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## Trajectories of dating violence: Differences by sexual minority status and gender

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### Abstract

The purpose of this study was to examine how sexual minority status (as assessed using both identity and behavior) was associated with trajectories of dating violence. University students from a large Southwestern university completed questions on their sexual minority identity, the gender of their sexual partners, and about experiences of dating violence for six consecutive semesters ( $N = 1942$ ). Latent growth curve modeling indicated that generally, trajectories of dating violence were stable across study participation. Sexual minority identity was associated with higher initial levels of dating violence at baseline, but also with greater decreases in dating violence across time. These differences were mediated by number of sexual partners. Having same and other-sex sexual partners was associated with higher levels of dating violence at baseline, and persisted in being associated with higher levels over time. No significant gender difference was observed regarding trajectories of dating violence.

### Keywords

Dating violence; Sexual minority; Trajectories; Gender differences

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Dating violence, or violence occurring within intimate relationships, is reported by 9–23% of adolescents and young adults (Halpern, Oslak, Young, Martin, & Kupper, 2001; Hickman, Jaycox, & Aronoff, 2004), and has serious health and mental health consequences (Coker et al., 2002; Muñoz-Rivas, Graña, O'Leary, & González, 2007). Emerging adulthood, or the period between ages 18–25 that typically encapsulates many youth's undergraduate experience (Arnett, 2000), may be a particularly important period for understanding the development of dating violence, as romantic relationships during this period are characterized by both their brevity and instability (Corbin & Fromme, 2002). Understanding variation in vulnerability to dating violence is particularly important. Existing cross-sectional work suggests that sexual minority individuals (e.g., individuals with gay, lesbian or bisexual identities or individuals who report same-sex sexual or romantic partners) are more likely to report dating violence than heterosexuals during late adolescence and early

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adulthood (Dank, Lachman, Zweig, & Yahner, 2013; Edwards et al., 2015; Martin-Storey, 2015; Porter & Williams, 2011). These cross-sectional findings are limited however, as they cannot assess if and how these associations change across time. Employing a life course framework to understand the association between sexual minority status and dating violence permits us to explore this link within a larger developmental framework.

### Trajectories of dating violence

Life course theory proposes that transitional periods are important for understanding developmental outcomes (Elder, 1998). Exploring change in outcomes such as dating violence longitudinally, and assessing if these trajectories vary by individual-level characteristics, can serve to identify the contextual factors that are associated with change over time, and to identify periods in which an individual may be particularly vulnerable. The transition to university may be a particularly important developmental period for understanding change in dating violence. Indeed, 66% of youth who graduate high school are enrolled in college or university the following year, suggesting that these youth are a significant portion of American emerging adults (Bureau of Labor Statistics, 2014). College offers individuals greater freedom in pursuing romantic relationships, and less monitoring regarding how these relationships are conducted. These changes may in turn explain why young adults report more intimate partner violence than adolescents (Halpern, Spriggs, Martin, & Kupper, 2009). Vulnerability to dating violence varies across emerging adulthood, however, as dating violence declines over time among college students (Smith, White, & Holland, 2003). These findings suggest that age is important for understanding overall rates of dating violence.

### Dating violence and sexual minority youth

The transition to adulthood may be particularly important for sexual minority youth, as moving from more restrictive high school and home environments to a larger university context results in greater anonymity and choice in social networks (Crosnoe, 2011). Although sexual minority adolescents and young adults report higher levels of dating violence compared with heterosexuals (Edwards et al., 2015; Porter & Williams, 2011), how this transition is associated with dating violence over time is currently unknown. Health disparities between sexual minorities and heterosexuals are often explained via minority stress theory (Meyer, 2003), suggesting that the negative psychosocial outcomes observed among sexual minority populations reflect the consequences of stigma via increased harassment, fear of harassment and internalized stress. This model can be applied to explain why sexual minority youth may be more likely to perpetrate and be victimized by dating violence, as they experience more stress that would exacerbate existing relationship conflict and reduce effective conflict resolution strategies. Previous research has linked internalized homophobia (Balsam & Szymanski, 2005), as well as other forms of discrimination, to higher rates of dating and intimate partner violence (Sanderson, Coker, Roberts, Tortolero, & Reininger, 2004; Stueve & O'Donnell, 2008). This general vulnerability may be exacerbated by the fact that sexual minority youth are more limited in partner choice, and may feel greater pressure to stay in high conflict relationships.

