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Relationship Factors Associated With Early Adolescent Dating Violence Victimization and Perpetration Among Latinx Youth in an Agricultural Community

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Abstract

Latinx early adolescents within the United States are particularly vulnerable to dating violence; yet, little research has examined early dating experiences and violence outside large urban settings. Latinxs, in particular, may experience a unique window of opportunity for dating violence (DV) prevention during early adolescence, based on their trends in risk behavior over the adolescent period. This study extends the current research on dating violence by examining a highly understudied population, Latinx early adolescent girls and boys residing in an agricultural community, by assessing victimization and perpetration, and examining interpersonal-level factors as potential risk and protective factors for violence. Using data from a prospective cohort study of Latinx adolescents with relationship experience (past six months) ($N = 296$; girls: $n = 147$; boys: $n = 149$; mean age: 13.8), we assessed the association between dating relationship characteristics and dating violence victimization and perpetration using modified-Poisson regression models with robust standard errors stratified by gender. In multivariable analyses, we found that girls with gang-affiliated partners, partner-related withdrawal from friends, and girls who had used drugs or alcohol with a partner experienced greater risk for dating violence. Additionally, holding beliefs supportive of female sexual naivete and engaging in and communicating about sexual activity were associated with victimization among girls. No significant associations were found among boys. Findings affirm the need for multilevel DV prevention programming that starts in middle school and addresses social isolation, gang exposure, and traditional Latinx gender-norm beliefs regarding *marianismo*. These findings underscore the imperative to coordinate dating and gang violence prevention efforts by addressing common co-occurring interpersonal and environmental risk factors, including social isolation and culturally-specific traditional beliefs. Such factors could

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Declaration of Conflicting Interests

The author(s) declared the following potential conflicts of interest with respect to the research, authorship and/or publication of this article: None

Ethical Approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee (RTI International Institutional Review Board, FWA No. 3331) and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study (parent permission and youth assent). This article does not contain any studies with animals performed by any of the authors.

also assist providers, families, and peers in early identification of Latinx early adolescents at risk for DV, especially in rural contexts where resources are often limited.

Keywords

dating violence; domestic violence; youth violence; cultural contexts; community violence

Introduction

Latinx adolescents make up an increasingly large proportion of adolescents in the United States and experience elevated rates of dating violence (DV), yet targeted research is quite limited (Johnson et al., 2014; Kann et al., 2018). Among Latinxs, 9.2% of female and 5.9% of male adolescents experience physical DV in the United States (Kann et al., 2018). Both physical and psychological DV in adolescence is associated with severe social and health consequences that may persist into adulthood (Exner-Cortens et al., 2013). Psychological abuse has received far less research attention, yet often acts as a precursor to physical and sexual DV (Exner-Cortens et al., 2013; Taylor et al., 2017). Despite substantial research on victimization, far fewer studies have examined intervenable factors associated with perpetration of DV, especially among Latinxs (Orpinas, Nahapetyan et al., 2012).

When DV occurs in early adolescence (ages 12–15), the consequences may be particularly devastating, including increased risk for poor attachment development, vulnerability to subsequent victimization, and acceptance of violence (Collins et al., 2009; Orpinas, Hsieh et al., 2012). Targeted prevention efforts during early adolescence may, therefore, be especially critical. Early adolescent Latinxs, in particular, may experience a unique window of opportunity for DV prevention. During early adolescence, rates of DV among Latinxs remain similar to those of other racial/ethnic groups before increasing to disproportionately elevated levels in later adolescence (Harris et al., 2009; Sianko et al., 2019), underscoring a key time point for early intervention before risk begins. While early prevention is critical for all early adolescent populations, it may be particularly important for mitigating the disparity in DV that emerges in later adolescence between Latinxs and their White counterparts. Little is known, however, about early adolescent dating experiences, including experiences of DV, particularly among Latinxs (Orpinas, Nahapetyan et al., 2012; Yan et al., 2010).

In addition to racial and ethnic disparities in rates of DV, levels vary geographically across rural and urban settings. Several studies report that youth in rural regions of the United States experience rates of DV that are two times higher than those in urban and suburban regions, yet little research has assessed the multiple vulnerabilities of being a Latinx early adolescent living in a rural or agricultural setting (Foshee et al., 2015; McDonnell et al., 2010). Latinx youth constitute a large and increasing proportion of adolescents living in such communities; the number of adolescent Latinxs living in agricultural communities increased by 48% from 2000 to 2012, alongside a corresponding decrease of 13% for non-Hispanic white adolescents (Johnson et al., 2014). In these settings, DV may be aggravated by a lack of youth-friendly or DV services, discrimination, barriers related to immigration status, gang

presence or involvement, poverty, and limited social and economic opportunity (Edwards, 2015; Minnis et al., 2013).

As risk factors for DV vary based on race/ethnicity and geography, vulnerability for DV also varies by gender. While previous research is equivocal about whether rates of DV are different for boys and girls, associated risk factors have been found to differ by gender, suggesting possible gender-based divergence in etiology (Reed et al., 2010; Wincentak et al., 2017). Additionally, severity and impact of DV increase when female adolescents, compared to males, are victims (Exner-Cortens et al., 2013; Wincentak et al., 2017). Such gender-based differences may be explained by the Theory of Gender and Power (Connell, 1987), which asserts that gender-based inequities in heterosexual relationships exist in society, partially driven by traditional gender norms, which put women and girls at risk for intimate partner violence (Wingood & DiClemente, 2000). In urban settings, endorsement of traditional gender norms has been found to be associated with DV perpetration (DVP) among male youth (Grest et al., 2018; Reed et al., 2011). In the Latinx cultural context, traditional gender norms such as dominant masculinity, described as *machismo*, and submissive femininity, described as *marianismo*, perpetuate gender-based inequalities and shape behavior within adult relationships (Arciniega et al., 2008; Castillo et al., 2010). More research is needed to understand how traditional gender norms and unequal power in adolescent relationships, often created by gender or age differences between partners, contribute to risk for DV among Latinx early adolescents (Piña-Watson et al., 2014; Reed et al., 2010).

Beyond unequal power within adolescent relationships, other relationship characteristics may influence DV. Adolescent romantic relationships can be understood through a framework developed by Furman and Wehner (1994), which integrates adolescent development (Sullivan, 1953) and attachment theories (Hazan & Shaver, 1987) to posit that central to adolescent romantic relationships are affiliation, caregiving, attachment, and sexual/reproductive behavioral systems that develop throughout adolescence (Furman, W. & Wehner, 1994). The first three are also central to peer and familial relationships, which are typically prioritized over romantic relationships in early adolescents among those with secure attachment styles (Freeman & Brown, 2001). A secure attachment style, a concept based on Attachment Theory (Bowlby, 1980), characterizes children who have found a secure base in, seek contact with, and are able to be comforted by a caregiver, which contrasts with an anxious or avoidant insecure attachment styles. Cognitive schemas for expectations of familial and peer relationships are developed through experiences in past and current relationships. In one study of African American adolescents, negative peer influences, such as gang affiliation and alcohol and drug use among peers, were found to be associated with insecure or changing (from secure to insecure) expectations of these relationships (Miller et al., 2002). Applied to DV, this theory suggests that insecure relationship expectations may increase risk for negative interactions, including DV, and that early dating experiences that are violent or aggressive may influence relationship expectations and subsequent relationships in negative ways (Exner-Cortens, 2014; Miga et al., 2010). Such theoretical pathways provide insight into how relationship characteristics may contribute to DV, yet more research with dating youth is needed to understand and verify this connection.

Few studies have explored how relationship characteristics relate to DV experiences, despite relationships being at the center of DV. Two previous studies among primarily white, older adolescent samples, one rural and one urban, found problematic relationship characteristics, including verbal conflict, jealousy, cheating, manipulative tactics (especially among males), lack of identity support, and instrumental support to be associated with DVP (Giordano et al., 2010; Vivolo-Kantor et al., 2016). Additionally, these studies found that relationship duration, large age difference, time spent with partner, sex with partner, and unbalanced relationship power increased risk of DVP. Based on a nationally representative sample of youth aged 10–18 from the Survey of Teen Relationships and Intimate Violence (STRiV), controlling behaviors and feelings of passionate love were found to predict DV victimization (DVV), and controlling behaviors and perpetration of emotional DV to predict DVP (Taylor et al., 2017). Rarely have studies assessed relationship characteristics and DV among a majority Latinx sample.

