to engage in this maladaptive communication pattern. This model accurately classified physical violence victimization approximately 80% of the time. Flooding was included in the final model predicting emotional violence perpetration, with youth 26% more likely to engage in this communication. This model accurately classified perpetrators approximately 73% of the time. Four horsemen was included in the final model predicting emotional violence victimization, with youth 13% more likely to have engaged in this cascading sequence. This model accurately classified emotional violence victimization approximately 75% of the time. The final model predicting perpetration of sexual violence included relationship commitment and the four horsemen. Youth who perpetrated sexual violence were 31% less likely to be committed to their relationship and 7% more likely to engage in the four horsemen. The final model had a sensitivity of about 90%. The final model predicting sexual violence victimization consisted of relationship satisfaction, with youth 34% less likely to report satisfaction in their relationships. This model accurately classified sexual violence victimization approximately 83% of the time. The final model predicting relational violence perpetration included relationship satisfaction, repair attempts, and flooding. Youth who perpetrated relational violence were 32% less likely to be satisfied in their relationships, 13% less likely to engage in repair attempts, and 15% more likely to engage in flooding. The final model had a sensitivity of about 82%. Four horsemen was included in the final model predicting victimization of relational violence, with youth 13% more likely to engage in this communication. This model accurately classified victimization 77% of the time. Flooding was included in the final models for threatening violence. Youth

who had been victimized by threatening behaviors were 24% more likely to engage in flooding, and those who perpetrated were 14% more likely to do so. These models accurately classified perpetration and victimization 81% of the time.

Study 2: Foster Care

In our sample of youth in foster care, the final models for physical violence perpetration, emotional violence perpetration, and emotional violence victimization consisted of relationship commitment and flooding. Youth who perpetrated or had been victim of these types of dating violence were between 134% and 191% more likely to report commitment to their relationship despite that they were 35% to 53% more likely to engage in flooding. The sensitivity ranged from 72% to 82%. The final model for physical violence victimization consisted of flooding, with youth 27% more likely to engage in this communication. This model accurately classified physical violence victimization about 77% of the time. The final model predicting sexual violence perpetration, sexual violence victimization, and relational violence perpetration included repair attempts. Youth who perpetrated or had been victim of these types of dating violence were 21% to 42% less likely to engage in repair attempts. These models accurately predicted the presence of violence about 84% to 88% of the time. The final model predicting relational violence victimization consisted of gridlock, with youth 21% more likely to engage in this communication. This model accurately classified victimization about 82% of the time. The final models for threatening violence perpetration and victimization consisted of repair attempts and flooding. Youth who perpetrated or had been victim of threatening behavior were 17% to 23% less likely to engage in repair attempts and 21% to 33% more likely to engage in flooding. The sensitivity of these models ranged from about 82% to 92%.

Study 3: After-School Programs

In our sample of youth in after-school programs, the final models predicting physical violence perpetration and victimization, emotional violence perpetration and victimization, sexual violence victimization, relational violence victimization, and threatening violence perpetration and victimization consisted of the four horsemen. Youth who perpetrated or had been victim of these types of dating violence were between 7% and 22% more likely to engage in this cascading sequence. The sensitivity ranged from 71% to 82%. The final model for sexual violence perpetration consisted of relationship satisfaction, with youth 39% less likely to report being satisfied in their relationships. This model accurately classified sexual violence perpetration 91% of the time. The final model predicting relational violence perpetration consisted of relationship commitment and the four horsemen. Youth reporting relational violence perpetration were 53% less likely to be committed to their relationship and 16% more likely to engage in the four horsemen; perpetrators of relational violence were accurately classified about 89% of the time.

As a follow-up, we performed a series of chi-square tests of independence to examine the relationship between ethnicity (specifically Hispanic vs. non-Hispanic) and experiences of TDV. Our results indicated that there were no differences between ethnicity in our samples of urban high school and foster care youth. Among youth in after-school programs, however, Hispanic participants were less likely to report perpetration, $\chi^2(1, N = 71) = 5.17, p = .023$,

or victimization, $\chi^2(1, N = 70) = 3.92, p = .048$, of threatening behavior compared with non-Hispanic participants. Hispanic participants were also less likely to report sexual violence perpetration compared with non-Hispanic participants, although the expected cell sizes were not adequate for chi-square analysis. Instead, Fisher's exact test results were examined ($p = .008$).

Discussion

This study replicated that of Cornelius and colleagues (2010), which found that many communication behaviors shown to be corrosive to marital relationships were predictive of violence among a majority-White sample of college students. We sampled three diverse populations of youth across two states, inclusive of urban high school youth, residential foster care youth, and urban youth participating in after-school programs. Using Gottman's (1999) marital communication conceptualization, we found that some forms of maladaptive communication behaviors were associated with, and predictive of TDV. Furthermore, more adaptive forms of communication protected against adolescents' use of dating violence. Interestingly, reports of relationship quality were associated with a decreased likelihood of TDV in high school youth and after-school samples, but with an increased likelihood of TDV among youth in foster care.