Previous research highlights the importance of contextual factors for identifying who is at risk for dating violence (Riggs & O'Leary, 1989). Whereas minority stressors may increase levels of conflict within relationships generally, they may also lead to behaviors that increase contextual risk for dating violence. For instance, experiences of harassment or victimization increase the likelihood of alcohol use and reporting multiple sexual partners among sexual minority populations (Bontempo & d'Augelli, 2002; Lehavot & Simoni, 2011; Ross et al., 2013). Heavy alcohol use (Luthra & Gidycz, 2006; Miller, Naimi, Brewer, & Jones, 2007) and more sexual partners (Alleyne, Coleman-Cowger, Crown, Gibbons, & Vines, 2011; Halpern et al., 2009) are both also associated with higher levels of dating violence. Sexual minority individuals may be more likely to experience dating violence because they may be prone to engage in some of the risky behaviors that increase the likelihood of dating violence.

Background factors are also important for increasing risk in dating violence (Riggs & O'Leary, 1989). One of these pre-disposing factors is childhood sexual abuse (Riggs & O'Leary, 1989; Smith et al., 2003). Individuals who are victimized in one context are more likely to experience other kinds of victimization across the life course (Ozer, Tschann, Pasch, & Flores, 2004). Sexual minority youth may be more vulnerable to dating violence because they are also vulnerable to multiple types of violence (Katz-Wise & Hyde, 2012), including childhood sexual abuse (Balsam, Rothblum, & Beauchaine, 2005; Koeppl & Bouffard, 2014). Increased risk for dating violence among sexual minority youth may reflect previous histories of victimization.

The association between sexual minority status and dating violence may also vary across gender. Some research indicates that sexual minority women are more vulnerable to dating violence than sexual minority men (Edwards et al., 2015; Halpern, Young, Waller, Martin, & Kupper, 2004). This may reflect differences in the development of romantic relationships among sexual minority youth by gender (Savin-Williams & Diamond, 2003). In particular, girls are more likely than boys to have their first same-sex sexual experiences within the contexts of romantic relationships, suggesting different contexts in which relationship conflict can occur.

Sex of sexual partner may also be linked to variation in dating violence. Previous cross-sectional work suggests increased vulnerability for dating violence among youth who report both same and other sex partners when compared with youth reporting exclusive same-sex partners (Martin-Storey, 2015). This vulnerability may reflect that these youth have more sexual partners generally, the rejection they face from both heterosexual and sexual minority communities, and the lower levels of protective factors they report (Eisenberg, 2001; Saewyc et al., 2009).

The assessment of sexual minority status may be important for understanding dating violence outcomes more generally. Previous research has generally linked self-identification (e.g., whether individuals identify as sexual minorities) to more negative psychosocial outcomes compared with sex of sexual partners (e.g., whether individuals report any same-sex sexual behavior) (Bostwick, Boyd, Hughes, & McCabe, 2010; Zhao, Montoro, Igartua, & Thombs, 2010). Given the often-discordant association between sexual minority

identification and sex of sexual partners during late adolescence and early adulthood (Igartua, Thombs, Burgos, & Montoro, 2009; Matthews, Blosnich, Farmer, & Adams, 2014), it seems essential to explore how both identity and sex of sexual partners are associated with dating violence.

## The current study

Sexual minority youth and young adults may be at greater risk for dating violence when compared with their heterosexual peers, although this association varies by gender and how sexual minority status is assessed. The literature establishing this vulnerability has been limited to cross-sectional samples, and fails to identify how contextual and sociodemographic factors may explain these associations. The goals of this study are threefold. Because the transition from adolescence to adulthood presents challenges as youth learn to navigate new environments, the first goal was to examine trajectories of dating violence as youth begin college. Following from a life course framework, dating violence was anticipated to decline across emerging adulthood, as reflected by changes across the college years. The second goal was to assess whether sexual minority status, as assessed via both identity (e.g. identifying as gay, lesbian, bisexual or questioning) or behavior (e.g., reporting same-sex sexual partners or both same and other sex sexual partners) was associated with those trajectories. Following from previous research, sexual minority individuals were anticipated to show higher levels of dating violence. The third goal was to assess whether the association between sexual minority status and trajectories of dating violence could be explained by demographic and psychosocial factors (i.e., alcohol use, number of sexual partners and experiences of victimization) that have been associated with both dating violence and sexual minority status. These factors were anticipated to account for differences in dating violence across sexual minority status. Given the existing research, analyses were conducted to test for differences between men and women in terms of how sexual minority status was associated with dating violence.

