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Patterns of Dating Violence Victimization and Perpetration among Latino Youth

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Abstract

Theory and research suggest that there may be significant heterogeneity in the development, manifestation, and consequences of adolescent dating violence that is not yet well understood. The current study contributed to our understanding of this heterogeneity by identifying distinct patterns of involvement in psychological, physical, and sexual dating violence victimization and perpetration in a sample of Latino youth (n=201; M=13.87 years; 42% male), a group that is understudied, growing, and at high risk for involvement in dating violence. Among both boys and girls, latent class analyses identified a three-class solution wherein the largest class demonstrated a low probability of involvement in dating violence across all indices ("uninvolved"; 56% of boys, 64% of girls) and the smallest class demonstrated high probability of involvement in all forms of dating violence except for sexual perpetration among girls and physical perpetration among boys ("multiform aggressive victims"; 10% of boys, 11% of girls). A third class of "psychologically aggressive victims" was identified for which there was a high probability of engaging and experiencing psychological dating violence, but low likelihood of involvement in physical or sexual dating violence (34% of boys, 24% of girls). Cultural (parent acculturation, acculturation conflict), family (conflict and cohesion) and individual (normative beliefs, conflict resolution skills, self-control) risk and protective factors were associated with class membership. Membership in the multiform versus the uninvolved class was concurrently associated with emotional distress among girls and predicted emotional distress longitudinally among boys. The

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Author Contributions

HLMR conceived of the study research questions and hypotheses, conducted statistical analysis, and drafted the manuscript; VF designed and coordinated the parent study and helped to draft the manuscript; MSC and SE helped draft the manuscript. All authors read and approved the final manuscript.

Conflicts of Interest

The authors report no conflicts of interest.

Compliance with Ethical Standards

Ethical Approval

Ethical approval for the parent study and analyses conducted for the current manuscript was provided by the non-biomedical Institutional Review Board at UNC Chapel Hill in accordance with federal regulations governing human subjects research.

Informed Consent

Informed consent was provided by both parents and adolescents who participated in the parent study that provided the data used in the analyses reported in the current manuscript.

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results contribute to understanding heterogeneity in patterns of involvement in dating violence among Latino youth that may reflect distinct etiological processes.

Keywords

adolescence; dating violence; Latino youth; latent class analysis; longitudinal

Introduction

Estimates from nationally representative surveys in the U.S. suggest that 10% of high school attending youth have experienced physical and/or sexual dating violence (Kann et al. 2014; Haynie et al. 2013) and 25% have experienced psychological dating violence in the past 12 months (Haynie et al. 2013) with potentially severe negative sequelae including depression, substance use, injury, and, in the most severe cases, death (Chen et al. 2016). Although dating violence affects youth in all ethnic and racial groups, research suggests that Latino youth represent a growing population who may be particularly at risk. Census projections estimate that the proportion of youth under the age of 18 in the U.S. who are Latino is expected to grow from 24% in 2014 to 34% in 2060 (Colby and Ortman 2015) and estimates from the Youth Risk Behavior Survey suggest that about 17.2% of high school-aged Latino youth have experienced physical and/or sexual dating violence victimization in the past year (Vagi et al. 2015), a rate that is significantly higher than that reported by non-Latino White youth (14.5%; Vagi et al. 2015).

Although progress has been made in characterizing the etiology of dating violence, considerable knowledge gaps remain. In particular, one area that has received scant research attention among adolescents, and no attention in studies of Latino youth, is the examination of dating violence typologies. Typological theoretical perspectives on partner violence and other antisocial behaviors posit the existence of different types or patterns of violence that have distinct causes and consequences and may thus merit different prevention and treatment approaches (Holtzworth-Munroe and Stuart 1994; Johnson 1995; Johnson 2008; Langhinrichsen-Rohling 2010; Moffitt 2003). For example, Johnson (1995; 2008) proposed a typology of partner violence among adults distinguishing a pattern of violence termed *intimate terrorism*, which is characterized by the use of severe emotional and physical violence to dominate and control a romantic partner, from *situational violence*, which is less severe, reciprocal, occurs with less frequency, and is not embedded in a dynamic of coercive control. Holtzworth-Munroe and Stuart (1994) originally identified three male adult perpetrator sub-types: *generally violent-antisocial* perpetrators, who engage in high levels of violence toward partners and others resulting from high levels of impulsivity, attitudes that are hostile toward women and accepting of violence, and poor relationship skills; *borderline-dysphoric* perpetrators, who engage in moderate to severe partner violence motivated by anger and insecure attachment; and *family-only* perpetrators, who engage in low levels of partner violence due to the combination of stress with low level risk factors (Holtzworth-Munroe and Stuart 1994; Holtzworth-Munroe 2000).

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While these and other (for a review, see Johnson and Ferraro 2000) proposed typologies vary in many particulars, they all suggest there may be subgroup heterogeneity in the causes, manifestation, and consequences of partner violence that could limit the effectiveness of one-size-fits-all prevention programs. The notion of heterogeneity has been highly influential in the field of adult partner violence (Capaldi and Kim 2007): however, it is only recently that a small body of research has begun to examine whether distinct profiles of involvement in dating violence manifest during adolescence, a critical developmental period for primary prevention efforts when patterns of involvement in relationship violence may initiate, become established, and persist into adulthood (Bouchey and Furman 2006; Foshee and Reyes 2009). This new emerging body of research has used person-centered analytic approaches (e.g., Latent Class Analysis, Factor Mixture Models) to identify subgroups of individuals who are similar to each other within a group, but differ from members of other groups, in terms of their patterns of endorsement across an entire set of dating violence indicators (e.g., physical, psychological, and sexual violence). For example, two previous studies have used person-centered approaches to assess adolescent dating violence profiles using measures of both victimization experiences as well as perpetration behaviors (Haynie et al. 2013; Goncy et al. 2016). Using a nationally representative sample of tenth graders, Haynie and colleagues (2013) found three classes (or profiles) of dating violence: (a) uninvolved, (b) verbally (psychologically) aggressive victims, and (c) multiform (i.e., physically and psychologically) aggressive victims, where aggressive victims denotes involvement in both perpetration and victimization. Using a sample of urban early adolescents, Goncy and colleagues (2016) found five classes, three of which map on to those found by Haynie and colleagues (2013), and two of which were unique to their study: a multiform perpetrator-only class and a multiform victim-only class. Both studies found sex differences in the odds of class membership and found that groups differed on concurrent measures of mental health and problem behaviors.

Overall, findings from this emerging body of literature suggest the existence of distinct patterns of adolescent involvement that may reflect different etiological pathways and/or result in different health consequences. However, research using these approaches has only just begun to accumulate and methodological issues limit the extent to which we can interpret and generalize the findings of extant studies. For example, only the two studies described above examined patterns characterized by both victimization and perpetration involvement. Inclusion of both victimization and perpetration measures as potential indicators of violence subtypes is of key importance given evidence that youth involved in dating violence typically report both victimization and perpetration (Gray and Foshee 1997; Haynie et al. 2013; O’Leary et al. 2008) and that subtypes of partner violence may be distinguished based on both use and receipt of violence (e.g., unilateral vs. mutually violent subtypes; Johnson 1995; Messinger et al., 2014).