Based on previous empirical literature and theory, we hypothesized that risk factors for DVV and DVP will vary by gender and that acceptance of traditional inequitable gender norms drive some of these differences. Specifically, we hypothesized that negative relationship characteristics, including larger age difference between partners, risk behaviors, and partner-related withdrawal from friends, would be associated with increased risk for female victimization and male perpetration. Additionally, we hypothesized that positive relationship characteristics, including emotional attachment and caregiving and partner communication, would be associated with lower risk for DV among boys and girls.

To test these hypotheses, we utilized reports of DVV and DVP from Latinx early adolescent girls and boys living in an agricultural region of California. This study extends the current research on DV by examining a highly understudied population, assessing victimization and perpetration, and examining relationship characteristics and interpersonal-level factors as potential risk and protective factors for DV. We aim to contribute to the evidence base for culturally-specific early adolescent DV prevention efforts targeting Latinx youth.

Methods

Setting and Population

Salinas is the urban center of an agricultural labor destination on California's Central Coast, which, much like other agricultural regions in California and the Southwest, draws immigrants predominantly from Mexico (Carr et al., 2012), creating a vibrant Mexican American population with rich cultural and social ties (Raymond-Flesch et al., 2017). The majority of youth are children of immigrants and have at least one family member engaged in low-paying seasonal agricultural work (Raymond-Flesch et al., 2017). Youth in Salinas are disproportionately affected by pervasive poverty, exposure to community violence, adolescent pregnancy, and social determinants that adversely affect health and well-being (Comfort et al., 2018; Monterey County, 2017; Raffaelli et al., 2016).

Study Design

A Crecer study is a prospective cohort study utilizing a community sample of youth, the design and implementation of which was informed by local youth and parents, a community advisory board, and the local health department, described by Comfort et al. (2018). In-person study visits took place in community-based locations close to participants' schools every six months over two years. Baseline data were collected from November, 2015 to March, 2017. Eligibility criteria for participation included being in 8th grade at the beginning of the study, attending one of the four middle schools in Salinas, being aged 12–15 years, Spanish or English speaking, providing parental permission, and 12-month intention to remain in Salinas. School-based recruitment used a range of approaches to target a diverse sample of students (e.g., classroom announcements, approaching small groups of students in school-yards). Participants were recontacted by study staff via phone calls and text messaging to schedule follow-up visits, regardless of school retention.

The 45–60 minute quantitative interview was interviewer administered in English or Spanish with sensitive behavioral questions administered via audio computer-assisted self-interviewing (ACASI) (Kurth et al., 2004). All variables pertaining to dating relationships were assessed via ACASI. Survey content included a variety of sexual health measures that assessed multiple aspects of dating relationships, sexual behavior, and DV. Participants received monetary compensation of \$20 for their time at the baseline and six-month follow-up visits.

Sample

We recruited a total of 1,099 8th grade youth during the period November, 2015 to March, 2017. Contact was made with 80% of parents by telephone and parental permission obtained for 800 youth (92% of parents contacted). There were 600 youth who provided written informed assent and 599 were determined to be eligible for the final cohort sample. For the purposes of this analysis, we limited the sample to participants with recent dating experience; 49% had a dating partner in the previous six months ($N = 296$; girls: $n = 147$; boys: $n = 149$). Among this sample, the mean age was 13.8 years old and half (52%) were in middle school (Table 1). The majority (88%) were of Mexican origin, with 72% second generation immigrants.

Data from baseline and the first (six-month) follow-up were utilized in this analysis. Given our interest in early adolescence, the current analysis examines DV at the six-month follow-up visit when it was first assessed. Relationship and behavioral measures were assessed at this same visit, reported for the previous six-month time period; we drew on the baseline interview for sociodemographic and gender-role beliefs data, which we assumed did not change substantially over the six-month period.

Measures

Participant demographics.—Demographics include current age, Mexican origin (yes/no), generation in the United States (first generation, second generation, or third or more generation), parent employed in agriculture (yes/no), the educational attainment of the

participant's mother (less than high school, high school, post-high school), and current education level (in middle/high school).

Dating experience.—A positive response to at least one of the following questions was considered as having dating experience in the past six months: “Have you had a boyfriend or girlfriend, or someone you considered a main partner, who you were more serious about than other people?” and, “Have you had a relationship with someone you wouldn't call your boyfriend or girlfriend but who was ‘more’ than just a friend? This could be someone you might have gone out with on dates, might have kissed romantically, or who might have been like a ‘friend with benefits’.” An affirmative response to the former question was considered a formal relationship type and an affirmative response to the latter was considered a casual relationship type. This measure of dating experience was developed by the last author for use with urban Latinx youth based on an adaptation of standard CDC HIV prevention behavioral questionnaires and refined through cognitive interview testing.

Endorsement of traditional gender role beliefs.—All participants indicated their level of endorsement of traditional gender role beliefs using culturally-based, adolescent-specific measures of *machismo* (Male Role Attitude Scale, eight items, Cronbach's alpha for the current sample 0.59) and *marianismo* (Marianismo Beliefs Scale, 16 items, Cronbach's alpha = 0.77) that included beliefs such as, “a guy will lose respect if he talks about his problems” and “a woman should be pure” (Castillo et al., 2010; Pleck et al., 1994). We calculated a mean level of agreement (1–4; 1: strongly disagree; 4: strongly agree) across scale items for each participant. Marianismo subscales of family pillar (Cronbach's alpha = 0.76), virtuous and chaste (Cronbach's alpha = 0.72), and self-silencing (Cronbach's alpha = 0.74) were assessed separately (Piña-Watson et al., 2014).

Dating relationship characteristics.—Past six-month dating relationships were characterized in terms of partner characteristics, relationship closeness, and risk behaviors.

- 1. Partner characteristics.** Partner characteristics included the type of relationship (main partner, casual partner, or both), context of meeting the partner, age difference between partners, and partner gang affiliation (yes/no). Relationship type was defined using the questions described in the dating experience section above.
- 2. Relationship closeness.** Relationship closeness was measured using multiple subconstructs related to the behavioral systems presented by Furman and Wehner (1994): romantic couple affiliation, partner-related withdrawal from friends, emotional attachment and caregiving, and frequency of communication about the relationship, communication about sex (yes/no) and about birth control (yes/no) in the past six months. *Romantic couple affiliation* was measured using a count of eight behaviors the participant and their current or most recent partner might have done that ranged from going out together in a group to saying they loved each other (yes/no) (Cronbach's alpha = 0.70), based on a measure utilized in the Add Health Study (Harris et al., 2009). *Partner-related withdrawal from friends* (i.e., subsequently referred to as “partner-related social withdrawal”) was

measured as a single item about seeing less of friends to spend more time with the current or most recent romantic partner (yes/no), also utilized in the Add Health Study (Harris et al., 2009). *Emotional attachment and caregiving* was measured as the average of three Likert-scale items of the Network of Relationships Inventory (Behavioral Systems Version), developed based on Ferman and Wehner's theory of adolescent relationships, about frequency of turning to any partner for support, cheering up, or advice and sympathy in the last six months (1: Little or not at all; 5: Extremely often; Cronbach's alpha = 0.83; Furman & Buhrmester, 2009). *Frequency of partner communication* about the relationship was from the same relationships inventory and measured with an identical Likert scale (Furman & Buhrmester, 2009).

- 3. Risk behavior.** Risk behavior within the partnership included drug or alcohol use as a couple and early sexual activity. Alcohol or drug use with a partner was measured with a single item about frequency of alcohol, marijuana, or other drug use when together (never, sometimes, often). Reporting vaginal or oral sex with any partner in the past six months was considered early sexual activity in this early adolescent cohort.