Prior to this study, it was unclear whether or how Gottman's marital conceptualization applied to adolescents. Findings suggest that adolescents from diverse backgrounds enact similar maladaptive communication patterns in dating conflict situations as college students (Cornelius et al., 2010). In support of our hypotheses, flooding and the four horsemen were consistently and positively associated with all forms of dating violence. The four horsemen, considered to be the most detrimental to relationship health (Gottman, 1999), emerged in the final logistic regression models as associated with an increased likelihood of experiencing perpetration and/or victimization of physical violence, emotional violence, sexual violence, and relational violence among our urban high school and after-school youth samples. It was also associated with threatening violence perpetration and victimization among urban youth enrolled in after-school programs. It seems that many adolescents, similar to young adults, may resort to violence in situational contexts of feeling overwhelmed (i.e., flooding) and from arguments that are characterized by spiraling insults, defensiveness, negativity, and blame (i.e., four horsemen; Cornelius et al., 2010; Gottman, 1999). Although these processes may be similar in situational contexts of violence among youth and young adults, developmental and cultural considerations contribute to our understanding as conflict topics and contexts vary. For example, prior research with adolescents suggests that feeling overwhelmed and escalation in argument are likely to result from jealousy or cheating, balancing relationships with peers/partners, and concerns about the future (Giordano et al., 2015). These topic domains reflect in part youth's age-related positionality with respect to desiring commitment while also at a developmental time of role exploration and amidst peer-saturated environments (Arnett, 2010; Adams & Williams, 2014).

Beyond replicating findings of Cornelius and colleagues (2010), our study offered the opportunity to examine for the first time how Gottman's (1999) communication conceptualization was associated with additional form of dating violence. Relational

violence, which denotes attempts to deliberately damage a partner's reputation, is particularly understudied although developmentally important (Choi, Weston, & Temple, 2017; Linder, Crick, & Collins, 2002). We found that youth who utilized repair attempts (e.g., taking breaks, using humor) during conflict were less likely to experience this type of violence, perhaps denoting that respect demonstrated within conflict situations is also a general indicator of the same within peer circles. Social media platforms provide enhanced opportunity for youth to engage in relational violence (or "drama"; see Marwick & boyd, 2014), heightening the importance of identifying how young couples may engage in specific forms of communication that result in loss of peer status and social support. Furthermore, relationship quality was associated with decreased likelihood of experiencing relational and also sexual violence perpetration among our urban youth samples. Approximately one quarter of youth from these samples reported being in less serious dating relationships (i.e., "casual," "hooking up," or "friends with benefits"). Although we lacked sufficient sample size to analyze by relationship type, it may be that perpetration of these forms of violence was less common among those in more committed relationships. Finding that the four horsemen was associated with sexual violence coincides with a review of research identifying interpersonal conflict as a risk factor for sexual violence (Tharp et al., 2013) and may even suggest that this construct is capturing specific communication behaviors described by women as occurring before and/or following unwanted sexual encounters (e.g., contempt, withdrawal; Gutzmer, Ludwig-Barron, Wyatt, Hamilton, & Stockman, 2016).

Also understudied, emotional violence is common among adolescents and can be equally, if not more, damaging to their mental health (Choi et al., 2017). It can further serve as an entryway for experiencing other forms of violence (Atkin, Smith, Roberto, Fediuk, & Wagner, 2002; Choi et al., 2017). Flooding and the four horsemen were associated with a higher likelihood of experiencing both emotional and threatening violence. As Cornelius and colleagues (2010) discuss in their original study, communication measures often share some overlap with measures of psychological/emotional violence. Emotional violence items included in the measure we utilized denoted speaking to a partner in a hostile or mean tone of voice and insulting a partner, which were also reflected in items concerning maladaptive conversational styles including flooding and the four horsemen (Gottman, 1999). However, by measuring global conversational styles situated within a developed body of theoretical work, our study offered the opportunity to assess whether these patterns were predictive of actual behaviors that occurred within the past year. Findings also contextualize emotional violence as more likely to occur when youth have difficulty self-regulating and as embedded within multiple unhealthy verbal and nonverbal problem-solving behaviors (e.g., contempt via sarcasm, eye rolling, or mimicking; disengaging by acting busy, ignoring, or leaving altogether; Gottman, 1999; Gottman & Silver, 1999).

Youth reporting dating violence may utilize more variable types of communication, including both adaptive and maladaptive forms (Messinger et al., 2011; Rueda & Williams, 2015), although this may also be a facet of increased overall conflict (Messinger et al., 2011). Youth in our study utilized behaviors considered adaptive with higher frequency than maladaptive behaviors, specifically including accepting influence and repair attempts. The study we replicated with young adults, however, found that repair attempts were predictive of both psychological and physical violence perpetration (Cornelius et al., 2010). Thus, it is

an important finding that these were protective against violence among youth in two of our samples. More research is warranted concerning repair attempts with adolescent samples, particularly with attention to critically important contexts (e.g., typologies of violence; Messinger et al., 2014) and emerging research with regard to joking around/horseplay (Hamby, 2016).

Some unique findings emerged concerning young mothers in residential foster care. However, this sample size was very small and we interpret them with caution. Although the four horsemen was positively and significantly associated with all forms of violence when analyzed using point-biserial correlations, this communication pattern did not emerge as a significant predictor for any type of violence in the final logistic regression models. Rather, flooding was associated with increased odds of both physical violence perpetration and victimization. It is logical that cumulative stress as a facet of childhood and adolescent trauma, parenting, and involvement in the child welfare system are likely to have contributed to feelings of overwhelm and to an inability to self-regulate. Furthermore, and unlike the other samples of youth, relationship commitment was a predictor of physical and emotional violence victimization and perpetration. As commitment to partners increased, perhaps due in part to shared parenting status, youth may have worried about losing their partner and resorted to violence as a way to maintain control. It is also noteworthy that, similar to other research (Wilson et al., 2014), a high percentage of youth in our foster care sample self-identified as LGBTQ. In a prior study, we found that staff at the residential foster care home misperceived dating violence among romantically involved mothers as a form of peer violence (Bermea, Rueda, & Toews, 2018). These preliminary findings support the inclusion of romantic relationship health within trauma-informed approaches to care and highlight that importance of policies and services as inclusive of LGBTQ youth (Purvis, Cross, & Pennings, 2009).