Another limitation of extant research is that both previous studies of adolescent victimization-perpetration subtypes assessed indicators of physical and psychological, but not sexual, dating violence. This is an important limitation given that sexual dating violence is correlated with other forms of dating violence and more consistently has been found to differ for boys and girls; specifically, numerous studies have found that, compared to girls, boys are more likely to perpetrate and less likely to experience sexual violence (for a review,

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see Chen et al. 2016). Thus, sexual dating violence may be a key indicator differentiating distinct dating violence patterns among boys and girls.

Relatedly, although some previous person-centered research has examined sex differences in the likelihood of dating violence class membership, most extant studies of latent classes of dating violence involvement have not formally examined whether the *nature* of these classes is the same or different for girls and boys (i.e., they did not establish measurement invariance). If boys and girls who share the same class (e.g., psychologically aggressive victims) have the same patterns of endorsement (item-response probabilities) across the dating violence indicators it suggests that common definitions (and interpretations) can be applied to the latent classes for boys and girls. However, if patterns of endorsement within a latent class differ by sex, it suggests that the nature of the dating violence classes differs for boys and girls. Methodologists have stated that examining measurement invariance by sex is a critical first step that should be undertaken prior to examining any sex differences in the prevalence of class membership (Collins and Lanza 2010). That is, it makes no sense to determine whether boys are more (or less) likely than girls to belong to a particular class if the nature of that class is not the same for boys and girls; in other words, as noted by Collins and Lanza (2010), where measurement invariance does not hold, comparisons of latent class prevalence rates "…take on more of an "apples-to-oranges flavor" (p. 126).

Finally, it is unclear whether the dating violence profiles that have been identified in previous research generalize to Latino youth. The small body of research that has examined dating violence among Latino youth, none of which has examined typologies of involvement, has almost exclusively focused on identifying predictors of physical victimization, limiting understanding of how different forms of victimization and perpetration may overlap. In fact, to our knowledge, only one previous study has examined dating violence perpetration behavior in this population (Gonzalez-Guarda et al. 2014). That study, which assessed a small sample (n=82) of Cuban-American youth, found that boys and girls reported similar rates of psychological (40% of boys; 46% of girls) and physical/sexual perpetration (assessed using a composite measure; 40% of boys; 42% of girls). However, that study did not formally assess sex differences (likely due to low power) or examine overlap across different types of perpetration and/or victimization experiences.

In sum, little is known about patterns of dating violence victimization and perpetration among Latino youth, with even less known about how these patterns relate to risk and protective factors and/or health consequences. This is an important gap in the literature to address. On the one hand, research with adult populations suggests that the causes, consequences, and manifestation of partner violence may be similar among Latinos as among non-Latinos (for a review see, Klevens 2007). On the other hand, research also suggests that there may be risk and protective factors for interpersonal violence that uniquely affect and/or are particularly salient for Latinos versus non-Latinos including: immigration and acculturation-related beliefs, stressors and experiences; family processes; and culturally prescribed relationship norms (Decker et al. 2007; East and Hokoda, 2015; Klevens, 2007; Ramos et al. 2011; Reyes et al. 2016; Sabina et al., 2015; Sanderson et al. 2004; Smokowski, David-Ferdon, et al. 2009; Ulloa et al. 2004). These unique risk and protective factors may

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contribute to shape patterns of dating violence among Latino youth that may be distinct from those characterizing non-Latino youth.

The Current Study

The primary aim of the current study was to identify prototypical patterns (also referred to as profiles or classes) of psychological, physical, and sexual dating violence victimization and perpetration among a sample of 210 Latino youth (ages 12 to 16 years). Based on the findings of the only two previous studies that examined latent classes of dating violence involvement using indicators of both victimization and perpetration (Haynie et al. 2013; Goncy et al., 2016), we anticipated identifying at least three patterns of dating violence involvement among boys and girls: uninvolved youth, psychologically aggressive victims, and multiform aggressive victims. Further, based on research suggesting that, compared to girls, boys are more likely to report sexual violence perpetration and less likely to report sexual violence victimization we expected that, among boys, multiform aggressive victims would be characterized by high probabilities of endorsing all dating violence indicators except sexual violence victimization whereas, for girls, this class would be characterized by high probabilities of endorsing all indicators except for sexual violence perpetration. The expectation that classes would be distinguished by the form of dating violence (i.e., psychological only vs. multiple forms of dating violence) is also supported by research that has identified dating violence profiles using measures of victimization only (Choi and Temple 2016) or perpetration only (Diaz-Aguado and Martinez 2015; Reidy et al. 2016). The current study expands on this body of literature by examining patterns of dating violence involvement in a sample of Latino youth, by determining whether the nature of these patterns varies by sex, and by including measures of psychological, physical, and sexual victimization and perpetration as indicators of latent class membership.

The second aim of the current study was to explore associations between cultural, family, and individual risk and protective factors and dating violence profile membership. Three cultural factors are examined that have been associated with increased risk for dating violence victimization in previous research with Latino youth (for a review see, Malhotra et al. 2015) and include parent and adolescent acculturation and acculturation conflict. Parent and adolescent acculturation encompass adaptations that Latino parents and youth make to the host culture that can involve the adoption (or rejection) of the cultural values and norms of the host society (often referred to as assimilation) as well as the retention (or loss) of culture-of-origin identity (Berry 1998). Acculturation conflict refers to family conflict that emerges when the children of immigrant parents adopt the cultural norms and values of mainstream society at faster rates than their parents (Marsiglia et al. 2009). Although limited, research with Latino youth suggests that acculturation indicators (e.g., being born in the US, speaking English at home, lower levels of Hispanicism) and acculturation conflict are associated with increased risk of experiencing and/or engaging in dating violence (Gonzalez-Guarda et al. 2014; Malhotra et al. 2015; Reyes et al. 2016; Smokowski, David-Ferdon, et al. 2009). Explanations for these linkages include the notions that: (1) assimilating youth may adopt behaviors (e.g., substance use) tolerated (or endorsed) by the host society that increase risk for dating violence; (2) retention of culture-of-origin identity by parents and teens may contribute to positive mental health outcomes (e.g., self-esteem,

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ethnic pride) and beliefs (e.g., belief in the importance of family; conservative attitudes toward dating and sex) that lower risk of involvement in dating violence; and (3) acculturation conflict may precipitate individual and family stress that leads adolescents to engage in risk behaviors that increase risk for dating violence (Malhotra et al. 2015; Smokowski, Rose, et al. 2009; Guilamo-Ramos et al. 2009)

Numerous scholars have noted the centrality of the family in Latino culture (e.g., Leidy et al. 2010), suggesting that family processes may be particularly salient influences on dating violence risk among Latino youth. Further, adult typological research suggests that aspects of the family environment distinguish subtypes of perpetrators involved in more severe patterns of violence from those involved in less severe patterns of violence (Holtzworth-Munroe and Stuart 1994; Holtzworth-Munroe 2000, Waltz et al. 2000; Saunders 1992). For example, the typology put forth by Holtzworth-Munroe and Stuart (1994) posits that generally violent antisocial partner violence perpetrators would report higher levels of exposure to parental violence than borderline-dysphoric and family-only perpetrators. Thus, three family factors (family conflict, family cohesion, and parental monitoring) were examined that each have been associated with dating violence among Latino youth (Kast et al. 2015; East and Hokoda 2015; Reyes, Foshee, Klevens et al. 2016).