Dating violence.—The outcomes of interest were early DVV and DVP in the past six months, measured using a five-item version of the Revised Conflict Tactics Scale (Exner-Cortens et al., 2013; Straus et al., 1996). Participants were considered as having experienced early DVV (15 years or younger) if they provided an affirmative response to having a main or casual partner (regardless of gender) do at least one of the following: call them names, insult them, or treat them disrespectfully in front of others; swear at them; threaten with violence or to hurt them; push or shove them; or throw something at them that could hurt them (Cronbach's alpha = 0.70). The latter two items were considered physical abuse and the remaining items, psychological abuse. Participants were considered to have perpetrated early DV if they reported doing at least one of any of these behaviors to a partner (Cronbach's alpha = 0.76).

Analysis

We calculated frequencies for all demographics and dating characteristics and assessed differences by gender using Pearson's chi-square tests and t-tests. We utilized bivariable and multivariable modified-Poisson regression models with robust standard errors stratified by gender to identify partner and relationship characteristics associated with DVV and DVP. This approach to estimate relative risks for DV directly, rather than using logistic regression to calculate odds ratios as an approximation of the relative risk, allows for a closer approximation of the true association in the population as DVV and DVP prevalence were both greater than 10% in the sample (Rothman et al., 2008). Multivariable models were adjusted for recruitment site (i.e., school) and for several sociodemographic characteristics, including participant age, education level (middle school—8th grade vs. high school—9th grade), and maternal education. We conducted all statistical analyses using STATA/IC 15 (StataCorp, 2017) and used complete case analysis, as missing data on the outcome were minimal ($n = 1$).

Results

Relationship Characteristics

Participants were 13.8 years old (range 12–15) on average at the six-month follow-up visit, with 52% currently in middle school (8th grade) and 48% in high school (9th grade). Participants typically first met their dating partners at their school (72% girls, 81% boys) and/or were friends (60% girls, 51% boys) prior to establishing a romantic relationship (Table 2). These relationships were an average of eight months in duration. Girls' partners were, on average, five months older than them, while most boys' partners were their same age ($p < 0.001$). Girls and boys reported equivalent levels of engagement in romantic couple affiliation (five of eight behaviors) and emotional attachment and caregiving (2.6 on a 5-point Likert scale), while boys reported more partner-related social withdrawal compared to girls (44% vs. 32% girls, $p = 0.03$) (Table 2). Boys reported significantly higher levels of communication with partners about sex and birth control than girls. Communication about sex (31%) was more common than birth control (21%) (Table 2). Similarly, boys reported engagement in sexual activity more than their female peers (16% vs. 8%, respectively; $p = 0.04$), while twice as many girls reported having a gang-affiliated partner as boys (18% vs. 9% of boys, $p = 0.03$; Table 2).

Factors Associated With DV for Early Adolescent Latina Girls

Among early adolescent Latina girls who were dating, approximately one in five reported DVV (18%), with 15% experiencing psychological abuse, and 5% experiencing physical abuse (Table 3). In bivariate analyses, DVV among girls was associated with higher endorsement of the virtuous and chaste sub-scale of *marianismo* gender role beliefs, having a gang-affiliated partner, partner-related social withdrawal, partner communication about sex, sexual activity, and alcohol/drug use with a partner (Table 3). In multivariable models among girls, we found that increased risk of DVV was associated with higher endorsement of female virtue and chastity (adjusted risk ratio [ARR]: 2.46, 95% confidence interval [CI]: 1.17, 5.21), having partner-related social withdrawal (ARR: 3.7, 95% CI: 1.8, 7.7), a gang-affiliated partner (2.3, 95% CI: 1.1, 5.1), and increased frequency of alcohol/drug use with a partner (ARR: 2.6, 95% CI: 1.4, 4.9), adjusting for sociodemographic characteristics and school (Table 5). In addition, two sexual activity measures were associated with greater risk of DVV: early sexual activity (ARR: 3.0, 95% CI: 1.4, 6.2) and partner communication about sex (ARR: 3.0, 95% CI: 1.3, 6.9).

Among girls, 23% reported DVP, with 20% reporting psychological and 7% reporting physical abuse perpetration (Table 4). About half (48%) of girls who reported DVP also reported DVV. Bivariate analyses revealed that having a gang-affiliated partner and using alcohol/drugs often with a partner were associated with girls' risk for perpetration (Table 4). In multivariable analyses we found that having a gang-affiliated partner (ARR: 3.0, 95% CI: 1.6, 5.6), partner-related social withdrawal (ARR: 2.2, 95% CI: 1.2, 3.9), and alcohol or drug use with a partner (ARR: 1.9, 95% CI: 1.1, 3.3) was associated with greater risk for DVP among girls (Table 5).

Factors Associated With DV for Early Adolescent Latino Boys

One in five dating boys reported DVV (20%) and DVP (20%; Tables 3 and 4). More specifically, 17% reported psychological abuse and 9% reported physical abuse victimization and 17% reported psychological and 6% physical abuse perpetration. About half (52%) of boys who reported perpetration also reported victimization. In bivariate analyses for boys, frequency of communication about the relationship was associated with higher risk for DVV and greater age of partner with lower risk of DVV, but neither were significant in adjusted analyses (Tables 3 and 5). Reporting partner-related social withdrawal was associated with greater risk for perpetrating DV in bivariate analyses, although not significant in the adjusted model. None of the factors included in adjusted analyses were associated with boys' DVV or DVP.

Discussion

This study provides unique evidence around early victimization and perpetration of physical and psychological DV among a sample of Latinx early adolescent girls and boys living in an agricultural region who were currently dating. One in five participants reported DVV and/or DVP in the past six months. The rates of DV found among these Latinx early adolescents are similar to those found in the few studies among older Latinx adolescents (mean age: 15 years) and among urban adolescents but lower than those found among early adolescent Latinxs living in urban settings (Edwards et al., 2014; Grest et al., 2018; McDonnell et al., 2010; Orpinas, Nahapetyan et al., 2012; Sabina et al., 2016; Yan et al., 2010). Given the limited number of studies on Latinx early adolescents living in rural and agricultural regions, our study contributes to our growing understanding of the prevalence of DV in this young population and aligns with previous research to underscore the importance of promoting healthy relationships among early adolescents. Such efforts may help reduce DV among those who are already dating and support healthy future relationships, including secure relationship expectations, for those transitioning into having more sustained/enduring relationships in later adolescence and adulthood.

Having a gang-affiliated partner was found in the current study to be associated with greater risk of DVV and DVP among girls, but not boys. These results contribute to a limited number of studies that have identified increased risk of intimate partner violence among gang-affiliated females, the majority of which have focused on older, urban adolescents (Miller et al., 2012; Sutton, 2017; Ulloa et al., 2012). Almost all girls with a gang-affiliated partner who reported DVV also reported DVP, indicating that violence may be concentrated in these girls' lives. Thus, despite overall low levels of gang membership among this sample of early adolescents, exposure to gang violence through a dating partner was somewhat common among girls and appears to contribute to relationship-based violence. This finding is supported by Furman and Wehner's (1994) theory which suggests that violence and aggression within relationships may shift secure relationship expectations to insecure ones, contributing to negative interactions, such as DV (Exner-Cortens, 2014; Furman & Wehner, 1994). Additionally, DV among girls was associated with co-occurring risk factors for gang affiliation, including early sexual debut and alcohol and drug use with a partner (Cepeda & Valdez, 2003; Sutton, 2017). Previous research on girls in a short-term detention center

aligns with our findings that girls with gang-affiliated partners are at risk for physical or sexual victimization by that partner, drug and alcohol use, and sexual health risks (King et al., 2015). Given the strong association between female DV and having a gang-affiliated partner found in this study and, nationally, the heightened level of youth involvement in gangs in rural and semi-rural regions (National Gang Center, 2010), preventive efforts to address DV in agricultural communities are critical and would benefit from coordinated, multilevel efforts to prevent gang affiliation and their common risk factors, both for primary prevention of DV, as well as vulnerability to subsequent re-victimization from gang-involved partners (Wilkins et al., 2014).