## Method

The data are drawn from a longitudinal study of youth recruited in the last semester of high school after acceptance to a large, Southwestern university. Prior to recruitment, the study was approved by the Institutional Review Board at the University of Texas at Austin. Participants were recruited in the summer of 2004 ( $N = 6391$ ) at either summer orientation (89%) or by mail (11%). Of participants invited, 4832 expressed interest in the study and met the additional requirement of being unmarried. These participants were randomly assigned to one of three different groups: a baseline and year 4 assessment ( $n = 976$ ), a year 4 only assessment ( $n = 810$ ), or a longitudinal assessment ( $n = 3046$ ). Of the longitudinal sample, 2245 provided informed consent and participated in the first wave of data collection. During their first semester of college (age  $M = 18.18$ ,  $SD = .35$ , range = 17.50–20.37), and then during the five subsequent semesters, three weeks prior to the end of the semester, participants completed a secure online questionnaire, and were remunerated for their participation.

As is generally the case with longitudinal samples, some data were missing. All individuals who had not reported on dating violence at three or more time points were dropped from the analytic sample ( $n = 294$ ). In addition, as race/ethnicity was an important control variable, individuals who reported Alaskan Native or American Indian identities ( $n = 7$ ) or Hawaiian/Pacific Islander identities ( $n = 2$ ) were dropped from the sample due to insufficient cell coverage. From the participants recruited, the analytic sample retained consisted of 1942 individuals. Those participants retained were not significantly more likely to report sexual minority identities, or same-sex sexual partners. Men, however, were more likely to have been excluded from the analytic sample than women ( $\chi^2(1, N = 2247) = 32.01, p < .01$ ). Individuals in the analytic sample did not differ on parental education, age, partnership status, income or race/ethnicity compared to those who were excluded. Individuals who left the sample were significantly more likely to report dating violence at the second wave of data collection, but not at any other time point ( $F(1, 1979) = 4.16, p < .01$ ). Those who were retained did not differ in terms of number of sexual partners, alcohol consumption or childhood sexual abuse compared to those who did not. Similar analyses tested whether the sexual minority participants who were retained in the analytic sample differed from sexual minority participants who were not. A total of 10 individuals from the original sample with sexual minority identities, and a total of 11 people with a history of same-sex behavior were excluded from the analytic sample. These participants did not differ from sexual minority youth who were retained in terms of dating violence, demographic characteristics or psychosocial variables.

## Measures

**Outcome measure**—Intimate partner violence was assessed with the Physical Assault subscale of the Revised Conflict Tactics Scale (CTS-2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996), which shows good reliability ( $\alpha = .86$ ) and has been previously used to assess dating violence longitudinally among college samples (Stappenbeck & Fromme, 2010). The first question asked participants how many times in the past three months they or their boyfriend/girlfriend/spouse had (1) thrown something at each other that could hurt, (b) twisted a partner's arm or hair (c) pushed or shoved partner, (d) grabbed partner, or (e) slapped partner. Respondents were asked the number of times these incidents had happened, with the options of 0, 1, 2, 3–5, 6–10, 11–20 and more than 20 times. Using the same response options, participants were then asked the number of times in the past three months they or their boyfriend/girlfriend/spouse had (a) slammed partner against a wall (b) choked partner (c) kicked partner (d) punched or hit partner with something that could hurt (e) beat up partner (f) burned or scalded partner on purpose or (g) used a knife or gun against the partner. The responses to the two questions were summed, with higher scores indicating higher rates of dating violence. The question specified that these incidents occurred with a partner, but did not clarify whether this term extended to casual dating partners. Rates of dating violence did not differ across partner status, suggesting that participants understood that the question could be applied to non-exclusive or informal partners.

**Sexual identity**—In the first wave of data collection, participants were asked about their sexual identity. Their choices were (a) hetero-sexual/straight; (b) bisexual; (c) gay; (d) lesbian or (e) questioning. Of the male participants in the sample, 696 (94.8%) reported

heterosexual or straight identities, 9 (1.2%) reported bisexual identities, 20 (2.7%) reported gay identities and 9 (1.2%) reported questioning identities. Of the female participants, 1183 reported heterosexual or straight identities (97.8%), 17 (1.4%) reported bisexual identities, two reported lesbian identities (.02%) and six (.05%) reported questioning identities. Due to the distribution of sexual minority participants across all sexual minority identities, youth were classified as either having a sexual minority identity or not for the analyses, in line with previous work examining sexual minority status within a larger non-sexual minority sample (Igartua et al., 2009).