Finally, approximately 50% of our sample self-identified as Hispanic and another 25% as Black across study sites. Ethnicity is often confounded with socioeconomic status, and Hispanic and Black youth from poverty-stricken areas of urban communities are more likely to witness violence in their homes, schools, and communities (Brady, Gorman-Smith, Henry, & Tolan, 2008). Although dating violence research in the United States has found only marginal differences in conflict negotiation styles across diverse racial groups (Messinger et al., 2011), Brady and colleagues found that adaptive coping skills (e.g., compromising, seeking help) buffered ethnic minority youth's risk of violent behaviors within peer and other interpersonal contexts. Youth in our samples experienced rates of violence that were higher than national averages (Youth Risk Behavior Surveillance [YRBS]; Centers for Disease Control and Prevention [CDC], 2018), although post hoc analyses found that Hispanic and non-Hispanic adolescents experienced similar rates overall. Considering that a majority of youth within the non-Hispanic category consisted of Black and mixed race youth, this is consistent with national findings (CDC, 2018). Future studies should continue to explore the role of communication behaviors as influenced by cultural and ecological contexts to increase the saliency of TDV preventive interventions. Furthermore, screening youth for the types, contexts, and severity of violence experienced is extremely important as some youth are involved in patterned fearful and highly controlling partnerships where

safety planning concerns are critical and couple's counseling or other prioritization of communicative competencies is not appropriate (Johnson, 2006; Messinger et al., 2014).

Implications

We learned from this study that diverse groups of youth are utilizing similar conflict negotiation strategies as adults, inclusive of a range of both adaptive and maladaptive communication behaviors. Maladaptive communication behaviors predicted their involvement as perpetrators and victims of dating violence, which carries a number of important implications for TDV programming. This is a timely area of research as a recent meta-analysis of school-based TDV programs concluded that while attitudes and knowledge were positively affected by adolescents' involvement in these programs, youth did not evidence behavioral changes (De La Rue, Polanin, Espelage, & Pigott, 2017). Although conflict resolution skills are typically targeted as part of these programs, modules vary widely and very little research to date has pinpointed specific conflict negotiation content for inclusion (Malhotra et al., 2015). States vary in their policy mandates and largely rely on school counselors and social workers to identify curricula, train in it, and deliver content (Rueda & Fawson, 2018). Trainings by the Gottman Institute are offered throughout the United States and around the world and provide continuing education credit (The Gottman Institute, n.d.), which is often needed to maintain professional licensure. Helping professionals can utilize this study as a starting point to assess the relationship health of adolescent couples. Future research can also build from this study to assess how other core concepts to Gottman and colleagues' research such as friendship-building, developing emotional intelligence, and relationship goal setting (Gottman & Silver, 1999) may help to inform skill building surrounding common conflict domains for adolescents.

Limitations

The current study has several limitations which should be considered when interpreting findings. First, the design was cross-sectional, and thus we cannot establish temporal precedence or causality. It is possible that TDV has a corrosive effect on communication skills, and thus, future research with longitudinal designs should examine the reciprocal relationships between communication behaviors and violence. We were limited by space in our study with after-school youth and only able to include Gottman's (1999) four horsemen scale. In addition to small sample sizes across sites, this disallowed us from offering comparisons by ethnicity and gender on communication variables. Group averages, including our all-female sample, suggest that youth were using Gottman's (1999) tactics with similar frequencies, although future research should assess this systematically and with larger samples. Furthermore, we had difficulty recruiting young mothers in foster care who were also participating in both on- and off-campus schooling and mandated activities. We included this small sample given the paucity of research with regard to their experiences with TDV and to explore communication as a potentially modifiable risk factor. Moreover, we included relationship commitment and satisfaction in conjunction with communication behaviors as predictors of TDV although future longitudinal research might examine how these serve as both predictors and outcome variables across time. Finally, findings may be limited in their generalizability as our samples were from specific urban geographic areas in the South and Southwest.

Conclusion

Although conflict may be an inevitable part of navigating intimate partnering, adolescent dating relationships provide a unique opportunity to improve communication and to develop relationship competency (Tabares & Gottman, 2003; Tuval-Mashiach & Shulman, 2006). Moreover, given the saliency of dating relationships during this time period, adolescents are often eager to learn about how to better communicate with a partner (Adams & Williams, 2011; Wolfe & Feiring, 2000). Programs and helping professionals can help youth to develop specific communication skills in an effort to reduce risk of TDV and prepare youth for healthy future relationships.

Acknowledgments

The authors would like to thank the College of Public Policy at the University of Texas at San Antonio for the funding provided to collect survey data in the residential foster care and after-school settings, as well as our collaborators across each of the study sites. They would also like to thank Michelle Toews, Associate Dean for Research and Scholarship at Kansas State University, for sharing valuable insights concerning our foster care sample, and Kaitlin Grytza for her help as a Graduate Research Assistant while studying at the University of Texas at San Antonio.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Author Biographies

Heidi Adams Rueda is an assistant professor at the University of Texas, San Antonio in the Department of Social Work. Her research focuses on adolescent dating and sexual relationships within ecodevelopmental contexts, particularly among understudied youth populations including Mexican American youth, pregnant and parenting youth in foster care, and among adolescents with disabilities. Within a holistic approach to dating health, her work aims to prevent teen dating violence and to foster strong foundations for healthy adolescent and lifelong partnering.

Monica Yndo is an assistant professor in the School of Humanities and Social Sciences at Concordia University, Austin, Texas. Her research interests broadly include the social processes and contextual factors that differentiate experiences and outcomes of intimate partner violence. She is also interested in how these factors influence perceptions and behaviors that are related to violence labeling and decision making.