In addition to sexual risk-taking and drug and alcohol use, social isolation has been identified as a risk factor for both gang affiliation and intimate partner violence (Sutton, 2017; Yan et al., 2010). This study found an association between girls spending less time with friends due to a partner and DV, highlighting possible relationship patterns with diminished social ties among girls experiencing DV. Supporting this finding, the STRiV study found controlling behaviors, which can include behaviors that limit a partner's social ties with peer, to predict DV perpetration among a national sample of youth aged 10–18 years (Taylor et al., 2017). While there is a dearth of evidence around social isolation among young adolescents experiencing DV, social isolation is a well-established tactic used by domestic violence perpetrators to increase partner vulnerability and dependence (Ellsberg et al., 2008). Attachment, caregiving, and affiliation needs are fulfilled through multiple relational sources, with family and peers being the most important sources in early adolescents (Freeman & Brown, 2001). Withdrawal from these primary sources may be particularly destabilizing during the early adolescent period of development. The limited amount of research on female gang affiliation has documented that females often seek gang affiliation to feel a sense of belonging, suggesting a similar need for prevention efforts to increase supportive social (peer and familial) connectedness (Sutton, 2017; Ulloa et al., 2012). This study's finding that early adolescent DV is associated with diminished social ties and with romantic relationships with gang-affiliated partners provides a signal that prevention interventions aiming to increase social connectedness could help to address DV and related gang affiliation.

These findings affirm etiological differences between girls' and boys' DV experiences. Moreover, endorsement of *marianismo* beliefs, specifically around female virtue and chastity, was associated with DV victimization among girls. These findings suggest that girls who report adhering to more traditional normative beliefs that they should be sexually naïve in their romantic relationships may be more readily targeted by romantic partners who perpetrate DV, an interpretation supported by the Theory of Gender and Power (Connell, 1987). With such sexual naivety may come diminished skills to negotiate relationships or stand up to a disrespectful or violent partner (Reed et al., 2010). DV prevention efforts specific to Latinx early adolescents may benefit from addressing traditional gender-role expectations to increase the acceptability for girls to be knowledgeable and assertive about their sexuality and relationships, in addition to teaching them skills to do so.

Contrary to our hypotheses, emotional attachment and caregiving within the relationship, partner age differences, and communication about the relationship and birth control were not

related to DV for boys or girls. Our findings may suggest that positive relationship factors, such as emotional attachment and caregiving and communication, are similarly present in adolescent relationships, regardless of whether DV is present. Supporting this finding, while the relationship between emotional attachment and relationship quality is well established in the research literature (Li & Chan, 2012), DV has been found to be associated with more negative aspects of relationship quality rather than the presence or absence of positive aspects (Viejo et al., 2016). These findings may also suggest that these measures, which do not specify if the emotional connection or communication was perceived to be positive or negative, may obscure the relationship of these constructs with regard to DV. For example, in relationships in which DV occurred, emotional attachment and communication could have been coercive and conflictual and had a positive correlation with DV, which may have counterbalanced the negative correlation observed among relationships without DV in which these interactions were positive and increased intimacy. More research with measures that more specifically assess both negative and positive communication and negative and positive emotional connection with romantic partners would be useful.

These results, additionally, uniquely offer a description of the nature of middle school dating relationships in this young adolescent Latinx population. Participants' dating relationships were largely school-based with partners of their same age, relatively long term (mean of 8 months), and involved a variety of expressions of romantic affiliation. These relationship characteristics suggest that efforts to promote healthy relationships should be school based and oriented toward longer-term relationships, rather than brief relationships lasting less than a couple months. A substantial minority of these participants' relationships, despite their young age, involved a gang-affiliated partner. Negative peer influences have been shown to be associated with insecure relationship expectations, and insecure expectations with negative interactions within relationships, concepts outlined in Furman and Wehner's (1994) theory (Exner-Cortens, 2014; Furman & Wehner, 1994; Miller et al., 2002). Given this, programs promoting healthy dating relationships in this and similar communities may, therefore, benefit from exploring how to promote secure relationship expectations among early adolescents to buffer against the negative influence of gang affiliation within romantic relationships (Exner-Cortens, 2014).

Findings should be considered in the context of several limitations. This is a cross-sectional study in which temporality of the identified associations cannot be established; however, this time point permitted a focus on DV in early adolescence, a contribution to the research literature. While DV questions were self-administered using ACASI to reduce the effects of social desirability bias, as has been suggested in previous research with other sensitive behaviors (Kurth et al., 2004), measurement of DV may be subject to self-report bias. Data were collected from a convenience sample recruited from all middle schools in an agricultural Latinx community ($n = 296$). While these findings may not be representative of out-of-school youth, comparison of the study sample with school district data suggest sociodemographic comparability with the 8th grade student population overall. As such, they are relevant to and offer unique evidence on DV for the increasing number of agricultural regions with similar Latinx populations elsewhere in the United States, especially given the limited number of studies on this population. Finally, because participation in this study depended on parental permission and out-of-school time, the sample may not be

representative of those youth who may be most at risk of experiencing and engaging in violence.

Conclusion

This study uniquely identified high levels of DVV and DVP among a sample of Latinx early adolescents in an agricultural community. In addition, this study revealed that a substantial number of early adolescent girls are dating gang-affiliated partners and experiencing a form of social isolation in their peer relationships, both of which were associated with greater risk of DVV and DVP. Findings affirm the need for multilevel DV prevention programming in agricultural communities that starts in middle school and addresses social isolation, gang exposure, and traditional Latinx gender-norm beliefs regarding *marianismo*. These findings underscore the imperative to coordinate dating and gang violence prevention efforts by addressing common interpersonal and environmental risk factors, including social isolation and culturally-specific traditional beliefs. Such factors could also assist providers, families, and peers in early identification of early Latinx adolescents at risk for DV, especially in rural contexts where resources are often limited. Longitudinal research is needed on these and other relationship characteristics related to early DV to inform the development of prevention models that address the specific risk and protective factors for DV pertinent to Latinx and community violence-exposed youth in agricultural regions.