Finally, we examine three individual factors (acceptance of dating violence, conflict resolution skills, and self-control) that have similarly been posited to distinguish involvement in more severe as compared to less severe patterns of dating violence involvement (Holtzworth-Munroe and Stuart 1994; Holtzworth-Munroe 2000). Notably, each of the family and individual variables examined in the current study has been associated with dating violence victimization and/or perpetration in empirical research (Chen et al. 2016; Reyes, Foshee, Klevens et al. 2016; Vagi et al. 2014) and thus are common targets for prevention programs (Reyes, Foshee, and Chen 2016). We expect that higher levels of each risk factor and lower levels of each protective factor will distinguish the expected multiform aggressive victims from the expected psychologically aggressive victim and uninvolved classes and distinguish the expected psychologically aggressive victim class from the uninvolved class.

The final aim of the study was to explore longitudinal associations between dating violence profiles, assessed at baseline, and emotional distress, assessed at six-month follow-up. These associations were examined based on research suggesting that individuals who experience and/or enact multiple types of violence may experience more severe mental health consequences than those who are involved in only one type of violence (Finkelhor 2007; Armour and Sleath 2014; Haynie et al. 2013; Sabina and Straus 2008). For example, Haynie et al. (2013) found that multiform aggressive victims reported higher levels of concurrent depressive symptoms and psychological complaints than did verbal aggressive victims. We expected that hypothesized multiform aggressive victims would report higher emotional distress at follow-up than psychologically aggressive victims and uninvolved youth.

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Methods

Participants

Analyses for this study used baseline and follow-up data from a randomized control trial of an adolescent dating violence prevention program for Latino caregivers and youth. Families were recruited in 2013 from five North Carolina counties using community-based strategies including; flyers, announcements on radio/TV programs, and newspaper ads; word-of-mouth; presentations at health fairs, schools and churches; and recruitment through community-based organizations and associated promotora (lay health advisor) networks. Eligible caregivers self-identified as a Latino parent of at least one adolescent between the ages of 12 and 16 years. Caregivers with more than one eligible adolescent were asked to select only one child to participate in data collection. At baseline the sample consisted of 210 caregivers each paired with one adolescent, for a total of 420 participants. Nearly all caregivers (hereto forth referred to as "parents") were the participating adolescent's mother (96%), six were the adolescent's father, and two were the adolescent's grandmother. Follow-up data were collected approximately six-months post-baseline from 82% (n=173) of adolescents who participated at baseline.

All but two parents (98%) and approximately half of adolescent participants (49%) were born outside of the United States (US). The majority of adolescent participants reported being of Mexican descent (75%), 9% were Central American, 6% were South American, 2% were Puerto Rican, and 8% reported being of mixed or other heritage. On average, adolescents who reported having been born outside of the US had lived in the US for 8.53 years with a range of 8 months to 16 years. Most adolescent participants reported speaking Spanish with their family most or all of the time (73%), 42% were boys, 6% were Black, and the mean age of adolescent participants was 13.87 years (range 12 to 16 years). Most parents were between the ages of 28 and 40 (58%), approximately half (48%) reported not having enough money to make ends meet at the end of the month, and one-third (33%) reported that their highest level of education was middle school or less.

Procedure

Data were collected through structured in-person interviews which lasted approximately 30 minutes and were conducted in participants' homes in either Spanish or English, depending on the participants' preference. In order to reduce social desirability bias in the dating violence questions, interviewers turned their backs while adolescents recorded their answers to those questions on a separate sheet of paper and then placed it in an envelope which they sealed. Caregivers and adolescents each received $15 in compensation for completing the interview. Prior to survey administration informed consent was obtained from the caregiver for the participation of both themselves and their adolescent; assent was also obtained directly from adolescent participants. All study procedures were approved by the University of North Carolina at Chapel Hill Institutional Review Board.

Measures

Descriptive statistics for the dating violence indicators used to define the latent class patterns and for variables examined in relation to class membership are presented in Table 1.

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Dating violence victimization and perpetration—Psychological, physical, and sexual dating violence victimization and perpetration were assessed using items from the Safe Dates victimization and perpetration in dating relationships scales (Foshee 1996). Adolescents were asked how many times a dating partner had ever perpetrated each of a series of psychological (6 items; e.g., "humiliated you in front of others"), physical (4 items; e.g., "slapped or scratched you"), and/or sexual (4 items; e.g., "put their hands on one of your private parts when you did not want them to") acts against them. Parallel questions asked about acts of violence that the respondent had perpetrated against a dating partner. Response options for each act ranged from never (0) to more than four times (3). Responses to items corresponding to each type of dating violence were summed and, due to limited variability in the sum scores, dichotomized to create binary physical, psychological, and sexual dating violence victimization and perpetration variables (six total indicators) that were coded as "0" if the participant had never been involved in that type of dating violence and "1" if they had been involved in that type of dating violence one or more times.

Parent and adolescent acculturation—Parent and adolescent Anglo-American acculturation were assessed using the ten item Psychological Acculturation Scale (Tropp et al. 1999). The Psychological Acculturation Scale was designed to assess variability in individual's sense of psychological attachment to, knowledge of, and belonging within Latino/Hispanic and Anglo/American cultures. Responses to each item (e.g., "with which group(s) of people do you feel you share most of your beliefs and values"; "which culture(s) do you feel proud to be a part of") were scored on a nine-point bipolar scale, ranging from 1 (only Hispanic/Latino) to 9 (only Anglo/American), with a bicultural orientation as the midpoint (5). Responses to the ten items were averaged to create a composite scale of parent (α=.89) and adolescent (α=.90) acculturation with higher scores representing a more Anglo/American orientation.

Acculturation conflict—Acculturation conflict was measured based on the adolescent's responses to a four item scale (Vega et al. 1998). Adolescents were asked how often they: (i) had problems with their family because they preferred American customs, (ii) felt they would rather be more American if they had the choice, (iii) had gotten upset with their parents because the parents don't know American ways, and (iv) felt uncomfortable because they had to choose between Latino and non-Latino ways of doing things. Responses were measured on a Likert scale ranging from never (1) to very often (4). Scores were averaged to create a composite measure (α=.74) with higher scores denoting more acculturation conflict.

Family conflict—Family conflict was assessed using adolescent responses to the four-item family conflict subscale of the Family, Friends, and Self Assessment Scales (Simpson and McBride 1992). Parents' responses to each item (e.g., "How often do members of your family say bad things to one another?") ranged from never (0) to very often (3); item scores were averaged to create a composite scale (α=.88).

Family cohesion—Family cohesion was assessed using adolescent responses to a three-item subscale from a measure developed by Olson (1986). Adolescents were asked how strongly they agreed or disagreed that "family members like to spend free time with each

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other," "family members feel very close to each other," and "family togetherness is very important." Response options ranged from strongly disagree (0) to strongly agree (3); item scores were averaged to create a composite measure (α=.90) with higher scores denoting more cohesion.

Parental monitoring—Parental monitoring was assessed using parent responses to seven items referencing the participating adolescent that assessed how strongly the parent agreed or disagreed that they: (i) have rules that the adolescent must follow, (ii) monitor what the adolescent watches on television, (iii) put restrictions on his/her access to music, video and computer games, (iv) ask the adolescent about his/her friends, (v), try to meet the parents of his/her friends, (vi) set a specific time for the adolescent to come home when he/she is out, and (vii) ask the adolescent where he/she is going when he/she goes out. Response options ranged from strongly disagree (0) to strongly agree (3); item scores were averaged to create a composite measure (α=.66); higher scores denoted greater parental monitoring.