Lela Rankin Williams is an associate professor and coordinator of the School of Social Work, Tucson. She is also a faculty affiliate and investigator with the Southwest Interdisciplinary Research Center. Her scholarship focuses on preventive interventions in adolescent populations. Her areas of focus include dating violence, parenting (for parents of adolescents and adolescent parents), and substance use. She utilizes randomized interventions across a variety of settings (schools, hospitals, in-home).

Ryan C. Shorey is an assistant professor of psychology at Ohio University. His work focuses on intimate partner violence and sexual assault, primarily among adolescents and young adults. He is particularly interested in the role of alcohol use in intimate partner

violence and sexual assault, including whether reducing alcohol use corresponds to reductions in violence perpetration.

References

- Adams HL, & Williams LR (2011). What they wish they would have known: Support for comprehensive sexual education from Mexican American and White adolescents' dating and sexual desires. *Children and Youth Services Review*, 33, 1875–1885.
- Adams HL, & Williams LR (2014). "It's not just you two": A grounded theory of peer-influenced jealousy as a pathway to dating violence among acculturating Mexican American adolescents. *Psychology of Violence*, 4, 294–308.
- Antônio T, & Hokoda A (2009). Gender variations in dating violence and positive conflict resolution among Mexican adolescents. *Violence and Victims*, 24, 533–545. [PubMed: 19694356]
- Arciniega GM, Anderson TC, Tovar-Blank ZG, & Tracey TJG (2008). Toward a fuller conception of Machismo: Development of a traditional Machismo and Caballerismo Scale. *Journal of Counseling Psychology*, 55, 19–33.
- Arnett JJ (2010). *Adolescence and emerging adulthood: A cultural approach* (4th ed.). Upper Saddle River, NJ: Pearson Education.
- Atkin C, Smith S, Roberto A, Fediuk T, & Wagner T (2002). Correlates of verbally aggressive communication in adolescents. *Journal of Applied Communication Research*, 30, 251–268.
- Bermea AM, Rueda HA, & Toews ML (2018). Queerness and dating violence among adolescent mothers in foster care. *Affilia: Journal of Women and Social Work*, 33, 164–176.
- Bonache H, Gonzalez-Mendez R, & Krahé B (2017). Romantic attachment, conflict resolution styles, and teen dating violence victimization. *Journal of Youth and Adolescence*, 46, 1905–1917. [PubMed: 28101748]
- Bradley RPC, Friend DJ, & Gottman JM (2011). Supporting healthy relationships in low-income, violent couples: Reducing conflict and strengthening relationship skills and satisfaction. *Journal of Couple & Relationship Therapy*, 10, 97–116.
- Bradley RPC, & Gottman JM (2012). Reducing situational violence in low-income couples by fostering healthy relationships. *Journal of Marital and Family Therapy*, 38, 187–198. [PubMed: 22765333]
- Brady SS, Gorman-Smith D, Henry DB, & Tolan PH (2008). Adaptive coping reduces the impact of community violence exposure on violent behavior among African American and Latino male adolescents. *Journal of Abnormal Child Psychology*, 36, 105–115. [PubMed: 17687640]
- Burk WJ, & Seiffge-Krenke I (2015). One-sided and mutually aggressive couples: Differences in attachment, conflict prevalence, and coping. *Child Abuse & Neglect*, 50, 254–266. [PubMed: 26360706]
- Castillo LG, Perez FV, Castillo R, & Ghosheh MR (2010). Construction and initial validation of the Marianismo Beliefs Scale. *Counselling Psychology Quarterly*, 23, 163–175.
- Centers for Disease Control and Prevention. (2018). Youth risk behavior surveillance—United States, 2017 Retrieved from <https://www.cdc.gov/healthyyouth/data/yrbs/pdf/2017/ss6708.pdf>
- Chen MS, & Foshee VA (2015). Stressful life events and the perpetration of adolescent dating abuse. *Journal of Youth and Adolescence*, 44, 696–707. [PubMed: 25189287]
- Choi HJ, Weston R, & Temple JR (2017). A three-step latent class analysis to identify how different patterns of teen dating violence and psychosocial factors influence mental health. *Journal of Youth and Adolescence*, 46, 854–866. [PubMed: 27709405]
- Clarey A, Hokoda A, & Ulloa EC (2010). Anger control and acceptance of violence as mediators in the relationship between exposure to interparental conflict and dating violence perpetration in Mexican adolescents. *Journal of Family Violence*, 25, 619–625.
- Connolly J, & McIsaac C (2009). Adolescents' explanations for romantic dissolutions: A developmental perspective. *Journal of Adolescence*, 32, 1209–1223. [PubMed: 19232706]