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References

- 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*(1), 19–33. 10.1037/0022-0167.55.1.19
- Bowlby J (1980). *Attachment and loss: Vol. 3. Loss, sadness and depression*. Basic Books.
- Carr PJ, Lichter DT, & Kefalas MJ (2012). Can immigration save small-town America? Hispanic boomtowns and the uneasy path to renewal. *The Annals of the American Academy of Political and Social Science, 641*(1), 38–57. 10.1177/0002716211433445
- Castillo LG, Perez FV, Castillo R, & Ghosheh MR (2010). Construction and initial validation of the Marianismo Beliefs Scale. *Counselling Psychology Quarterly, 23*(2), 163–175. 10.1080/09515071003776036
- Cepeda A, & Valdez A (2003). Risk behaviors among young Mexican American gang-associated females: Sexual relations, partying, substance use, and crime. *Journal of Adolescent Research, 18*(1), 90–106. 10.1177/0743558402238278 [PubMed: 21218177]
- Collins WA, Welsh DP, & Furman W (2009). Adolescent romantic relationships. *Annual Review of Psychology, 60*, 631–652. 10.1146/annurev.psych.60.110707.163459
- Comfort M, Raymond-Flesch M, Auerswald C, McGlone L, Chavez M, & Minnis A (2018). Community-engaged research with rural Latino adolescents: Design and implementation strategies to study the social determinants of health. *Gateways: International Journal of Community Research and Engagement, 11*(1), 90–108. 10.5130/ijcre.v11i1.5721 [PubMed: 31236142]
- Connell RW (1987). *Gender and power*. Stanford University Press.
- Edwards KM (2015). Intimate partner violence and the rural–urban–suburban divide: Myth or reality? A critical review of the literature. *Trauma, Violence, & Abuse, 16*(3), 359–373. 10.1177/1524838014557289
- Edwards KM, Mattingly MJ, Dixon KJ, & Banyard VL (2014). Community matters: Intimate partner violence among rural young adults. *American Journal of Community Psychology, 53*(1–2), 198–207. 10.1007/s10464-014-9633-7 [PubMed: 24473923]
- Ellsberg M, Jansen HA, Heise L, Watts PCH, & Garcia-Moreno C (2008). Intimate partner violence and women’s physical and mental health in the WHO multi-country study on women’s health and domestic violence: An observational study. *The Lancet, 371*(9619), 1165–1172. 10.1016/S0140-6736(08)60522-X
- Exner-Cortens D (2014). Theory and teen dating violence victimization: Considering adolescent development. *Developmental Review, 34*(2), 168–188. 10.1016/j.dr.2014.03.001
- Exner-Cortens D, Eckenrode J, & Rothman E (2013). Longitudinal associations between teen dating violence victimization and adverse health outcomes. *Pediatrics, 131*(1), 71–78. 10.1542/peds.2012-1029 [PubMed: 23230075]
- Foshee VA, Chang LY, McNaughton R, Luz H, & Ennett ST (2015). The synergy of family and neighborhood on rural dating violence victimization. *American Journal of Preventive Medicine, 49*(3), 483–491. 10.1016/j.amepre.2015.06.005 [PubMed: 26296447]
- Freeman H, & Brown BB (2001). Primary attachment to parents and peers during adolescence: Differences by attachment style. *Journal of Youth and Adolescence, 30*, 653–674. 10.1023/A:1012200511045
- Furman W, & Buhrmester D (2009). Methods and measures: The network of relationships inventory: Behavioral systems version. *International Journal of Behavioral Development, 33*(5), 470–478. 10.1177/0165025409342634 [PubMed: 20186262]
- Furman W, & Wehner EA (1994). Romantic views: Toward a theory of adolescent romantic relationships. In Montemayor R, Adams GR & Gullotta TP (Eds.), *Advances in adolescent development: An annual book series: Vol. 6. Personal relationships during adolescence* (pp. 168–195). SAGE Publications.

- Giordano PC, Soto DA, Manning WD, & Longmore MA (2010). The characteristics of romantic relationships associated with teen dating violence. *Social Science Research*, 39(6), 863–874. 10.1016/j.ssre-search.2010.03.009 [PubMed: 21037934]
- Grest CV, Amaro H, & Unger J (2018). Longitudinal predictors of intimate partner violence perpetration and victimization in Latino emerging adults. *Journal of Youth and Adolescence*, 47(3), 560–574. 10.1007/s10964-017-0663-y [PubMed: 28382461]
- Harris KM, Halpern CT, Whitsel E, Hussey J, Tabor J, Entzel P, & Udry JR (2009). The national longitudinal study of adolescent to adult health: Research design. *Add Health*. <http://www.cpc.unc.edu/projects/addhealth/design>
- Hazan C, & Shaver P (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52(3), 511–524. 10.1037/0022-3514.52.3.511 [PubMed: 3572722]
- Johnson KM, Schaefer A, Lichter DT, & Rogers LT (2014). The increasing diversity of America's youth: Children lead the way to a new era. The Carsey Institute. <https://scholars.unh.edu/cgi/viewcontent.cgi?referer=https://scholar.google.com/&httpsredir=1&article=1211&context=carsey>
- Kann L, McManus T, & Harris WA (2018). Youth risk behavior surveillance — United States, 2017, MMWR surveillance summaries. Center for Surveillance Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention (CDC). <https://www.cdc.gov/healthyyouth/data/yrbs/pdf/2017/ss6708.pdf>
- King KM, Voisin DR, & Diclemente RJ (2015). The relationship between male gang involvement and psychosocial risks for their female juvenile justice partners with non-gang involvement histories. *Journal of Child and Family Studies*, 24, 2555–2559. 10.1007/s10826-014-0057-7
- Kurth AE, Martin DP, Golden MR, Weiss NS, Heagerty PJ, Spielberg F, Handsfield HH, & Holmes KK (2004). A comparison between audio computer-assisted self-interviews and clinician interviews for obtaining the sexual history. *Sexually Transmitted Diseases*, 31(12), 719–726. 10.1097/01.olq.0000145855.36181.13 [PubMed: 15608586]
- Li T, & Chan D (2012). How anxious and avoidant attachment affect romantic relationship quality differently: A meta-analytic review. *European Journal of Social Psychology*, 42(4), 406–419. 10.1002/ejsp.1842
- McDonell J, Ott J, & Mitchell M (2010). Predicting dating violence victimization and perpetration among middle and high school students in a rural southern community. *Children and Youth Services Review*, 32(10), 1458–1463. 10.1016/j.childyouth.2010.07.001
- Miga EM, Hare A, Allen JP, & Manning N (2010). The relation of insecure attachment states of mind and romantic attachment styles to adolescent aggression in romantic relationships. *Attachment and Human Development*, 12, 463–481. 10.1080/14616734.2010.501971 [PubMed: 20730640]
- Miller AL, Notaro PC, & Zimmerman MA (2002). Stability and change in internal working models of friendship: Associations with multiple domains of urban adolescent functioning. *Journal of Social and Personal Relationships*, 19(2), 233–259. 10.1177/0265407502192004
- Miller E, Levenson R, Herrera L, Kurek L, Stofflet M, & Marin L (2012). Exposure to partner, family, and community violence: Gang-affiliated Latina women and risk of unintended pregnancy. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 89(1), 74–86. 10.1007/s11524-011-9631-0 [PubMed: 22160445]
- Minnis AM, Marchi K, Ralph L, Biggs MA, Combellick S, Arons A, Brindis CD, & Braveman P (2013). Limited socioeconomic opportunities and Latina teen childbearing: A qualitative study of family and structural factors affecting future expectations. *Journal of Immigrant and Minority Health*, 15(2), 334–340. 10.1007/s10903-012-9653-z [PubMed: 22678305]
- Monterey County. (2017). Monterey county maternal child and adolescent health community profile 2017–18. California Department of Public Health. <https://www.cdph.ca.gov/Programs/CFH/DMCAH/LocalMCAH/CDPH%20Document%20Library/Community-Profile-Monterey.pdf>
- National Gang Center. (2010). National youth gang survey analysis. Author. <http://www.nationalgangcenter.gov/Survey-Analysis>.
- Orpinas P, Hsieh H, Song X, Holland K, & Nahapetyan L (2012). Trajectories of physical dating violence from middle to high school: Association with relationship quality and acceptability