Teen acceptance of dating violence—Acceptance of dating violence was assessed using a twelve-item scale on which participants reported the extent to which they agreed or disagreed (0=strongly disagree; 3=strongly agree) with statements such as "Its ok for a boy to hit his girlfriend if he caught her kissing someone else." Item scores were averaged to create a composite measure (α = 0.89).

Teen conflict resolution skills—Conflict resolution skills were assessed using a nine item scale on which participants reported how likely or unlikely (0=very unlikely; 3=very likely) they would be to use positive (e.g., "listening to the other person's point of view") and negative (reverse coded; e.g., "say mean things to the person") conflict resolution strategies when having a disagreement with someone. Item scores were averaged to create a composite measure (α = 0.70) such that higher scores indicated better conflict resolution skills.

Teen self-control—Self-control was assessed with a four-item impulsivity measure from the criminology literature (Grasmick et al. 1993; see also Finkel et al. 2009; Flora et al. 2003; Gottfredson and Hirschi 1990). Participants reported how strongly they agreed or disagreed (0=strongly disagree; 3=strongly agree) with statements such as "you often act on the spur of the moment without stopping to think." Item scores were averaged to create a composite measure (α = 0.67).

Teen emotional distress—Emotional distress was assessed at both baseline and follow-up using four items from the Kessler Psychological Distress Scale (Kessler et al. 2002). Participants reported how often in the past three months (0=never; 4=all of the time) they had felt depressed, hopeless, restless or fidgety, or that everything they did was an effort (Baseline α=.73).

Analytic Strategy

We conducted a series of latent class analyses in Mplus 7.4 (Muthén and Muthén 2015) to identify respondents with similar patterns of responses on the six behaviors (psychological,

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physical and sexual victimization and perpetration) (aim 1). The model produces two sets of parameter estimates: (a) the latent class membership probabilities, which reflect the prevalence of each class profile and (b) the item-response probabilities, which denote the probability of endorsing a particular item (e.g., physical violence victimization), given membership in a particular class. The item response probabilities express the correspondence between each observed dating violence indicator and each class with higher (or lower) probabilities indicating a defining characteristic of the dating violence profile.

As a first step, we identified the optimal number of classes for the full sample by comparing models with increasing number of classes across a number of different statistical fit indices including the: Akaike information criterion (AIC), adjusted sample-size BIC (aBIC), and Bootstrap Likelihood Ratio Test (BLRT). The best-fitting most parsimonious models are those that minimize the AIC and aBIC and for which adding an additional class results in a significant decrease in model fit as indicated by a p-value of less than .05 for the BLRT. We also evaluated classification quality, as indicated by entropy scores (values nearest to one indicate the best classification) and considered the substantive interpretation of the item response probabilities (Collins and Lanza 2010).

After determining the best-fitting model for the full sample, we examined measurement invariance by assessing whether there were sex differences in the item response probabilities (i.e., the measurement parameters) using a multiple group approach. Specifically, we used a likelihood ratio test to examine whether a model in which all parameters (class membership and item-response probabilities) were allowed to vary across groups (i.e., sex) significantly differed from a model in which the item-response probabilities were constrained across groups.

We used the approach developed in Vermunt (2010) to examine: (1) associations between each of the putative risk and protective factors and latent class membership (aim 2) and (2) associations between latent class membership and emotional distress at baseline and follow-up (aim 3). This approach allows for inclusion of covariates into the LCA model using an estimation process that accounts for measurement error due to uncertainty of class classification (i.e., the probability of membership in a particular class conditional on a particular response pattern; for more details see, Vermunt 2010 and Asporouhov and Muthen 2014). Associations between risk and protective factors and latent class membership were examined within a multinomial logistic regression model in addition to the original measurement latent class model. Associations between the latent class profiles and emotional distress at baseline and at follow-up (adjusting for baseline values) were examined within a linear regression model in addition to the latent class model. Treatment status was examined as an additional potential covariate in these models but had no effect on findings and so it was dropped from analyses. Finally, missing data on follow-up emotional distress (the only variable with any missing data) was accounted for using full information maximum likelihood which provides unbiased parameter estimates under the assumption that data are missing at random (Allison 2001).

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Results

Overall prevalence rates for the dating violence indicators ranged from 13% to 39% for victimization and from 3% to 32% for perpetration (see Table 1). Physical dating violence perpetration was significantly more prevalent for girls than boys; in contrast, boys were significantly more likely than girls to report physical victimization and sexual perpetration. No sex differences were found in rates of sexual dating violence victimization or in rates of psychological dating violence victimization or perpetration (see Table 1).

A series of latent class models was estimated for the full sample that ranged from one to six classes. All of the model fit indices suggested that the three-class model provided the best fit to the data (see Table 2). However, a likelihood ratio test of measurement invariance for this model indicated that one or more of the item response probabilities differed significantly by sex (G^2 =59.77, df=18, p<.001), suggesting that the nature of the latent classes differed for girls and boys. Following the recommendations of Collins and Lanza (2010) for dealing with measurement non-invariance across groups, we proceeded with all further analyses stratified by sex.

As shown in Table 2, repetition of the class enumeration process among the sex-stratified samples indicated that a three-class model provided the best fit for both girls and boys, despite differences in the item response probabilities. The parameter estimates for the three-class models are presented in Figure 1 which plots the probability of endorsing each dating violence item conditional on class membership for girls (Left Panel) and boys (Right Panel). Consistent with study expectations, among boys and girls, the majority of youth were classified as uninvolved (Class 1; 64% of girls, 56% of boys), based on low probabilities of endorsing any of the dating violence items (all probabilities were <.15). The second largest class was comprised of psychologically aggressive victims (Class 2: 24% of girls, 34% of boys), based on high (>.50) probabilities of endorsing psychological perpetration and victimization and lower (<.50) probabilities of endorsing other types of perpetration and victimization. Among girls, but not boys, this class also was characterized by a moderate probability of endorsing sexual dating violence victimization (.21 for girls; .05 for boys); in contrast, among boys, but not girls, this class was also characterized by a moderate probability of endorsing physical victimization (.34 for boys; .00 for girls). The third class was comprised of multiform aggressive victims (10% of boys, 11% of girls), based on high (>.50) probabilities of endorsing all types of dating violence perpetration and victimization with the exception of sexual perpetration for girls (.07) and physical perpetration for boys (.23).

Associations between Risk and Protective Factors and Class Membership

Table 3 presents the findings of the multinomial models examining associations between cultural, family, and individual risk and protective factors and each of the dating violence patterns with the uninvolved and psychologically aggressive victims classes specified as reference groups.

Distinguishing the psychologically aggressive victims from the uninvolved class—For both boys and girls, higher levels of acculturation conflict were associated with

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increased odds of membership in the psychologically aggressive victims class compared to the uninvolved class (marginal association for girls). Among girls, but not boys, higher levels of family conflict were significantly associated with increased odds and family cohesion with decreased odds of being in the psychologically aggressive victims compared to the uninvolved class.

Distinguishing the multiform aggressive victims from the uninvolved class— For both boys and girls, as expected, higher levels of parent Anglo-American acculturation (marginal association for boys) and family conflict were associated with increased odds, and higher levels of family cohesion with decreased odds of membership in the multiform as compared to the uninvolved class. Among girls, but not boys, higher levels of dating violence acceptance were associated with increased odds, and higher levels of conflict resolution skills and self-control with decreased odds of membership in the multiform versus the uninvolved class.