- Cornelius TL, Shorey RC, & Beebe SM (2010). Self-reported communication variables and dating violence: Using Gottman's marital communication conceptualization. *Journal of Family Violence*, 25, 439–448.
- Dank M, Lachman P, Zweig JM, & Yahner J (2014). Dating violence experiences of lesbian, gay, bisexual, and transgender youth. *Journal of Youth and Adolescence*, 43, 846–857. [PubMed: 23861097]
- De La Rue L, Polanin JR, Espelage DL, & Pigott TD (2017). A meta-analysis of school-based interventions aimed to prevent or reduce violence in teen dating relationships. *Review of Educational Research*, 87, 7–34.
- Fernández-González L, Wekerle C, & Goldstein AL (2012). Measuring adolescent dating violence: Development of "Conflict in Adolescent Dating Relationships Inventory" short form. *Advances in Mental Health*, 11, 35–54.
- Fletcher GJ, Simpson JA, & Thomas G (2002). The measurement of perceived relationship quality components: A confirmatory factor analytic approach. *Personality and Social Psychology Bulletin*, 26, 340–354.
- Foshee VA, Karriker-Jaffe KJ, Reyes HLM, Ennett ST, Suchindran C, Bauman KE, & Benefield TS (2008). What accounts for demographic differences in trajectories of adolescent dating violence? An examination of intrapersonal and contextual mediators. *Journal of Adolescent Health*, 42, 596–604.
- Giordano PC, Copp JE, Longmore MA, & Manning WD (2015). Contested domains, verbal "amplifiers," and intimate partner violence in young adulthood. *Social Forces*, 94, 923–951.
- The Gottman Institute. (n.d.). A research-based approach to relationships Retrieved from <https://www.gottman.com/professionals/training/level-1/>
- Gottman JM (1999). *The marriage clinic: A scientifically based marital therapy* New York, NY: W.W. Norton.
- Gottman JM, & Silver N (1999). *The seven principles for making marriage work* New York, NY: Three Rivers Press.
- Gover AR, Jennings WG, Tomsich EA, Park M, & Rennison CM (2011). The influence of childhood maltreatment and self-control on dating violence: A comparison of college students in the United States and South Korea. *Violence and Victims*, 26, 296–318. [PubMed: 21846019]
- Gutzmer K, Ludwig-Barron NT, Wyatt GE, Hamilton AB, & Stockman JK (2016). "Come on baby you know I love you": African American women's experiences of communication with male partners and disclosure in the context of unwanted sex. *Archives of Sexual Behavior*, 45, 807–819. [PubMed: 26892099]
- Hamby S (2016). Self-report measures that do not produce gender parity in intimate partner violence: A multi-study investigation. *Psychology of Violence*, 6, 323–335.
- Horevitz E, & Organista KC (2013). The Mexican health paradox expanding the explanatory power of the acculturation construct. *Hispanic Journal of Behavioral Sciences*, 35, 3–34.
- Johnson MP (2006). Conflict and control: Gender symmetry and asymmetry in domestic violence. *Violence Against Women*, 12, 1003–1018. [PubMed: 17043363]
- Jonson-Reid M, Scott LD, McMillen JC, & Edmond T (2007). Dating violence among emancipating foster youth. *Children and Youth Services Review*, 29, 557–571.
- Linder JR, Crick NR, & Collins WA (2002). Relational aggression and victimization in young adults' romantic relationships: Associations with perceptions of parent, peer, and romantic relationship quality. *Social Development*, 11, 69–86.
- Luthra R, & Gidycz CA (2006). Dating violence among college men and women: Evaluation of a theoretical model. *Journal of Interpersonal Violence*, 21, 717–731. [PubMed: 16672738]
- Malhotra K, Guarda-Gonzalez RM, & Mitchell EM (2015). A review of teen dating violence prevention research: What about Hispanic youth? *Trauma, Violence, & Abuse*, 16, 444–465.
- Marwick A, & boyd d. (2014). "It's just drama": Teen perspectives on conflict and aggression in a networked era. *Journal of Youth Studies*, 17, 1187–1204.
- McIsaac C, Connolly J, McKenney KS, Pepler D, & Craig W (2008). Conflict negotiation and autonomy processes in adolescent romantic relationships: An observational study of

interdependency in boyfriend and girlfriend effects. *Journal of Adolescence*, 31, 691–707. [PubMed: 18951625]

- Messinger AM, Davidson LL, & Rickert VI (2011). IPV among adolescent reproductive health patients: The role of relationship communication. *Journal of Interpersonal Violence*, 26, 1851–1867. [PubMed: 20587465]
- Messinger AM, Fry DA, Rickert VI, Catallozzi M, & Davidson LL (2014). Extending Johnson's intimate partner violence typology: Lessons from an adolescent sample. *Violence Against Women*, 20, 948–971. [PubMed: 25125494]
- Muñoz-Rivas MJ, Grana JL, O'Leary KD, & Gonzalez MP (2007). Aggression in adolescent dating relationships: Prevalence, justification, and health consequences. *Journal of Adolescent Health*, 40, 298–304.
- Muñoz-Rivas MJ, Graña JL, O'Leary KD, & González MP (2009). Prevalence and predictors of sexual aggression in dating relationships of adolescents and young adults. *Psicothema*, 21, 234–240. [PubMed: 19403076]
- Onwuegbuzie AJ, Mallette MH, Hwang E, & Slate JR (2013). Evidence-based guidelines for avoiding poor readability in manuscripts submitted to journals for review for publication. *Research in the Schools*, 20, I–XI.
- Purvis KB, Cross DR, & Pennings JS (2009). Trust-based relational intervention™: Interactive principles for adopted children with special social-emotional needs. *Journal of Humanistic Counseling, Education, and Development*, 48, 3–22.
- Raffaelli M (2005). Adolescent dating experiences described by Latino college students. *Journal of Adolescence*, 28, 559–572. [PubMed: 15913756]
- Rebellon CJ, Straus MA, & Medeiros R (2008). Self-control in global perspective: An empirical assessment of Gottfredson and Hirschi's general theory within and across 32 national settings. *European Journal of Criminology*, 5, 331–361.
- Renner LM, & Slack KS (2006). Intimate partner violence and child maltreatment: Understanding intra- and intergenerational connections. *Child Abuse & Neglect*, 30, 599–617. [PubMed: 16782195]
- Reuter TR, Sharp C, & Temple JR (2015). An exploratory study of teen dating violence in sexual minority youth. *Partner Abuse*, 6, 8–28.
- Richards T, Tillyer M, & Wright E (2017). Intimate partner violence and the overlap of perpetration and victimization: Considering the influence of physical, sexual, and emotional abuse in childhood. *Child Abuse & Neglect*, 67, 240–248. [PubMed: 28282597]
- Rueda HA, & Fawson P (2018). From state policy to school practices: Accessibility and implementation of teen dating violence awareness education. *Partner Abuse*, 9(4), 379–397.
- Rueda HA, & Williams LR (2015). Mexican American adolescent couples communicating about conflict: An integrated developmental and cultural perspective. *Journal of Adolescent Research*, 52, 17–181.
- Rueda HA, Lindsay M, & Williams LR (2015). "She posted it on Facebook": Mexican American adolescents' experiences with technology, relationship conflict, and dating violence. *Journal of Adolescent Research*, 30, 419–445.
- Rueda HA, Williams LR, & Nagoshi JL (2015). Help-seeking and help-offering for teen dating violence among acculturating Mexican American adolescents. *Children & Youth Services Review*, 53, 219–228.
- Ryan KM (2013). Issues of reliability in measuring intimate partner violence during courtship. *Sex Roles*, 69, 131–148.
- Samuels GM, & Pryce JM (2008). "What doesn't kill you makes you stronger": Survivalist self-reliance as resilience and risk among young adults aging out of foster care. *Children and Youth Services Review*, 30, 1198–1210.
- Shapiro AF, & Gottman J (2005). Effects on marriage of a psycho-communicative-educational intervention with couples undergoing the transition to parenthood, evaluation at 1-year post intervention. *Journal of Family Communication*, 5, 1–24.
- Shapiro AF, Gottman J, & Fink B (2015). Short-term change in couples' conflict following a transition to parenthood intervention. *Couple & Family Psychology*, 4, 239–251. [PubMed: 27375959]