**Same sex sexual behavior**—Participants were asked if their lifetime sexual partners were men or women. Among men, 379 reported having no sexual partners, 18 reported only having men as partners, 20 reported having both men and women as partners and 318 reported having only having women as partners. For women, 498 reported having no sexual partners, 1 reported only women as sexual partners, 22 reported having both men and women as sexual partners, and 686 reported having only men as sexual partners. Participants were coded as having (1) only same-sex partners, (2) only other sex partners, (3) same and other sex partners, or (4) no sexual partners. Those reporting no sexual partners were included separately, as comparing youth with any same-sex sexual partners to a group of youth with other-sex or no sexual partners inflates the appearance of risk behaviors among sexual minority youth. Reporting only other-sex sexual partners was used as the referent category for the multivariate analyses.

**Control variables**—*Race/ethnicity* was assessed as White, American Indian/Native Alaskan, Asian, Black or African American, Hispanic or Latino, or Native Hawaiian or Pacific Islander. These categories were subsequently dummy-coded, and White race/ethnicity was used as the referent category. Percentages are presented by gender in Table 1, and are reflective of the university population from which participants were drawn. *Family socioeconomic status* was controlled using a factor created from dummy codes of maternal education (bachelor's degree or not), paternal education (bachelor's degree or not) and family income (over \$100,000 a year or not). These referent categories were chosen because they capture the largest percent of the sample. Partner status was assessed by asking participants their relationship status. They could choose (1) not dating (b) dating but not exclusively, or (c) dating exclusively. For the purpose of the present analyses, individuals were classified as having a partner or not. Alcohol use was assessed by asking participants the total number of times within the past three months they had been drunk (not just a little high). This item has been used in previous research with college samples (Fromme, Corbin, & Kruse, 2008; Wechsler & Isaac, 1992). *Number of sexual partners* was assessed by asking the number of sexual partners the participant reported in the past three months. This item was used as a continuous variable in the current analyses. Finally, *childhood sexual abuse* was assessed by asking participants how many times they had experienced unwanted sexual contact by a parent, guardian, or relative. Their choices were no times, 1 time, 2 times, 3–5 times, 6–10 times, 11–20 times, or more than 21 times. This question was included as a continuous variable in the analyses, with higher values indicating more incidents of abuse.



## Planned analyses

Initial differences in study variables were tested according to gender employing either  $\chi^2$  tests or ANOVAs, depending on whether the outcome variable was continuous or categorical (presented in Table 1). Subsequently, the factor for family of origin SES included in model 3 was tested. Following these preliminary analyses, latent growth curves were modeled using Mplus 7.11 (Muthén & Muthén, 1998–2013). Latent growth curve modeling (LGM) is an ideal statistical tool for assessing variation in a behavior such as dating violence over time, as it indicates (1) the initial levels of the variable (i.e., the intercept), and (2) the change in this variable over time. As the majority of the participants were anticipated to have not experienced dating violence in the preceding three months, zero-inflated Poisson models were employed to address zero inflation within the data (Atkins & Gallop, 2007; Liu, 2007). The MLR estimator was employed because the data were non-normal.

The first model explored the initial shape of dating violence by testing linear and non-linear models. The best fitting model was determined by exploring model fit, as well as the significance of the mean and variance. The second set of models examined how sexual minority identity and same-sex sexual behavior, respectively, were associated with trajectories of dating violence. Interactions were subsequently tested to assess if the associations between sexual minority status and trajectories of dating violence varied by gender. The third set of models regressed control and psychosocial variables onto the intercept and slope, along with gender and sexual minority status. Indirect effects via the control and psychosocial variables were explored to identify mechanisms explaining the link between sexual minority status and dating violence.

Within the analytic sample, some missing data occurred. Although 6.4% of the data within the analytic sample was missing, listwise deletion would have resulted in a loss of 50% of the sample. Similar analyses were conducted exploring patterns of missing data among individuals with sexual minority identities (52% of the participants would be lost through listwise deletion, with 6.8% missing data overall) and among individuals with same-sex sexual behaviors (66% of the participants would be lost through listwise deletion, with 7.8% missing data overall). Consequently, missing data was addressed using Full Information Maximum Likelihood, which uses correlations within the data to estimate associations for missing cases.

## Results

Prior to testing the longitudinal models, the factor structure of family SES, which consisted of mother having a bachelor's degree or not, father having a bachelor's degree or not, and family income (above 100,000 a year or not) was tested. The factor structure was acceptable with factor loadings ranging from .43 ( $p < .01$ ) to .76 ( $p < .01$ ). Table 2 shows the overlap between sexual minority identity and same sex-sexual behavior. As would be anticipated, overlap occurred between sexual minority identity and sex of sexual partners.