Distinguishing the multiform from the psychologically aggressive victims class—Only two factors-parent acculturation and teen conflict resolution skills-distinguished the multiform profile from the psychologically aggressive victims class. Higher levels of parent Anglo-American acculturation were associated with increased odds of being in the multiform relative to the psychologically aggressive victims class (marginal association for girls). Among girls, but not boys, higher levels of conflict resolution skills were associated with decreased odds of membership in the multiform class compared to the psychologically aggressive victims class.

Associations between Latent Class Membership and Emotional Distress

Table 4 presents mean differences in baseline and follow-up (adjusted for baseline) emotional distress across the three dating violence profiles that were identified. At baseline, mean levels of emotional distress were significantly higher among the multiform class versus the uninvolved class among girls, but not boys. No other baseline mean comparisons were statistically significant. At follow-up, mean levels of emotional distress were higher among the multiform class versus the uninvolved class among boys, but not girls. Thus, among boys, involvement in the multiform class as compared to the uninvolved class was longitudinally predictive of higher levels of emotional distress at follow-up. No other follow-up mean comparisons were significant.

Alternate Model Analysis

To maximize sample size, the primary analyses were conducted with the full sample of adolescents in the study, including those who had never dated (40%; coded a “0” on all dating violence indicators). We conducted sensitivity analysis to determine whether the latent class solution was the same when excluding those who had never dated and we found that results did not substantively differ. In the primary analyses, all dating violence indicators were coded as binary, a coding scheme that is consistent with previous studies that have used LCA to examine patterns of dating violence. Although the limited distribution of the physical and sexual indicators precluded any other type coding besides binary, the greater prevalence and frequency of psychological dating violence allowed for coding as an

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ordinal indicator. For our second sensitivity analyses we examined whether this alternative coding of psychological dating violence (victimization and perpetration) changed the latent class solution. Again, no substantive differences were found, suggesting that findings were robust to this coding decision.

Discussion

Typological theoretical perspectives on partner violence suggest that there may be heterogeneous patterns of involvement in dating violence during adolescence that have different causes and consequences and thus merit tailored lines of prevention programming. Although an emerging body of literature has begun to identify subgroups based on patterns of dating violence involvement, only two studies have examined involvement in both victimization and perpetration and no studies, to our knowledge, have examined patterns of dating violence involvement among Latino youth in the United States, a growing, yet understudied population at risk for dating violence. The primary aim of the current study was to build on previous research by identifying distinct patterns (classes) of psychological, physical, and sexual dating violence victimization and perpetration among Latino adolescent boys and girls. Secondary aims were to identify cultural, family, and individual risk and protective factors that distinguish class membership and to examine whether and how class membership is related to emotional distress.

Overall, findings provide evidence that there may be important heterogeneity in the forms of dating violence behavior that Latino boys and girls experience and engage in. In particular, consistent with study expectations, we identified three distinct patterns of dating violence involvement: uninvolved, psychologically aggressive victims, and multiform aggressive victims, where the latter two classes include youth who were both perpetrators and victims. These patterns applied for both boys and girls although they differed in the particulars of the underlying response probabilities (discussed further below). Notwithstanding these sex differences, overall the patterns identified are similar to those found by Haynie et al. (2013) using a national general population sample and suggest that Latino youth who are involved in dating violence, like the general population, tend to both experience victimization and engage in aggressive acts. Although we could not determine the extent to which youth in the current sample experienced victimization and engaged in perpetration within a particular dating relationship (reciprocal violence), previous research suggests that reciprocal violence is common in romantic relationships and is associated with increased risk for negative health consequences (Whitaker et al. 2007; Gray and Foshee 1997). Regardless of whether aggression is reciprocal, these findings suggest that dating abuse prevention efforts with Latino youth should acknowledge that perpetrators may be victims and vice-versa and address relationship dynamics that may contribute to escalation of conflict by both partners (Haynie et al. 2013).

The finding that the psychologically aggressive victims latent class (24% of girls; 34% of boy) was more prevalent than the multiform aggressive victims latent class (11% of girls; 10% of boys) is also consistent with previous research with general population samples that has found that, among youth who are involved in dating violence, the most typical pattern of behavior is characterized by involvement in psychological abuse only (Choi and Temple

2016; Diaz-Aguado and Martinez 2015; Goncy et al. 2016; Haynie et al. 2013; Reidy et al. 2016). Although we did not include a specific measure assessing acceptance of psychological dating violence in the current study, this pattern of findings may reflect more permissive attitudes toward the use of psychological abuse against dating partners than toward the use of physical and sexual abuse. That is, there may be a larger subgroup of youth whose normative beliefs are accepting of the use of psychological, but not physical or sexual abuse in dating relationships, and a smaller subgroup that are accepting of the use of all forms of dating violence.

While less prevalent than the psychologically abusive victims class, it is notable that the prevalence of the multiform class was higher in the current study than has been reported in previous research. For example, both previous studies of latent classes of involvement in dating violence victimization and perpetration reported 5% prevalence rates for the multiform latent class compared to the 10% and 11% prevalence rates found in the current study for boys and girls respectively (Goncy et al. 2016; Haynie et al. 2013). Taken together, these findings may suggest that Latino youth may be particularly at risk for being multiform aggressive victims; however, we caution that measurement (e.g., the forms of dating violence used as latent class indicators) and analytic (e.g., use of sex stratified analysis) differences could also account for differences in prevalence rates across studies.

Although approximately one in ten boys and girls in the current study were classified as multiform aggressive victims, the nature of the multiform aggressive victim class varied by sex. Boys in this class were highly likely to experience and engage in all forms of dating violence except physical perpetration, whereas girls in this class were highly likely to experience and engage in all forms of dating violence except sexual perpetration. Sex differences also emerged in the nature of the psychologically aggressive victims class. In addition to being highly likely to engage in and experience psychological dating violence, girls (but not boys) in this class reported moderate levels of sexual victimization whereas boys (but not girls) reported moderate levels of physical victimization. Previous research examining salient patterns of dating violence victimization and perpetration may have failed to identify these sex differences because they did not assess sexual dating violence in addition to physical and psychological dating violence and/or because they did not formally examine measurement invariance by sex. Future research is needed to replicate these findings among Latino youth as well as youth of other ethnic backgrounds. Such research could build on the current study to examine sex differences in the normative beliefs and motivating factors (e.g., emotion dysregulation; dominance and control) for different forms of dating violence that could drive gendered patterns of involvement.

A secondary aim of the current study was to examine relations between risk and protective factors drawn from cultural, family, and individual domains of influence and patterns of dating violence involvement. Factors from all three levels distinguished class membership although some sex differences in associations were detected and most significant associations were found when comparing the multiform aggressive victims to the uninvolved class. Overall, family factors, including both conflict and cohesion, were most consistently associated with class membership for boys and girls; individual factors were associated with class membership for girls only.