- Shortt JW, Capaldi DM, Kim HK, & Laurent HK (2010). The effects of intimate partner violence on relationship satisfaction over time for young at-risk couples: The moderating role of observed negative and positive affect. *Partner Abuse*, 1, 131–152. [PubMed: 20411024]
- Shulman S, Mayes LC, Cohen TH, Swain JE, & Leckman JF (2008). Romantic attraction and conflict negotiation among late adolescent and early adult romantic couples. *Journal of Adolescence*, 31, 729–745. [PubMed: 18835494]
- Smith DM, & Donnelly J (2001). Adolescent dating violence: A multi-systemic approach of enhancing awareness in educators, parents, and society. *Journal of Prevention & Intervention in the Community*, 21, 53–64.
- Smokowski PA, David-Feron C, & Stroupe N (2009). Acculturation and violence in minority adolescents: A review of the empirical literature. *Journal of Primary Prevention*, 30, 215–263.
- Steinberg SJ, Davila J, & Fincham F (2006). Adolescent marital expectations and romantic experiences: Associations with perceptions about parental conflict and adolescent attachment security. *Journal of Youth and Adolescence*, 35, 314–329.
- Tabares A, & Gottman JM (2003). A marital process perspective of adolescent romantic relationships. In Florsheim P (Ed.), *Adolescent romantic relations and sexual behavior: Theory, research, and practical implications* (pp. 337–354). Mahwah, NJ: Lawrence Erlbaum.
- Tharp AT, DeGue S, Valle LA, Brookmeyer KA, Massetti GM, & Matjasko JL (2013). A systematic qualitative review of risk and protective factors for sexual violence perpetration. *Trauma, Violence, & Abuse*, 14, 133–167.
- Tuval-Mashiach R, & Shulman S (2006). Resolution of disagreements between romantic partners, among adolescents, and young adults: Qualitative analysis of interaction discourses. *Journal of Research on Adolescence*, 16, 561–588.
- Weiss JA, MacMullin J, Waechter R, Wekerle C, & The MAP Research Team. (2011). Child maltreatment, adolescent attachment style, and dating violence: Considerations in youths with borderline-to-mild intellectual disability. *International Journal of Mental Health and Addiction*, 9, 555–576.
- Wilson BDM, Cooper K, Kastanis A, & Nezhad S (2014). Sexual and gender minority youth in foster care: Assessing disproportionality and disparities in Los Angeles Retrieved from http://williamsinstitute.law.ucla.edu/wp-content/uploads/LAFYS_report_final-aug-2014.pdf
- Wolfe DA, & Feiring C (2000). Dating violence through the lens of adolescent romantic relationships. *Child Maltreatment*, 5, 360–363. [PubMed: 11232263]
- Wolfe DA, Scott K, Reitzel-Jaffe D, Wekerle C, Grasley C, & Straatman AL (2001). Development and validation of the Conflict in Adolescent Dating Relationships Inventory. *Psychological Assessment*, 13, 277–293. [PubMed: 11433803]
- Wolfe K, & Foshee V (2003). Family violence, anger expression styles, and adolescent dating violence. *Journal of Family Violence*, 18, 309–316.

Table 1.

Demographic Information Across Samples.