Models were fit to compare linear and non-linear models. A quadratic model was ultimately chosen for two reasons. First, the quadratic model showed significant improvement over the linear model in terms of the AIC (6905.33), BIC (6955.48) and adjusted BIC (6926.88) (the

fit indices available with count data). In addition, the mean and variance of the intercept (mean coefficient = 6.72,  $p < .01$ , variance coefficient = 13.19,  $p < .01$ ), slope (mean coefficient = 1.93,  $p < .02$ ; variance coefficient,  $p < .01$ ) and quadratic (mean coefficient = -41,  $p < .01$ ; variance coefficient = .15,  $p < .01$ ) were all significant for this model. Although the fit continued to improve with the cubic model, the means of the cubic and quadratic were no longer significant, suggesting that the quadratic model was sufficient.

### Sexual minority status and trajectories of dating violence

For the second model, gender and sexual minority identity were regressed onto the intercept, slope and quadratic growth parameters, and the coefficients are presented in Table 3 for sexual minority identity. Individuals with sexual minority identities reported higher initial levels of dating violence compared with their peers (by 62% of a standard deviation, or approximately .5 points on the dating violence scale). This decreased between Time 1 (by 57% of a standard deviation) and Time 3, and then increased again (by 53% of a standard deviation). By comparison, heterosexual youth were relatively stable in their reports of dating violence over time. Gender was also significantly associated with the intercept, such that women were more likely to report dating violence than men (by 25% of a standard deviation). No significant interaction was observed between gender and sexual minority identity on the intercept, slope or quadratic of the trajectories.

The third model explored the persistence of these associations, controlling for sociodemographic variables (family SES, gender, race/ethnicity, partnership status) as well as psychosocial factors associated with dating violence and sexual minority status (e.g., heavy alcohol use, childhood sexual abuse, and number of sexual partners). Sexual minority identity was no longer significantly associated with the intercept, slope or quadratic of dating violence, with interactions suggesting no significant differences across gender once additional variables were included in the model. Having a partner (75% of a standard deviation), reporting a history of childhood sexual abuse (15% of a standard deviation) and having a higher number of sexual partners (16% of a standard deviation) were all associated with higher initial levels of dating violence. Having a partner (compared to not having a partner) was also significantly associated with a decrease in dating violence across time. Follow up analyses exploring indirect effects suggested that the number of sexual partners, but not abuse or partnership status, mediated the association between sexual minority identity and dating violence on the intercept (indirect effect = .03,  $p < .05$ , 95% CI [.003, .044]).

The same models were run for sex of sexual partners, and are presented in Table 4. The model 4, which included gender and sex of sexual partners as predictors, no significant difference was observed on the intercept or slope between individuals with only other-sex partners, and individuals with only same-sex partners. The interaction between gender and same-sex only sexual partners was not tested as only one woman reported exclusive same-sex sexual behavior. Differences did emerge, however, between individuals with only other sex partners, and individuals with same and other sex partners. As is presented in Fig. 1, compared to individuals with only other sex sexual partners, individuals with same and other sex sexual partners reported higher initial levels of dating violence (significant intercept, by



56% of a standard deviation) followed by a significant decrease over time (significant slope, by 59% of a standard deviation), and then a significant increase again (significant quadratic, by 37% of a standard deviation). Again, interactions by gender with same and other-sex sexual behavior continued to be non-significant, suggesting that these trajectories did not differ by gender. Compared to individuals who reported only other-sex sexual partners, individuals with no sexual partners reported lower initial levels of dating violence (by 70% of a standard deviation), followed by a significant increase over time (37% of a standard deviation).

The next model (model 5) added psychosocial and control variables. When the psychosocial and control variables were included in the analyses, individuals with same and other-sex sexual partners continued to report higher initial levels of dating violence compared with their heterosexual peers (38% of a standard deviation), with no significant interaction across gender. As was the case for the previous analyses, having a partner (66% of a standard deviation), childhood sexual abuse (14% of a standard deviation) and number of sexual partners (10% of a standard deviation) were all significantly associated with higher initial levels of dating violence. Furthermore, having a partner was the only variable associated with a significant reduction in the likelihood of reporting dating violence across time. As was the case for sexual minority identity, indirect effects between having same and other sex sexual partners and dating violence were tested. These findings indicated significant indirect effects, via number of sexual partners on the intercept (indirect effect = .05,  $p < .05$ ; 95% CI [.01, .23]), suggesting that the significant differences between youth with same and other sex partners and youth with only other sex partners was partially mediated via higher numbers of sexual partners.