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With respect to the cultural factors, results suggest that acculturation conflict and parent, but not teen, Anglo-American acculturation distinguished class membership with the most consistent findings for parent acculturation. In particular, greater parent Anglo-American acculturation was associated with an increase in the odds of being in the multiform aggressive victim class relative to the psychologically aggressive victims among boys (marginal association for girls) and relative to the uninvolved class among girls (marginal association for boys). One potential explanation for these findings is that parents who are more oriented to Anglo-American culture might allow their adolescents to be more involved in social activities where they could interact with dating partners; in turn, exposure to social activities and dating situations might increase risk for experiencing and engaging in physical and sexual dating violence (Reyes et al. 2016). The finding that teen acculturation did not distinguish class membership was unexpected; however, Latino scholars have noted that the pathways linking adolescent acculturation processes to risk behavior are complex and include both protective and risk-inducing pathways that could cancel each other out, resulting in a non-significant main effect (Guilamo-Ramos et al. 2009). As expected, acculturation conflict was associated with increased risk for being in the psychologically aggressive victims class compared to the uninvolved class among boys (marginal association for girls) although, unexpectedly, this factor did not distinguish the multiform aggressive victims class from either of the other classes. Acculturation conflict and resultant stress may lead to internalizing and externalizing problems that put Latino youth at risk for experiencing and engaging in psychological dating violence (Huq et al. 2016; Marsiglia et al. 2009; Smokowski, David-Ferdon, et al. 2009). Taken together, these findings suggest that parent acculturation and acculturation conflict may be unique sources of risk for Latino youth that should be targeted by Latino dating abuse prevention programs, although more research is needed to understand the mechanisms relating these factors to risk for involvement in different patterns of dating violence.

With respect to family factors, conflict and cohesion, but not parental monitoring, distinguished class membership. In particular, among both boys and girls, greater family conflict and lower family cohesion were associated with an increase in the odds of being in the multiform class relative to the uninvolved class. Among girls, but not boys, these factors also increased the risk of being in the psychologically aggressive victims class relative to the uninvolved class. These findings are consistent with theoretical perspectives suggesting that family relational dysfunction increases risk for involvement in violence (e.g., Jouriles et al. 2012; Lavoie et al. 2002) and suggest that family-based interventions to reduce parent-child conflict and increase family cohesion may be effective in preventing dating violence among both boys and girls. Family-based approaches to dating violence prevention may be particularly appropriate for Latino youth given the importance of the family in Latino culture (Leidy et al. 2010). That parental monitoring was not significantly associated with patterns of dating violence is consistent with some previous research with Latino teens (Howard et al. 2005; Yann et al. 2009), and suggests that monitoring behaviors may be less important than the family relational climate (e.g., levels of cohesion, parent-child attachment) in terms of protecting youth from involvement in dating violence (Reyes et al. 2016). On the other hand, some research suggests that parental monitoring may play a buffering role such that protective effects are more salient among high risk Latino youth than among low risk Latino

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youth; thus, future research should examine the interplay between parental monitoring and other risk factors in relation to patterns of dating violence involvement (East and Hokoda, 2015).

Individual factors distinguished class membership only for girls. Self-control was associated with decreased, and acceptance of dating violence with increased odds of being in the multiform aggressive victims class relative to the uninvolved class. In addition, greater conflict resolution skills were associated with decreased odds of being in the multiform class relative to both the uninvolved and psychologically aggressive victim classes. Taken together, these findings suggest that self-control, conflict resolution skills, and norms proscribing the use of dating violence may be important inhibitory factors that protect against involvement in multiple forms of violence among Latina girls and should thus be targeted for change by dating violence prevention programs for this subgroup. Unexpectedly, among boys, none of the individual factors was associated with class membership. It is possible that we did not measure the types of variables that distinguish profiles of dating violence involvement for boys (e.g., hostile attitudes toward women). Alternatively, the lack of findings may be attributed to low power given the small sample size for boys.

The third aim of the current study was to examine whether and how involvement in different patterns of dating abuse are related to emotional distress. Findings suggest that, consistent with previous person-centered research, emotional distress was higher among multiform as compared to uninvolved youth (Haynie et al. 2013; Goncy et al. 2016); however, unexpectedly, this finding varied both by sex and by timing of assessment. Multiform girls reported higher levels of emotional distress than uninvolved girls at baseline, but not follow-up; differences in emotional distress between multiform and uninvolved boys were found at follow-up, but not baseline. It is unclear what accounts for this pattern of findings, although we speculate that it is possible that emotional distress was more stable for girls than for boys across follow-up; thus, among girls, class membership was unable to contribute to predicting emotional distress beyond what could be predicted by emotional distress at baseline (Weinstein 2007). Contrary to expectations based on previous research, psychologically aggressive victims did not differ significantly from uninvolved or multiform youth in terms of their levels of emotional distress at either time point and this finding was the same for both boys and girls. It may be that, among Latino early adolescents, psychologically aggressive victims are engaging in infrequent and relatively mildly abusive behavior that does not result in increased emotional distress. On the other hand, power and/or measurement limitations may have precluded our ability to detect the expected associations.

The current study has several limitations, in addition to those noted above, to consider in interpreting the results and future research. First, as noted above, our sample size in stratified analysis was small which may have affected our power to detect associations between covariates and class membership, particularly among boys. The small sample size and complexity of the models being estimated also limited our ability to assess potential variability in associations by other demographic variables including adolescent race and/or generational status. Previous research with Latino youth suggests that these variables (race and generational status) may moderate associations between dating violence and risk and protective factors as well as distal outcomes (Kast et al. 2015; Decker et al. 2007). As such,

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we call on future research to replicate, establish the generalizability of, and elaborate on our findings. Such research could build on the current study by examining covariates (e.g., hostility toward women, dominance/control motives, psychopathology) and health outcomes (e.g., trauma symptoms, fear, injury) that typological theories suggest may be differentially associated with profiles of dating violence involvement among boys and girls (Johnson 1995; Holtzworth-Munroe and Stuart, 1994; Malamuth 1996). Second, data were assessed by adolescent and parent self-report and thus subject to the potential for social desirability and single-reporter bias. Finally, analysis of associations between risk and protective factors and class membership was cross-sectional and thus we were unable to establish temporality of associations. Future research could examine the stability (or instability) of class membership over time and assess whether particular covariates predict transitions in class membership. For example, such research could identify covariates that predict an increased likelihood of transitioning into the multiform class at time 2 given membership in a lower risk class at time 1, which would have direct relevance for informing prevention efforts. In addition, future studies should examine whether the patterns identified in the current study, which assessed a sample of early adolescents, also characterize dating violence involvement among older Latino youth. Relationships between emerging adults clearly differ from those of early adolescents in terms of commitment, intimacy, and interdependence, among other factors (Arnett 2000; Meir and Allen 2009). These relationship factors as well as developmental differences in the capacity to sustain a relationship and negotiate conflict may lead to changes in the prevalence of particular violence profiles and/or to the emergence of new profiles.

Notwithstanding these limitations, this study had several strengths. First, the study focused on Latino youth, a relatively understudied population in the dating violence literature. Second, dating violence measures were assessed using multi-item scales and thus might more accurately describe the prevalence of different forms of victimization and perpetration than the single-item measures used in most previous research with Latino youth. Using measures of psychological, physical, and sexual forms of victimization and perpetration enabled a more comprehensive examination of patterns of dating violence involvement than has been undertaken in previous research. Third, this is the first study, to our knowledge, to formally examine measurement invariance in latent classes of dating violence involvement by sex using a multiple group approach. Fourth, we examined associations between class membership and risk and protective factors drawn from multiple domains, including cultural and family factors, which have been understudied relative to individual factors in research examining the etiology of dating violence among Latino youth. Finally, we were able to establish temporality of associations and adjust for confounding in our analysis of the longitudinal effects of dating violence class membership on emotional distress.