	Study 1: Urban High School (N = 123)	Study 2: Foster Care (N = 59)	Study 3: After School (N = 99)
Race			
Latino/Hispanic	61.9%	39%	49.2%
Black	5.1%	34%	31.5%
White	22.0%	11.9%	5%
Asian	0.8%	1.7%	0 %
Mixed	n/a	10.2%	13%
Other	10.1%	3.4%	6%
Gender			
Male	55.8%	0%	41.2%
Female	43.3%	100%	55.9%
Age			
14	0.8%	5.1% ^a	22.2%
15	20.5%	10.3%	22.2%
16	29.5%	32.8%	21.2%
17	27%	36.2%	14.1%
18+	21.9%	15.6%	19.2%
Grade			
8	0%	7.2% ^b	6.1%
9	5.8%	17.9%	35.4%
10	43.8%	26.8%	21.2%
11	23.8%	16.1%	21.2%
12	25.6%	8.9%	16.2%
Other	0%	23.2% ^c	0%
Sexual preference			
Heterosexual	85.7%	71.4%	82.8%
LGBTQ ^d	13.5%	26.8%	15.1%
Other	0.8%	1.8%	2%
Relationship status			
Single	39.8%	35.1%	43.8%
Going out	27.8%	37.4%	27.5%
Casual dating	9.7%	15.3%	14.8%
Hooking up	9.7%	1.7%	4%
Friends with benefits	8.2%	3.4%	7.9%
Engaged or married	2.2%	5.1%	2%
Other	2.2%	1.7%	0%

^a 1.7% of youth in foster care were 13 years old.

^b 3.6% of youth in foster care were in seventh grade.

^c10.7% of youth in the foster care sample had obtained a general education diploma (GED), 7.1% had graduated high school, and 5.4% had attended at least some college.

^dLGBTQ refers to youth who self-identified as lesbian, gay, bisexual, transgender, questioning, or queer.

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Table 2.

Descriptive Statistics and Cronbach's Alpha reliability Estimates for Gottman's Communication Scales, CADRI-SF, and Romantic Relationship Quality Subscales and Alpha Reliabilities Across Samples.

Variable	Sample 1: Urban High School			Sample 2: Foster Care			Sample 3: After School		
	<i>M</i>	<i>SD</i>	α	<i>M</i>	<i>SD</i>	α	<i>M</i>	<i>SD</i>	α
Communication scales									
Harsh start-up	5.56	5.12	.86	5.78	5.88	.93	—	—	
Accepting influence	12.49	4.44	.82	14.04	3.67	.79	—	—	
Repair attempts	13.86	5.34	.90	15.76	4.29	.86	—	—	
Gridlock	6.44	5.66	.92	6.32	6.14	.93	—	—	
Four horsemen	11.43	9.42	.93	13.35	10.73	.96	11.93	8.5	.93
Flooding	5.24	4.67	.91	5.41	4.68	.91	—	—	
CADRI-SF									
Emotional violence									
Perpetration	1.70	0.82		2.07	0.97		1.56	0.07	
Victimization	1.80	0.96		2	0.98		1.78	0.10	
Physical violence									
Perpetration	1.23	0.65		1.48	0.81		1.23	0.05	
Victimization	1.28	0.67		1.49	0.95		1.37	0.08	
Sexual violence									
Perpetration	1.21	0.68		1.22	0.57		1.17	0.06	
Victimization	1.27	0.71		1.33	0.76		1.22	0.06	
Relational violence									
Perpetration	1.25	0.65		1.36	0.74		1.17	0.05	
Victimization	1.37	0.75		1.39	0.76		1.36	0.09	
Threatening behavior									
Perpetration	1.27	0.68		1.62	0.96		1.25	0.07	
Victimization	1.27	0.67		1.49	0.87		1.38	0.09	
Relationship quality									
Satisfaction	5.48	1.50	.87	5.67	1.54	.93	5.52	0.17	.90
Commitment	5.61	1.59	.88	6.24	1.20	.94	6.07	0.16	.90

Note. Total scores on Gottman's (1999) scales ranged from 0 to 20 with the exception of the four horsemen (1–33) and flooding (1–15). All samples included the entire range with the exception of foster youth who ranged from 2 to 20 and 1 to 20 on accepting influence and repair attempts, respectively, and urban- and after-school youth who ranged from 0 to 32 on four horsemen. PRQC (Fletcher et al., 2002) subscales for relationship satisfaction and commitment ranged from 1 = *not at all* to 7 = *extremely*. Items from the CADRI-SF (Fernández-González, Wekerle, & Goldstein, 2012) ranged from 1 = *never* to 4 = *often*. All samples included the entire range with the exception of after-school youth, who ranged from 1 to 3 on physical and relational violence perpetration, and foster youth, who ranged from 1 to 3 on sexual violence perpetration. CADRI-SF = Conflict in Adolescence Dating Inventory– Short Form; PRQC = Perceived Relationship Quality Components.

Table 3.

Rates of Dating Violence Across Samples.

Rates of Violence	Study 1: Urban High School	Study 2: Foster Care	Study 3: After School
Physical violence			
Perpetration	14%	32%	22%
Victimization	20%	25%	28%
Emotional violence			
Perpetration	55%	74%	57%
Victimization	52%	63%	60%
Sexual violence			
Perpetration	12%	15%	12%
Victimization	15%	17%	20%
Relational violence			
Perpetration	18%	25%	15%
Victimization	24%	25%	23%
Threatening violence			
Perpetration	19%	33%	19%
Victimization	19%	27%	25%

Note. Percentages were calculated using responses to each subscale within the CADRI-SF (Fernández-González et al., 2012). These were coded dichotomously as “no violence” (0) if violence had not occurred within their current or recent past relationship or as “any violence” (1) if that type of violence had occurred at least one time.

Table 4.
Stepwise Logistic Regressions Predicting Perpetration and Victimization of Dating Violence Across Samples.