## Discussion

Previous research suggests that dating violence has serious consequences for the individual, highlighting the importance of understanding which youth are most likely to experience this outcome (Coker et al., 2002; Hickman et al., 2004; Muñoz-Rivas et al., 2007). Current findings indicated that while dating violence is stable across emerging adulthood for heterosexual youth, both sexual minority identity and sex of sexual partners were associated with both higher initial levels of dating violence, and with greater variation in dating violence during emerging adulthood. Of particular interest is how these trajectories (1) varied depending on how sexual minority status was assessed, (2) failed to differ by gender, and (3) were mediated or partially mediated by number of sexual partners.

Youth with both same and other sex sexual partners continued to show higher levels of dating violence, even when psychosocial and control variables were included in the model. This finding may align with an existing literature that suggests that individuals, and in particular women, who report both same and other sex sexual partners are more likely to report dating violence (Martin-Storey, 2015; Messinger, 2011; Tjaden, Thoennes, & Allison, 1999). Youth's sexual risk behavior peaks during emerging adulthood among the general population (Kan, Cheng, Landale, & McHale, 2010; Stevenson, Zimmerman, & Caldwell, 2007). This increase in risky sexual behavior generally may make individuals with both male and female sexual partners particularly vulnerable to dating violence. Having a sexual

minority identity was also associated with a greater vulnerability for dating violence, although this association was no longer significant when other variables were accounted for. These findings reflect previous research suggesting that some, but not all sexual minority youth are at greater risk for violence within their intimate relationships (Freedner, Freed, Yang, & Austin, 2002; Martin-Storey, 2015). Ultimately, these findings suggest that the way in which sexual minority status is measured matters for understanding how it relates to dating violence over time.

The lack of gender differences in trajectories of dating violence also bears some discussion. Although women in general had higher initial levels of dating violence when control variables were not included in the analyses, gender did not interact with sexual minority status regarding trajectories of dating violence. This lack of difference may partially reflect previous work suggesting that vulnerability to dating violence varies across sexual minority identity subtype, with bisexual women and gay men being most likely to experience violence within intimate relationships (Goldberg & Meyer, 2013). Indeed, the majority of sexual minority-identified participants in the current study fell into one of these two groups. Finally, sample characteristics may also explain the lack of difference, as the sample consisted of more women than men, and only one woman reported having only same-sex partners. Future research with a larger sample of sexual minority youth may help clarify the present findings.

Having a partner, number of sexual partners and childhood sexual abuse were all associated with dating violence, as would be anticipated based on previous research (e.g., Alleyne et al., 2011; Halpern et al., 2009; Riggs & O'Leary, 1989; Smith et al., 2003). Once these variables were included in the analyses, sexual minority identity was no longer significantly associated with dating violence outcomes. Follow-up analyses suggested that only number of sexual partners mediated the association between sexual minority status and dating violence. The mediating role of number of sexual partners suggests that, as is the case for heterosexual youth (Riggs & O'Leary, 1989), the context of the intimate relationship is important for understanding vulnerability to dating violence.

Although the present findings provide unique insight into trajectories of dating violence during emerging adulthood, the current study is not without limitations. The number of youth reporting only same sex partners was small, and included only one woman, precluding the examination of effects by gender. The lack of significant findings for this group in particular may have reflected the small sample size. These findings are consistent with previous work suggesting variation in levels of vulnerability for dating violence among sexual minority populations (e.g., Edwards et al., 2015; Martin-Storey, 2015; Porter & Williams, 2011), but need to be replicated before conclusions can be drawn. An advantage of the present study is that sexual minority and heterosexual participants were recruited using the same methods from the same college population. The use of a regionally-specific college sample, however, limits the generalizability of this research, and may explain why the percentages of sexual minority youth differed from previous work with nationally representative samples (e.g., Chandra, Mosher, & Copen, 2011). The present study included assessments of sexual minority identity and same-sex sexual behavior from a single time point. These constructs are frequently fluid across the transition to adulthood (e.g. Fish &

Pasley, 2015; Talley, Sher, Steinley, Wood, & Littlefield, 2012), and future research with a larger sample of participants should explore how changes in sexual minority status identifiers are associated with trajectories of dating violence. Finally, the current study focused on physical dating violence, but did not include information on the gender of the perpetrating partner or the directionality of the violence. Although the frequently observed co-occurrence between victimization and perpetration suggests the two are related (Chiodo et al., 2012; Coker et al., 2000), future research may wish to distinguish between victimization and perpetration, as these two outcomes share risk factors (e.g., alcohol use, depression), but differ on important variables such as involvement with the juvenile justice system or traditional sex role ideology (McDonnell, Ott, & Mitchell, 2010; Stith, Smith, Penn, Ward, & Tritt, 2004).