Conclusion

The present study is the first to identify and characterize distinct patterns of involvement in dating violence victimization and perpetration among Latino youth. The patterns identified were consistent with previous research with general population samples, providing more evidence that youth who are involved in dating violence tend to both engage in perpetration and experience victimization with most involved only in psychological violence and a

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smaller subgroup involved in multiple forms of abuse. Findings suggests that potential targets for such prevention efforts include cultural (parent acculturation), family (conflict and cohesion), and individual (self-control, conflict resolution skills, normative beliefs) level factors that increase risk for involvement in multiform dating violence. Also consistent with previous general population research, emotional distress was greatest for Latino youth involved in multiple forms of dating violence, suggesting that this pattern of involvement has particularly negative impacts on mental health and thus deterrence from this pattern of involvement should be a focus of prevention efforts. Notably, sex differences emerged in the nature of the patterns of dating violence involvement and in concurrent and longitudinal associations between these patterns and other factors. Although more research is needed, these findings suggest that prevention programs may be more effective if they are tailored to target sex-specific risk factors for particular patterns of dating violence. Future research should build on the current study to replicate findings, examine transitions in class membership over time, and further explain whether and how the causes, manifestations, and consequences of dating violence vary for boys and girls.

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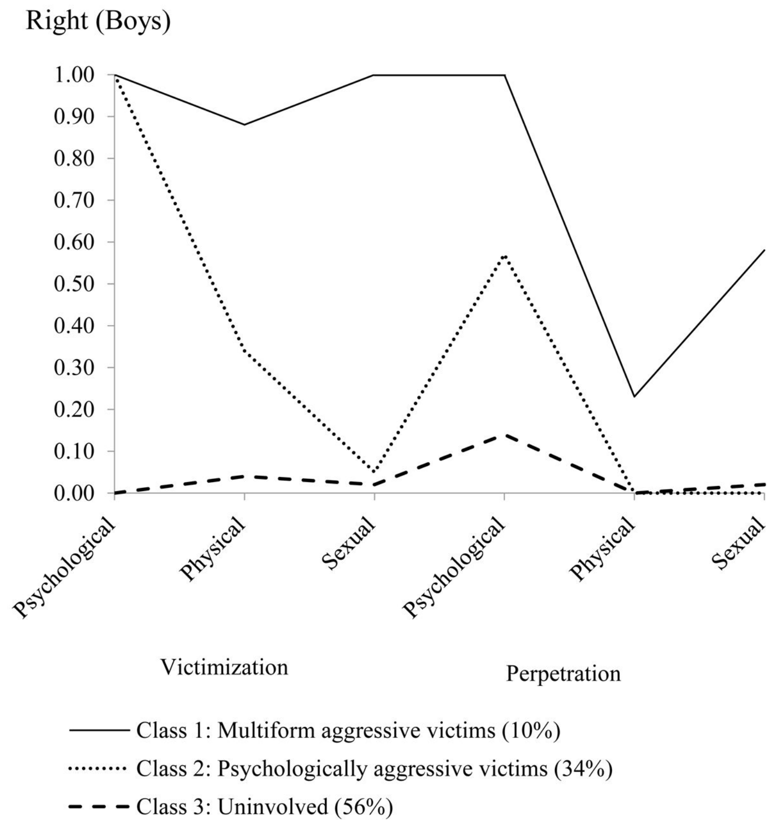

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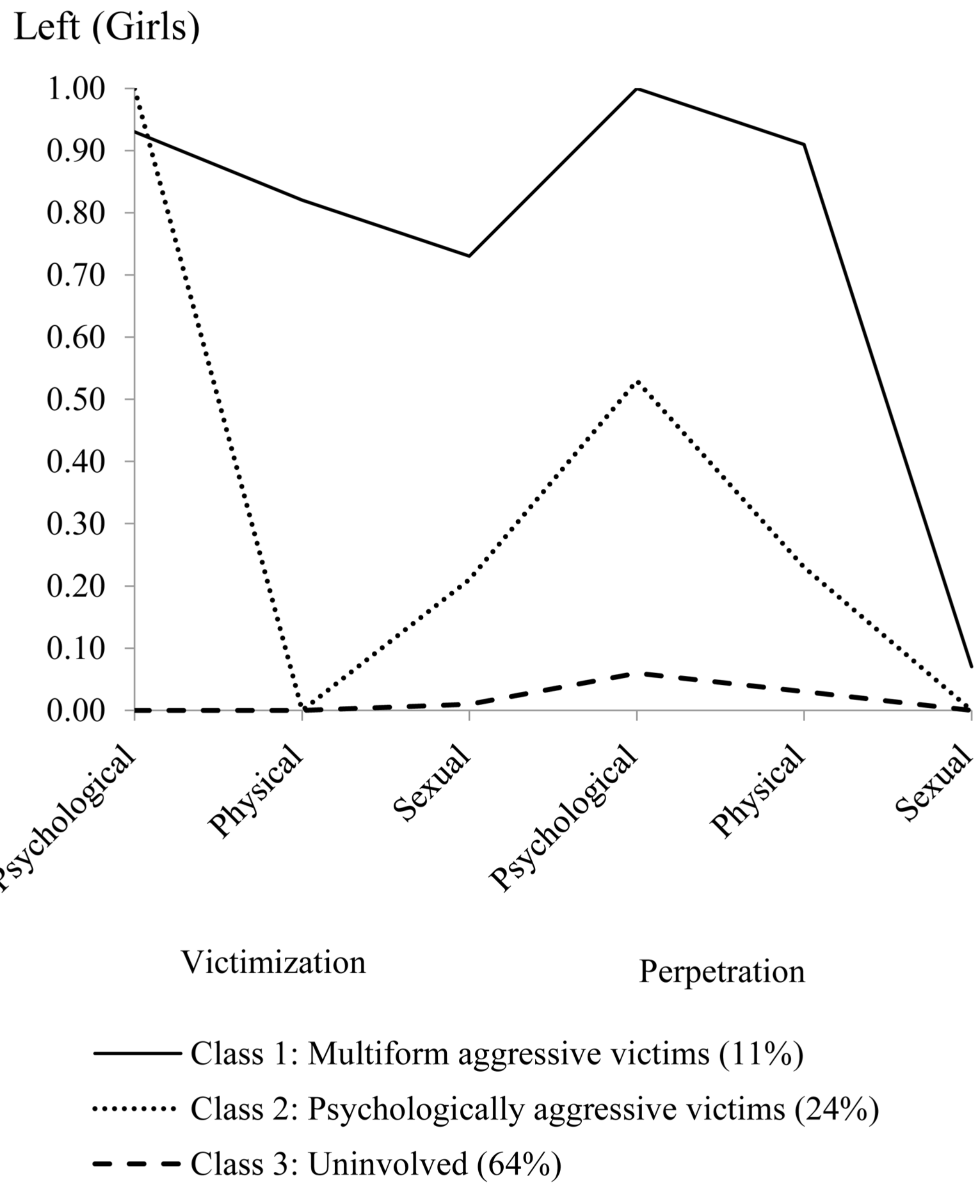

Figure 1.
Latent class prevalences and item-response probabilities for three-class models for girls (Left) and boys (Right).