- of aggression. *Journal of Youth and Adolescence*, 42(4), 551–565. 10.1007/s10964-012-9881-5 [PubMed: 23233161]
- Orpinas P, Nahapetyan L, Song X, McNicholas C, & Reeves PM (2012). Psychological dating violence perpetration and victimization: Trajectories from middle to high school. *Aggressive Behavior*, 38(6), 510–520. 10.1002/ab.21441 [PubMed: 23044936]
- Piña-Watson B, Castillo LG, Jung E, Ojeda L, & Castillo-Reyes R (2014). The Marianismo Beliefs Scale: Validation with Mexican American adolescent girls and boys. *Journal of Latina/O Psychology*, 2(2), 113–130. 10.1037/lat0000017
- Pleck JH, Sonenstein FL, & Ku LC (1994). Attitudes toward male roles among adolescent males: A discriminant validity analysis. *Sex Roles: A Journal of Research*, 30(7–8), 481–501. 10.1007/BF01420798
- Raffaelli M, Iturbide MI, & Fernandez M (2016). Development and well-being of rural Latino youth: Research findings and methodological aspects. In Crockett L, & Carlo G (Eds.), *Rural ethnic minority youth and families in the United States. Advancing responsible adolescent development* (pp. 89–108). Springer, Cham. 10.1007/978-3-319-20976-0_6
- Raymond-Flesch M, Auerswald C, McGlone L, Comfort M, & Minnis A (2017). Building social capital to promote adolescent wellbeing: A qualitative study with teens in a Latino agricultural community. *BMC Public Health*, 17(1), 177. 10.1186/s12889-017-4110-5 [PubMed: 28178971]
- Reed E, Raj A, Miller E, & Silverman JG (2010). Losing the “gender” in gender-based violence: The missteps of research on dating and intimate partner violence. *Violence Against Women*, 16(3), 348–354. 10.1177/1077801209361127 [PubMed: 20133922]
- Reed E, Silverman JG, Raj A, Decker MR, & Miller E (2011). Male perpetration of teen dating violence: Associations with neighborhood violence involvement, gender attitudes, and perceived peer and neighborhood norms. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 88(2), 226–239. 10.1007/s11524-011-9545-x [PubMed: 21311987]
- Rothman KJ, Greenland S, & Lash T (2008). *Modern epidemiology* (3rd ed.). Lippincott Williams & Wilkins.
- Sabina C, Cuevas CA, & Cotignola-Pickens HM (2016). Longitudinal dating violence victimization among Latino teens: Rates, risk factors, and cultural influences. *Journal of Adolescence*, 47, 5–15. 10.1016/j.adolescence.2015.11.003 [PubMed: 26708954]
- Sianko N, Kunkel D, Thompson MP, Small MA, & McDonnell JR (2019). Trajectories of dating violence victimization and perpetration among rural adolescents. *Journal of Youth and Adolescence*, 48(12), 2360–2376. 10.1007/s10964-019-01132-w [PubMed: 31595383]
- StataCorp L (2017). *Stata statistical software: Release 15* [computer software]. College Station, loc.
- Straus MA, Hamby SL, Boney-McCoy S, & Sugarman DB (1996). The revised conflict tactics scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*, 17(3), 283–316. 10.1177/019251396017003001
- Sullivan HS (1953). *The interpersonal theory of psychiatry*. W. W. Norton & Company.
- Sutton TE (2017). The lives of female gang members: A review of the literature. *Aggression and Violent Behavior*, 37, 142–152. 10.1016/j.avb.2017.10.001
- Taylor B, Joseph H, & Mumford E (2017). Romantic relationship characteristics and adolescent relationship abuse in a probability-based sample of youth. *Journal of Interpersonal Violence*. Advance online publication. 10.1177/0886260517730566
- Ulloa EC, Dyson RB, & Wynes DD (2012). Inter-partner violence in the context of gangs: A review. *Aggression and Violent Behavior*, 17(5), 397–404. 10.1016/j.avb.2012.05.001
- Viejo C, Monks CP, Sanchez V, & Ortega-Ruiz R (2016). Physical dating violence in Spain and the United Kingdom and the importance of relationship quality. *Journal of Interpersonal Violence*, 31(8), 1453–1475. 10.1177/0886260514567963 [PubMed: 25604968]
- Vivolo-Kantor AM, Massetti G, Niolon P, Foshee V, & McNaughton-Reyes L (2016). Relationship characteristics associated with teen dating violence perpetration. *Journal of Aggression, Maltreatment & Trauma*, 25(9), 936–954. 10.1080/10926771.2016.1223774
- Wilkins N, Tsao B, Hertz M, Davis R, & Klevens J (2014). Connecting the dots: An overview of the links among multiple forms of violence. Prevention Institute. https://www.cdc.gov/violenceprevention/pdf/connecting_the_dots-a.pdf

- Wincentak K, Connolly J, & Card N (2017). Teen dating violence: A meta-analytic review of prevalence rates. *Psychology of Violence*, 7(2), 224–241. 10.1037/a0040194
- Wingood GM, & DiClemente RJ (2000). Application of the theory of gender and power to examine HIV-related exposures, risk factors, and effective interventions for women. *Health Education & Behavior*, 27(5), 539–565. 10.1177/109019810002700502 [PubMed: 11009126]
- Yan FA, Howard DE, Beck KH, Shattuck T, & Hallmark-Kerr M (2010). Psychosocial correlates of physical dating violence victimization among latino early adolescents. *Journal of Interpersonal Violence*, 25(5), 808–831. 10.1177/0886260509336958 [PubMed: 19584406]

Demographic Characteristics of Latinx Early Adolescents in an Agricultural Community, A Crecer Study, Salinas, California, 2016–2017.

Table 1.

Characteristic	Total (n = 296)			Girls (n = 147)			Boys (n = 149)			P value ^d
	Mean (SD)	No.	%	Mean (SD)	No.	%	Mean (SD)	No.	%	
Age, years	13.8 (0.5)			13.8 (0.5)			13.8 (0.5)			.78
12		1	(0)		0	(0)		1	(1)	
13		83	(28)		42	(29)		41	(29)	
14		199	(67)		99	(67)		100	(67)	
15		13	(4)		6	(4)		7	(5)	
Mexican origin		261	(88)		126	(86)		135	(91)	.19
U.S. generation										1.00
First generation		32	(11)		15	(10)		17	(11)	
Second generation		214	(72)		106	(72)		108	(72)	
Third or later generation		47	(16)		23	(16)		24	(16)	
Missing		3	(1)		3	(2)		0	(0)	
Parent working in agriculture		141	(48)		74	(50)		67	(45)	.36
Maternal education										.43
Less than high school		117	(40)		65	(44)		52	(35)	
High school		100	(34)		46	(31)		54	(36)	
Post-high school		69	(23)		31	(21)		38	(26)	
Unknown		10	(3)		5	(3)		5	(3)	
Current education level										.91
In middle school		154	(52)		76	(52)		78	(52)	
In high school		142	(48)		71	(48)		71	(48)	
Endorsement of <i>marianismo</i>	2.7 (0.3)			2.6 (0.3)			2.7 (0.3)			.02
Family pillar	3.1 (0.5)			3.1 (0.5)			3.2 (0.4)			.15
Virtuous & chaste	2.9 (0.5)			2.9 (0.5)			2.9 (0.5)			.79
Self-silencing	2.1 (0.5)			2.0 (0.5)			2.2 (0.5)			.00
Endorsement of <i>machismo</i>	2.5 (0.4)			2.4 (0.3)			2.5 (0.4)			.04

Note. SD = standard deviation.

^d P Value calculated with independent t-test (continuous) or Pearson's chi square test (categorical).

Table 2. Characteristics of Latinx Early Adolescents' Dating Relationships (A Crecer Study, n = 296), Salinas, California, 2016–2017.

Dating Relationship Characteristics (Past Six Months)	Total (n = 296)		Girls (n = 147)		Boys (n = 149)		P value ^d
	n	%	n	%	n	%	
Relationship type							.16
Main partner	121	(41)	58	(40)	63	(42)	
Casual partner	32	(11)	21	(14)	11	(7)	
Both main and casual (> 1 partner)	143	(48)	68	(46)	75	(50)	
Length of relationship (months)	10 ^b	8 (0, 44) ^c	10	7 (0, 30) ^c	11	9 (0, 44) ^c	.23 ^d
Missing	15	(0)	8	(5)	7	(5)	
Partner age relative to participant age (months)	5 ^b	13 (-36, 84) ^c	8 ^b	13 (-24, 84) ^c	2 ^b	12 (-36, 24) ^c	<.001
Missing	18	(6)	8	(5)	7	(5)	
Original context of meeting partner							
Went to the same school	226	(76)	106	(72)	120	(81)	.09
Were friends	164	(55)	88	(60)	76	(51)	.13
Partner was a friend of another friend of yours	88	(30)	54	(37)	34	(23)	.01
Spent time on social media or online	93	(31)	52	(35)	41	(28)	.15
Some other way	40	(14)	22	(15)	18	(12)	.47
Did not know your partner before your relationship began	8	(3)	6	(4)	2	(1)	.15
Romantic couple affiliation (score 0–8)	5,0 ^b	(2) ^e	4,8 ^b	(2) ^e	5,2 ^b	(2) ^e	.11
Thought of yourselves as a couple	249	(84)	124	(84)	125	(84)	
Told each other you loved each other	237	(80)	117	(80)	120	(81)	
Told other people that you were a couple	217	(73)	107	(73)	110	(74)	
Went out together in a group	173	(58)	90	(61)	83	(56)	
Went out together alone	167	(56)	76	(52)	91	(61)	
Gave each other presents	173	(58)	79	(54)	94	(63)	
Changed your relationship status on social media	132	(45)	62	(42)	70	(47)	
Met your partner's parents	113	(38)	47	(32)	66	(44)	
Partner-related withdrawal from friends	113	(38)	47	(32)	66	(44)	.03
Missing	3	(1)	2	(1)	1	(1)	