## Conclusions

Overall, the risk for dating violence among sexual minority populations varied across time and the way that sexual minority status was assessed. Findings are particularly concerning for individuals with both male and female sexual partners, as these youth, unlike individuals from other groups, were more likely to report dating violence across their college years, even after the inclusion of psychosocial and control variables. These trajectories illustrate the importance of a life course approach focusing on transitional periods for understanding the disparities in dating violence seen between sexual minority and heterosexual populations.

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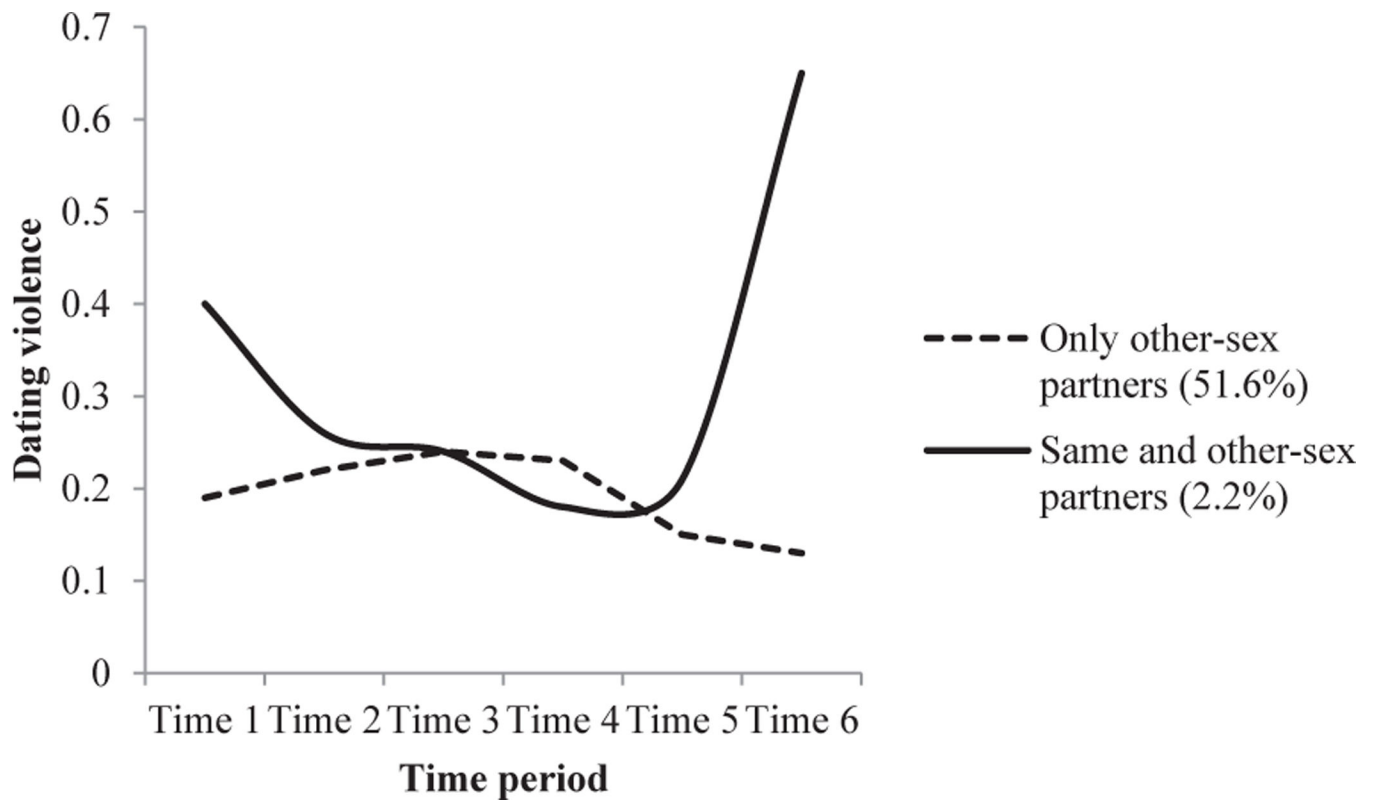
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**Fig. 1.** Trajectories of dating violence among youth with only other-sex sexual partners and youth with both same and other sex sexual partners.

**Table 1**

Sample descriptives by gender.