Variable	Study 1: Urban High School					Study 2: Foster Care					Study 3: After School				
	B	SE	Pseudo R ²	OR	p	B	SE	Pseudo R ²	OR	p	B	SE	Pseudo R ²	OR	p
Physical perpetration															
Relationship commitment	—	—	—	—	—	1.07	.49	.27	2.91	.030	—	—	—	—	—
Flooding	—	—	—	—	—	0.30	.10	.44	1.35	.002	—	—	—	—	—
Four horsemen	—	—	—	—	—	—	—	—	—	—	.11	.04	.20	1.12	.002
Physical victimization															
Flooding	—	—	—	—	—	0.23	.09	.25	1.27	.007	—	—	—	—	—
Four horsemen	.07	.03	.10	1.07	.017	—	—	—	—	—	.22	.04	.25	1.13	<.001
Emotional perpetration															
Relationship commitment	—	—	—	—	—	0.91	.37	.26	2.47	.015	—	—	—	—	—
Flooding	.23	.05	.27	1.26	<.001	0.43	.16	.42	1.53	.007	—	—	—	—	—
Four horsemen	—	—	—	—	—	—	—	—	—	—	.14	.04	.28	1.15	<.001
Emotional victimization															
Relationship commitment	—	—	—	—	—	0.84	.34	.27	2.34	.013	—	—	—	—	—
Flooding	—	—	—	—	—	0.36	.12	.42	1.44	.003	—	—	—	—	—
Four horsemen	.12	.03	.28	1.13	<.001	—	—	—	—	—	.20	.05	.40	1.22	<.001
Sexual perpetration															
Relationship satisfaction	—	—	—	—	—	—	—	—	—	—	-.50	.25	.11	0.61	.043
Relationship commitment	-.38	.19	.12	0.69	.042	—	—	—	—	—	—	—	—	—	—
Repair attempts	—	—	—	—	—	-.54	.21	.56	0.52	.010	—	—	—	—	—
Four horsemen	.07	.04	.19	1.07	.057	—	—	—	—	—	—	—	—	—	—
Sexual victimization															
Relationship satisfaction	-.42	.17	.10	0.66	.016	—	—	—	—	—	—	—	—	—	—
Repair attempts	—	—	—	—	—	-.29	.11	.31	0.75	.007	—	—	—	—	—
Four horsemen	—	—	—	—	—	—	—	—	—	—	.07	.03	.08	1.07	.052
Relational perpetration															
Relationship satisfaction	-.38	.19	.19	0.68	.047	—	—	—	—	—	—	—	—	—	—
Relationship commitment	—	—	—	—	—	—	—	—	—	—	-.75	.31	.2	0.47	.016

Variable	Study 1: Urban High School					Study 2: Foster Care					Study 3: After School				
	B	SE	Psuedo R ²	OR	p	B	SE	Psuedo R ²	OR	p	B	SE	Psuedo R ²	OR	p
Repair attempts	-.13	.07	.25	0.87	.038	-.024	.09	.24	0.79	.009	—	—	—	—	—
Flooding	.14	.07	.31	1.15	.033	—	—	—	—	—	—	—	—	—	—
Four horsemen	—	—	—	—	—	—	—	—	—	—	.15	.06	.35	1.16	.01
Relational victimization															
Gridlock	—	—	—	—	—	0.19	.06	.30	1.21	.003	—	—	—	—	—
Four horsemen	.13	.03	.29	1.13	<.001	—	—	—	—	—	.09	.04	.14	1.10	.011
Threatening perpetration															
Repair attempts	—	—	—	—	—	-.019	.09	.27	0.83	.045	—	—	—	—	—
Flooding	.13	.06	.09	1.14	.016	0.19	.08	.37	1.21	.021	—	—	—	—	—
Four horsemen	—	—	—	—	—	—	—	—	—	—	.12	.04	.23	1.13	.002
Threatening victimization															
Repair attempts	—	—	—	—	—	-.026	.11	.37	0.77	.021	—	—	—	—	—
Flooding	.22	.06	.22	1.24	.001	0.29	.10	.51	1.33	.009	—	—	—	—	—
Four horsemen	—	—	—	—	—	—	—	—	—	—	.13	.04	.27	1.14	.001

Note. OR = odds ratio.

Table 5.
Predicting Violence: Test of the Full Models Against the Constant-Only Models by Sample.

Violence Type	Study 1: Urban High School					Study 2: Foster Care					Study 3: After School				
	χ^2	df	n	p	% Correct	χ^2	df	n	p	% Correct	χ^2	df	n	p	% Correct
Physical violence perpetration				ns		18.65	2	50	<.001	82	10.99	1	79	<.001	77.2
Physical violence victimization	5.934	1	96	.015	80.2	8.9	1	51	.003	76.5	14.88	1	79	<.001	74.7
Emotional violence perpetration	22.87	1	104	<.001	73.1	17.7	2	51	<.001	76.5	18.12	1	76	<.001	71.1
Emotional violence victim	23.51	1	102	<.001	74.5	18.83	2	50	<.001	72	27.12	1	77	<.001	76.6
Sexual violence perpetration	9.93	2	98	.007	89.8	17.29	1	50	<.001	88	4.13	1	74	.042	90.5
Sexual violence victim	5.84	1	98	.016	82.7	10.27	1	51	.001	88.2	3.92	1	81	.048	80.2
Relational violence perpetration	21.26	3	98	<.001	81.6	8.63	1	51	.003	84.3	14.82	2	72	.001	88.9
Relational violence victim	20.91	1	96	<.001	77.1	10.92	1	51	.001	82.4	7.01	1	74	.008	78.4
Threatening behavior perpetration	6.18	1	105	.012	81.0	15.33	2	51	<.001	82.4	11.12	1	73	.001	82.2
Threatening behavior victim	13.99	1	96	<.001	81.3	20.62	2	50	<.001	92	14.22	1	72	<.001	81.9