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Table 1

Prevalence of Psychological, Physical, and Sexual Dating Violence Victimization and Perpetration and Covariate Means and Standard Deviations among Latina/o Girls and Boys

	Total (n=210)	Sex		χ^2
		Girls (n=121)	Boys (n=89)	
Dating Violence Victimization				
Psychological	39	35	44	1.79
Physical	15	9	22	7.29 **
Sexual	13	14	12	0.13
Dating Violence Perpetration				
Psychological	32	28	37	1.90
Physical	11	17	2	12.00 ***
Sexual	3	1	7	5.57 *
	M (SD)	*M (SD)*	*M (SD)*	*t*
Cultural Factors				
Parent acculturation	2.31 (1.34)	2.51 (1.42)	2.04 (1.17)	2.54 **
Teen acculturation	3.79 (1.52)	3.72 (1.62)	3.89 (1.37)	−0.79
Acculturation conflict	1.83 (0.63)	1.89 (0.66)	1.73 (0.57)	1.87
Family Factors				
Family conflict	1.41 (0.73)	1.46 (0.75)	1.34 (0.70)	1.20
Family cohesion	2.37 (0.54)	2.29 (0.6)	2.47 (0.43)	−2.54 *
Parental monitoring	2.61 (0.37)	2.59 (0.35)	2.64 (0.39)	−0.93
Individual Factors				
Teen acceptance of dating violence	0.81 (0.56)	0.71 (0.56)	0.94 (0.54)	−3.04 **
Teen conflict resolution skills	2.23 (0.87)	2.25 (1.07)	2.20 (0.48)	0.51
Teen self-control	1.71 (0.63)	1.78 (0.64)	1.61 (0.59)	1.99 *
Emotional Distress				
Baseline emotional distress	1.35 (0.80)	1.40 (0.81)	1.29 (0.77)	0.93
Follow-up emotional distress	1.25 (0.79)	1.37 (0.81)	1.10 (0.74)	2.30 *

Note.

* p<.05,

** p<.01,

*** p<.001

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Table 2

Model Fit Statistics for Latent Class Models Specifying One to Four Classes

N of classes	*N* of free parameters	Loglikelihood	AIC	ssBIC	BLRT (p-value)	Entropy
Full sample (N = 210)						
1	6	−545.13	1102.25	1103.32	*NA*	*NA*
2	13	−437.47	900.93	903.25	<.001	0.86
3	20	−420.25	880.51	884.08	<.001	0.89
4	27	−417.00	888.00	892.82	.50	0.92
5	34	−413.86	895.72	901.79	.25	0.93
6	41	−411.36	904.71	912.03	.18	0.97
Girls (N = 121)						
1	6	−297.58	607.16	604.96	*NA*	*NA*
2	13	−225.60	477.19	472.43	<.001	0.88
3	20	−212.39	464.78	457.46	<.001	0.98
4	27	−209.61	473.22	463.34	.26	1.00
5	34	−207.83	483.67	471.23	.32	1.00
6	41	−207.41	496.82	481.82	.54	1.00
Boys (N = 89)						
1	6	−231.95	475.89	471.89	*NA*	*NA*
2	13	−191.04	408.08	399.41	<.001	0.91
3	20	−178.29	396.58	383.24	<.001	0.99
4	27	−173.92	401.84	383.83	.06	0.99
5	34	−171.95	411.90	389.22	.17	0.97
6	41	−170.93	423.87	396.51	.15	0.99

Note. AIC=Akaike's information criteria; ssBIC=Sample-size adjusted BIC; BLRT=boot-strapped likelihood ratio test.

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Table 3

Associations between Cultural, Family, and Individual Risk and Protective Factors and Latent Class Membership

Class	Effect	Males OR (95% CI)	Females OR (95% CI)
	Uninvolved as Comparison Class		
Psychological	Parent acculturation	0.77 (0.48, 1.26)	1.35 (0.86, 2.10)
	Teen acculturation	1.01 (0.63, 1.61)	0.69 (0.42, 1.14)
	Acculturation conflict	1.71 (1.08, 2.72)*	1.45 (0.97. 2.15)^
	Family conflict	1.20 (0.75, 1.90)	1.84 (1.16, 2.92)**
	Family cohesion	0.69 (0.41, 1.15)	0.64 (0.41, 0.99)*
	Parental monitoring	1.24 (0.77, 1.99)	1.37 (0.91, 2.06)
	Teen acceptance of dating violence	1.08 (0.69, 1.68)	1.10 (0.72, 1.68)
	Teen conflict resolution skills	1.09 (0.68, 1.75)	1.31 (0.95, 1.82)
	Teen self-control	1.11 (0.70, 1.77)	0.88 (0.56, 1.38)
Multiform	Parent acculturation	1.75 (0.90, 3.40)^	2.29 (1.38, 3.82)**
	Teen acculturation	1.87 (0.87, 4.01)	1.34 (0.67, 2.70)
	Acculturation conflict	1.19 (0.47, 3.03)	1.46 (0.81, 2.63)
	Family conflict	1.98 (1.05, 3.69)*	2.79 (1.25, 6.24)*
	Family cohesion	0.44 (0.21, 0.94)*	0.50 (0.30, 0.83)**
	Parental monitoring	1.37 (0.91, 2.07)	1.17 (0.66, 2.08)
	Teen acceptance of dating violence	1.19 (0.56, 2.54)	1.77 (1.01, 3.10)*
	Teen conflict resolution skills	0.90 (0.53, 1.54)	0.24 (0.08, 0.69)**
	Teen self-control	0.94 (0.44, 2.02)	0.42 (0.20, 0.88)*
	Psychological Violence as Comparison Class		
Multiform	Parent acculturation	2.27 (1.10, 4.67)*	1.70 (0.93, 3.12)^
	Teen acculturation	1.85 (0.81, 4.21)	1.93 (0.82, 4.53)
	Acculturation conflict	0.69 (0.27, 1.81)	1.01 (0.54, 1.89)
	Family conflict	1.65 (0.87, 3.12)	1.51 (0.68, 3.33)
	Family cohesion	0.64 (0.33, 1.24)	0.79 (0.45, 1.38)
	Parental monitoring	1.11 (0.69, 1.78)	0.86 (0.48, 1.56)
	Teen acceptance of dating violence	1.11 (0.51, 2.41)	1.61 (0.91, 2.84)
	Teen conflict resolution skills	0.83 (0.46, 1.49)	0.18 (0.06, 0.57)**
	Teen self-control	0.84 (0.37, 1.92)	0.48 (0.21, 1.09)^

Note. OR=odds ratio; CI=confidence interval.

^ p<.10,

* p<.05,

** $p<.01$,

*** $p<.001$.

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Table 4

Mean Emotional Distress at Baseline and Follow-up by Latent Class Membership.

	Latent Class		
	Multiform	**Psychological**	**Uninvolved**
Boys			
Baseline	1.59	1.34	1.22
Follow-up (adjusted)	**0.91**	0.44	**0.31**
Girls			
Baseline	**1.96**	1.39	**1.30**
Follow-up (adjusted)	0.79	0.63	0.68

Note. Analyses conducted separately for boys (n=89) and girls (n=121) with emotional distress analyzed as a dependent variable. Follow-up models were adjusted for baseline. Within each row, bolded means are significantly different at p<.05.