Dating Relationship Characteristics (Past Six Months)	Total (n = 296)			Girls (n = 147)			Boys (n = 149)			P value ^a
	n	%		n	%		n	%		
Emotional attachment & caretaking (1–5; Extremely often)	2.6 ^b	(1) ^e	2.6 ^b	(1) ^e	2.6 ^b	(1) ^e	2.6 ^b	(1) ^e	.84	
Missing	2	(1)	1	(1)	1	(1)	1	(1)		
Frequency of partner communication about relationship (1–5; Extremely often)	2.5 ^b	(1) ^e	2.5 ^b	(1) ^e	2.5 ^b	(1) ^e	2.5 ^b	(1) ^e	1.00	
Missing	2	(1)	1	(1)	1	(1)	1	(1)		
Partner communication about sex	71	(24)	25	(17)	46	(31)			.01	
Missing	1	(0)	0	(0)	1	(1)				
Partner communication about birth control	58	(20)	26	(18)	32	(21)			.45	
Missing	4	(1)	3	(2)	1	(1)				
Gang-affiliated partner	40	(14)	26	(18)	14	(9)			.03	
Missing	2	(1)	2	(1)	0	(0)				
Alcohol and drug use with partner									.11	
Never	239	(81)	120	(82)	119	(80)				
Sometimes	47	(16)	24	(16)	23	(15)				
Often	8	(3)	1	(1)	7	(5)				
Missing	2	(1)	2	(1)	0	(0)				
Oral or vaginal sex	36	(12)	12	(8)	24	(16)			.04	

Note. SD = standard deviation.

^aP value calculated with independent t-test (continuous) or Pearson's chi-square test (categorical)

^bMean

^cStandard deviation (range)

^dP value calculated with two-sample Wilcoxon rank-sum (Mann-Whitney) test because of non-normally distributed data

^eStandard deviation

Table 3.

Bivariate Risk Ratios of Dating Violence Victimization Related to Early Dating Relationship Qualities Among Latinx Early Adolescents (A Crecer Study, n = 296), Salinas, California, 2016–2017.

	Dating Violence Victimization									
	Girls (n = 147)					Boys (n = 149)				
	Yes (%)	No (%)	Risk Ratio	95% CI	P value	Yes (%)	No (%)	Risk Ratio	95% CI	P value
Participant Characteristics										
Age <i>mean (SD)</i>	26 (17.8)	120 (82.2)				29 (19.5)	120 (80.5)			
Maternal education										
Less than high school	13.7 (0.6)	13.8 (0.5)	0.78	0.36, 1.66	.51	13.9 (0.6)	13.7 (0.5)	1.87	0.96, 3.67	.07
High school	12 (46.2)	52 (43.3)	Ref			10 (34.5)	42 (35.0)	Ref		
Post-high school	5 (19.2)	41 (34.2)	0.58	0.22, 1.54	.27	13 (44.8)	41 (34.2)	1.25	0.60, 2.61	.55
Unknown	8 (30.8)	23 (19.2)	1.38	0.63, 3.03	.43	5 (17.2)	33 (27.5)	0.68	0.25, 1.85	.45
Current education level										
In middle school	1 (3.9)	4 (3.3)	1.07	0.17, 6.66	.95	1 (3.5)	4 (3.3)	1.04	0.16, 6.59	.97
In high school	12 (46.2)	63 (52.5)	Ref			12 (41.4)	66 (55.0)	Ref		
Marianismo-family pillar	14 (53.9)	57 (47.5)	1.23	0.61, 2.49	.56	17 (58.6)	54 (45.0)	1.56	0.80, 3.03	.19
Marianismo-virtuous & chaste	3.0 (2.2,3.8)	3.1 (1.8,4)	0.81	0.44, 1.47	.48	3.2 (2.2,3.8)	3.2 (2.4)	1.00	0.49, 2.05	1.00
Marianismo-self-silencing	3.1 (2.2,4)	2.8 (1.6,4)	2.58	1.26, 5.27	.01	2.8 (1.6,3.8)	2.9 (1.4,4)	0.82	0.44, 1.56	.56
Machismo	2.0 (1.2,3.5)	2.0 (1.3,5)	1.11	0.49, 2.50	.80	2.2 (1.2,3.2)	2.2 (1.3,7)	0.99	0.48, 2.02	.98
Partner characteristics (past 6 months)	2.5 (1.9,3.4)	2.4 (1.6,3.6)	1.44	0.52, 4.00	.49	2.5 (1.5,3.4)	2.5 (1.1,3.6)	0.92	0.40, 2.11	.85
Partner age relative to participant age <i>mean (SD)</i>	0.8 (1.1)	0.3 (1.0)	1.29	0.99, 1.68	.06	-0.3 (1.0)	0.0 (0.9)	0.68	0.45, 1.00	.05
Gang-affiliated partner	9 (34.6)	17 (14.3)	2.42	1.22, 4.83	.01	3 (10.3)	11 (9.2)	1.11	0.38, 3.23	.84
Relationship Closeness (past 6 months)										
Partner-related withdrawal from friends	16 (61.5)	31 (26.1)	3.34	1.64, 6.80	<.01	14 (48.3)	52 (43.7)	1.16	0.60, 2.23	.66
Emotional attachment & caregiving <i>mean (SD)</i>	2.4 (1.0)	2.6 (1.1)	0.88	0.64, 1.22	.45	2.7 (1.0)	2.5 (1.1)	1.08	0.83, 1.41	.56
Frequency of partner communication about relationship <i>mean (SD)</i>	2.9 (1.3)	2.5 (1.2)	1.24	0.96, 1.60	.10	2.9 (1.2)	2.4 (1.3)	1.26	1.01, 1.57	.04
Partner communication about sex	10 (38.5)	15 (12.5)	3.03	1.56, 5.88	<.01	12 (41.4)	34 (28.6)	1.57	0.81, 3.01	.18
Partner communication about birth control	8 (30.8)	18 (15.3)	2.02	0.98, 4.14	.06	10 (34.5)	22 (18.5)	1.91	0.99, 3.69	.06
Risk behaviors										

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	Dating Violence Victimization									
	Girls (n = 147)					Boys (n = 149)				
	Yes (%)	No (%)	Risk Ratio	95% CI	P value	Yes (%)	No (%)	Risk Ratio	95% CI	P value
Alcohol and drug use with partner										
Never	17 (65.4)	103 (86.6)	Ref			23 (79.3)	96 (80.0)	Ref		
Sometimes	8 (30.8)	16 (13.5)	2.35	1.15, 4.83	.02	5 (17.2)	18 (15.0)	1.12	0.48, 2.66	.79
Often	1 (3.9)	0 (0.00)	7.06	4.54, 10.98	<.01	1 (3.5)	6 (5.0)	0.74	0.12, 4.74	.75
Oral or vaginal sex	5 (19.2)	7 (5.8)	2.66	1.22, 5.79	.01	5 (17.2)	19 (15.8)	1.09	0.46, 2.57	.85

Note. CI = confidence interval; SD = standard deviation.

Table 4.

Bivariate Risk Ratios of Dating Violence Perpetration Related to Early Dating Relationship Qualities Among Latinx Early Adolescents (A Crecer Study, n = 296), Salinas, California, 2016–2017.