	Men N = 696		Women N = 1183	
	Mean	SD	Mean	SD
<i>Sexual minority variables</i>				
Sexual minority identity (%)	5.2 <sup>**</sup>		2.1	
Only other-sex sexual partners (%)	43.3 <sup>**</sup>		56.8	
Only same-sex sexual partners (%)	2.4 <sup>**</sup>		.1	
Same and other sex sexual partners (%)	2.7		1.8	
No sexual partners (%)	51.6 <sup>**</sup>		41.3	
<i>Dating violence</i>				
Dating violence at Time 1	.11	.73	.15	.70
Dating violence at Time 2	.12	.65	.18	.74
Dating violence at Time 3	.09 <sup>**</sup>	.54	.21	.90
Dating violence at Time 4	.14	.70	.20	.89
Dating violence at Time 5	.11	.63	.15	.68
Dating violence at Time 6	.10	.60	.13	.67
<i>Demographic variables</i>				
Race/ethnicity				
Asian (%)	19.6		18.1	
Black or African American (%)	3.1 <sup>*</sup>		4.8	
Hispanic or Latino (%)	14.0		15.8	
Multiple race/ethnicities (%)	6.3		7.1	
White (%)	54.7		53.1	
No race/ethnicity reported	2.3 <sup>*</sup>		1.0	
Family socioeconomic status				
Family (high income or not)	39.2 <sup>**</sup>		31.9	
Maternal education (BA or not)	59.0		57.9	
Paternal education (BA or not)	76.1		74.2	
In a relationship or not (%)	46.1 <sup>**</sup>		63.5	
<i>Psychosocial variables</i>				
Alcohol use	2.59	5.73	2.54	6.12
Childhood abuse (%)	.02 <sup>**</sup>	.22	.11	.64
Number of sexual partners in the past three months	.55 <sup>*</sup>	1.02	.66	.92

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

**Table 2**

Cross-tabulations of sexual minority identity and sex of sexual partner.

	<b>Only same-sex partners</b>	<b>Same and other sex partners</b>	<b>Only other sex partners</b>	<b>No sexual partners</b>
Sexual minority identity	15	17	12	18
Heterosexual identity	4	25	992	860

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**Table 3**

Slope, intercept and quadratic for sexual identity for men and women.

	Model 2			Model 3		
	I	S	Q	I	S	Q
Gender	-.12**	.00	-.01	-.03	-.04	.01
<i>Sexual minority variables</i>						
<i>Sexual minority identity</i>	.11**	-.10**	.09**	.04	-.07	.07
<i>Demographic variables</i>						
Family SES				-.09	-.08	.10
Race/ethnicity						
Not reported				.02	-.01	.03
Asian				-.01	.09	-.07
Black/African American				.02	-.01	-.02
Hispanic/Latino				.04	-.03	.02
Multiple ethnicities				-.04	.06	-.05
Partnered or not				.37**	-.22**	.11
<i>Psychosocial variables</i>						
Alcohol use				.03	.00	.01
Childhood sexual abuse				.08*	-.04	.03
Number of sexual partners				.15**	-.09	.10

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

Model 2: AIC = 6884.50; BIC = 6968.07; Adjusted BIC = 6920.42.

Model 3: AIC = 39,826.34; BIC = 40,617.84; Adjusted BIC = 40,166.35.

**Table 4**

Slope, intercept and cubic for same-sex sexual behavior for men and women.

	Model 4			Model 5		
	I	S	Q	I	S	Q
Gender	-.08	-.03	.01	-.02	-.04	.01
<i>Sexual minority variables</i>						
Only other sex partners (ref)						
Only same-sex partners	.03	-.01	.02	.01	-.01	.01
Same and other-sex partners	.08**	-.09*	.10*	.06*	-.07	.08
No sexual partners	-.35**	-.19**	-.12	-.16**	.05	-.01
<i>Demographic variables</i>						
Family SES				-.08	-.09	.10
Race/ethnicity						
Not reported				.00	-.02	.03
Asian				.01	.09	-.07
Black/African American				.04	-.01	-.02
Hispanic/Latino				-.05	-.03	.02
Multiple ethnicities				.33	.06	-.05
Partnered or not				.32**	-.20**	.11
<i>Psychosocial variables</i>						
Alcohol use				.02	.01	.01
Childhood sexual abuse				.08*	-.04	.03
Number of sexual partners				.09*	-.08	.09

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

Model 2: AIC = 6809.47; BIC = 6926.45; Adjusted BIC = 6859.73.

Model 3: AIC = 33,865.07; BIC = 34,851.22; Adjusted BIC = 34,288.89.