	Dating Violence Perpetration									
	Girls (n = 147)					Boys (n = 149)				
	Yes (%)	No (%)	Risk Ratio	95% CI	P value	Yes (%)	No (%)	Risk Ratio	95% CI	P value
Participant Characteristics	33 (22.6)	113 (77.4)				29 (19.5)	120 (80.5)			
Age <i>mean (SD)</i>	13.8 (0.5)	13.8 (0.5)	1.11	0.60, 2.05	.74	13.9 (0.5)	13.7 (0.5)	1.45	0.78, 2.67	.24
Maternal education										
Less than high school	9 (27.3)	55 (48.7)	Ref			9 (31.0)	43 (35.8)	Ref		
High school	11 (33.3)	35 (31.0)	1.7	0.77, 3.78	.19	10 (34.5)	44 (36.7)	1.25	0.60, 2.61	.55
Post-high school	12 (36.4)	19 (16.8)	2.75	1.30, 5.84	.01	9 (31.0)	29 (24.2)	0.68	0.25, 1.85	.45
Unknown	1 (3.0)	4 (3.5)	1.42	0.22, 9.15	.71	1 (3.5)	4 (3.3)	1.04	0.16, 6.59	.97
Current education level										
In middle school	16 (48.5)	59 (52.2)	1.12	0.61, 2.05	.71	12 (41.4)	66 (55.0)	1.56	0.80, 3.03	.19
In high school	17 (51.5)	54 (47.8)				17 (58.6)	54 (45.0)			
Marianismo-family pillar	3.1 (2.2,4)	3.1 (1.8,4)	1.10	0.65, 1.86	.72	3.3 (2.4,4)	3.1 (2,4)	1.65	0.76, 3.56	.20
Marianismo-virtuous & chaste	2.9 (1.8,3.8)	2.9 (1.6,4)	1.03	0.54, 1.96	.93	3.0 (1.6,3.8)	2.9 (1.4,4)	1.43	0.67, 3.03	.36
Marianismo-self-silencing	1.9 (1.2,3.5)	2.0 (1.3,5)	0.55	0.24, 1.23	.14	2.1 (1.3,3.2)	2.2 (1.3,7)	0.72	0.38, 1.37	.32
Machismo	2.4 (1.9,3.3)	2.4 (1.6,3.6)	0.73	0.28, 1.95	.54	2.5 (1.6,3.1)	2.5 (1.1,3.6)	1.06	0.52, 2.16	.87
Partner characteristics (past 6 months)										
Partner age relative to participant age <i>mean (SD)</i>	0.7 (1.1)	0.6 (1.1)	1.03	0.78, 1.36	.83	0.0 (1.1)	0.2 (0.9)	0.84	0.59, 1.20	.33
Gang-affiliated partner	13 (39.4)	13 (11.6)	2.98	1.71, 5.19	<.01	4 (13.8)	10 (8.3)	1.54	0.62, 3.81	.35
Relationship closeness (past 6 months)										
Partner-related withdrawal from friends	15 (45.5)	32 (28.6)	1.74	0.96, 3.14	.07	18 (62.1)	48 (40.3)	2.03	1.03, 4.01	.04
Emotional closeness <i>mean (SD)</i>	2.4 (0.9)	2.6 (1.1)	0.83	0.64, 1.09	.19	2.4 (1.1)	2.6 (1.1)	0.92	0.67, 1.25	.59
Communication										
Frequency of partner communication about relationship <i>mean (SD)</i>	2.7 (1.3)	2.5 (1.3)	1.11	0.88, 1.39	.39	2.6 (1.2)	2.5 (1.3)	1.03	0.81, 1.31	.80
Partner communication about sex	8 (24.2)	17 (15.0)	1.55	0.79, 3.03	.20	12 (41.4)	34 (28.6)	1.57	0.81, 3.01	.18
Partner communication about birth control	8 (24.2)	18 (16.2)	1.45	0.74, 2.85	.28	8 (27.6)	24 (20.2)	1.38	0.67, 2.83	.38

	Dating Violence Perpetration									
	Girls (n = 147)					Boys (n = 149)				
	Yes (%)	No (%)	Risk Ratio	95% CI	P value	Yes (%)	No (%)	Risk Ratio	95% CI	P value
	33 (22.6)	113 (77.4)				29 (19.5)	120 (80.5)			
Risk behaviors										
Alcohol and drug use with partner										
Never	24 (72.7)	96 (85.7)	Ref			22 (75.9)	97 (80.8)	Ref		
Sometimes	8 (24.2)	16 (14.3)	1.65	0.85, 3.26	.14	5 (17.2)	18 (15.0)	1.12	0.48, 2.66	.79
Often	1 (3.0)	0 (0.00)	5.00	3.49, 7.16	<.01	2 (6.9)	5 (4.2)	0.74	0.12, 4.74	.75
Oral or vaginal sex	5 (15.2)	7 (6.2)	1.99	0.94, 4.22	.07	7 (24.1)	17 (14.2)	1.66	0.80, 3.45	.18

Note. CI = confidence interval; SD = standard deviation.

Table 5.

Adjusted Risk Ratios of Dating Violence Victimization and Perpetration Related to Early Dating Relationship Qualities Among Latinx Early Adolescents (A Crecer Study, n = 296), Salinas, California, 2016–2017.

	Dating Violence Victimization				Dating Violence Perpetration							
	Girls (n = 147)		Boys (n = 149)		Girls (n = 147)		Boys (n = 149)					
	Adjusted ^d Risk Ratio	95% CI	P value	Adjusted ^d Risk Ratio	95% CI	P value	Adjusted ^d Risk Ratio	95% CI	P value			
Participant Characteristics												
Marianismo-family pillar	0.89	0.48, 1.63	.70	1.12	0.55, 2.31	.75	1.03	0.60, 1.75	0.92	1.85	0.82, 4.18	.14
Marianismo-virtuous & chaste	2.46	1.17, 5.21	.02	0.97	0.49, 1.92	.93	0.91	0.48, 1.75	0.78	1.47	0.66, 3.24	.34
Marianismo-self-silencing	1.11	0.48, 2.57	.81	1.07	0.48, 2.34	.88	0.57	0.24, 1.35	0.20	0.75	0.35, 1.58	.45
Machismo	1.75	0.66, 4.61	.26	1.19	0.51, 2.74	.69	0.72	0.25, 2.02	0.53	1.25	0.58, 2.71	.57
Partner characteristics (past 6 months)												
Partner age relative to participant age	1.31	0.99, 1.74	.06	0.65	0.40, 1.03	.07	1.08	0.78, 1.49	0.65	0.82	0.53, 1.25	.35
Gang-affiliated partner	2.31	1.06, 5.06	.04	1.00	0.31, 3.25	1.00	3.01	1.62, 5.60	<0.01	1.66	0.66, 4.19	.28
Relationship closeness (past 6 months)												
Partner-related withdrawal from friends	3.71	1.78, 7.72	<.01	1.05	0.53, 2.09	.88	2.18	1.21, 3.93	0.01	1.78	0.91, 3.47	.09
Emotional attachment & caregiving	0.88	0.64, 1.21	.44	1.09	0.81, 1.45	.58	0.86	0.66, 1.13	0.29	0.92	0.65, 1.29	.63
Frequency of partner communication about relationship <i>mean (SD)</i>	1.24	0.97, 1.60	.09	1.24	0.98, 1.57	.07	1.11	0.90, 1.36	0.35	1.03	0.79, 1.33	.85
Partner communication about sex	2.97	1.43, 6.17	<.01	1.48	0.74, 2.95	.27	1.75	0.89, 3.40	0.10	1.57	0.78, 3.16	.21
Partner communication about birth control	1.85	0.87, 3.95	.11	1.75	0.90, 3.40	.10	1.65	0.81, 3.35	0.17	1.37	0.66, 2.83	.40
Risk behaviors												
Alcohol and drug use with partner	2.63	1.41, 4.92	<.01	0.91	0.45, 1.85	.80	1.90	1.09, 3.31	0.02	1.21	0.70, 2.07	.49
Oral or vaginal sex	2.98	1.29, 6.87	.01	0.92	0.38, 2.21	.84	1.83	0.80, 4.17	0.15	1.69	0.78, 3.67	.18

Note. CI = confidence interval

^a Analysis adjusted for participant age, education level, maternal education, and recruitment site.

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