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Victimization disparities between heterosexual and sexual minority youth from ages nine to fifteen

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Abstract

Mental health disparities between heterosexual and sexual minority youth are partly explained by the higher rates of victimization experienced by sexual minority youth. The onset and progression of these victimization disparities, however, are poorly understood. Using multi-rater longitudinal data, trajectories of victimization starting at age nine were compared among youth who did and did not report same-sex attraction at age 15 (N = 310). Self and teacher, but not primary caregivers, reported victimization was significantly higher among sexual minority youth starting at age nine, but did not vary across time. The findings underscore the importance of understanding homophobic experiences of sexual minority youth during late childhood and early adolescence in order to inform prevention programs.

Keywords

sexual minority; victimization; longitudinal; multi-rater

Higher levels of mental health problems are consistently documented among sexual minority (i.e., lesbian, gay, bisexual, queer or questioning) youth compared to their heterosexual peers (Marshal et al., 2011; Institute of Medicine, 2011). Adhering to a minority stress framework (Meyer, 2003), sexual minority-related health disparities are the consequences of stigma associated with sexual minority status. Sexual minorities are often subjected to forms of enacted stigma – including peer victimization – and these experiences are associated prospectively with serious consequences across the lifecourse (Klomek, Souraner & Eloheimo, 2015; Toomey et al., 2010). Indeed, victimization, fear of victimization, and the consequences of victimization for self-concept at least partially account for the link between sexual minority status and poorer mental health (Goldbach, Tanner-Smith, Bagwell & Dunlap, 2014; Martin-Storey & Crosnoe, 2012). Understanding how the developmental course of victimization varies by sexual minority status is therefore essential for understanding (1) the emergence and progression of mental health vulnerabilities among

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sexual minority youth and (2) optimal times to intervene to improve sexual minority health and development.

Theoretical Context

Existing developmental theory provides some insight into when differences in victimization may emerge for sexual minority youth (Mustanski, Kuper, & Greene, 2014; Savin-Williams & Cohen, 2007). With the onset of puberty, youth begin to develop patterns of sexual attraction that will later contribute to sexual behavior and sexual identity development (Floyd, & Stein, 2002). Identifying and labelling groups (e.g., sexual minority youth), however, is also an important first step in the development of stigma (Link & Phelan, 2006). Furthermore, gender stereotypes increase in rigidity following entry into junior high school (Mulvey & Killen, 2015; Horn, 2006). From this perspective, victimization among sexual minority youth would emerge and intensify during early adolescence, when sexual identity development is nascent and peers are increasingly likely to regulate behaviors related to gender and sexuality (La Roi, Kretschmer, Dijkstra, Veenstra & Oldehinkel, 2017; Russell & Fish, 2016).

In line with theory suggesting that negative attitudes towards sexual minorities emerge around late childhood and early adolescence, existing empirical work examining attitudes towards sexual minorities – as well sexual minority youth's vulnerability for victimization – typically captures experiences among youth starting around age 12-13. The findings suggest that negative attitudes towards sexual minorities are highest during early adolescence (Horn, 2006), but become more positive as youth age (Robinson, Espelage, & Rivers, 2013). Similarly, studies indicate that sexual minority youth experience higher levels of victimization than heterosexual youth as early as ages 12-14 (Robinson & Espelage, 2011, van Beusekom et al., 2016), suggesting that early adolescence may be both a particularly difficult, and potentially formative time for sexual minority youth health.

Prior Longitudinal Research

Though studies addressing sexual minority youth's vulnerability for victimization typically focus on early adolescence, emerging research suggests that these vulnerabilities may appear earlier in childhood. Two prospective longitudinal studies, for example, find that mental health disparities among children who later report sexual minority identities are evident as early as age 11 (La Roi et al., 2016; Schuster et al., 2015). Retrospective work documenting sexual minority identity development suggests that some sexual minorities identify a sense or awareness of "feeling different" from their heterosexual peers as early as age 8 (Mustanski, Kuper, & Greene, 2014; Savin-Williams & Cohen, 2007). These findings may reflect an understanding of heteronormativity prior to the development of a sexual (minority) identity. Indeed, negative attitudes towards same-sex couples can be identified in children as young as five (Clark, 2014), and qualitative research similarly suggests considerable heteronormativity within the school and peer context starting in elementary school (Myers & Raymond, 2010; Ryan, 2016).

Though the extent to which children comprehend sexual minority status prior to adolescence is currently not well understood, research suggests that children do hold negative attitudes towards their gender nonconforming peers (Mulvey & Killen, 2015), and that gender nonconforming children experience more peer victimization and exclusion (Zosuls et al., 2016). Children with higher levels of gender nonconformity are also more likely to be victimized by parents and other adults (Grossman, D'Augelli, Howell, & Hubbard, 2005; Roberts et al., 2012), which, in line with re-victimization theory, is subsequently associated with higher levels of peer victimization (Friedman et al., 2011). Although not all sexual minorities indicate higher levels of childhood gender nonconformity compared to heterosexuals, research using prospective reports indicates a positive association between childhood gender nonconformity and sexual minority status in adolescence and adulthood. Li, Kung, and Hines (2017), for example, found that caregiver-rated gender non-conforming behavior as early as age four was positively associated with youth having a gay/lesbian identity at age 15 (see also Steensma, van der Ende, Verhulst, & Cohen-Kettenis, 2013). Early gender nonconformity may, therefore, be uniquely important in explaining variation in victimization within sexual minorities (Toomey et al., 2010), and between sexual minorities and heterosexual individuals (Martin-Storey & August, 2016; Rieger & Savin-Williams, 2012). These findings suggest that the vulnerability to negative social outcomes among sexual minority youth may emerge prior to adolescence, and that more information is needed on this topic to inform intervention and prevention programming.

Current Study and Hypotheses

Peer victimization is consistently identified as an important factor in understanding vulnerability to later mental health outcomes among sexual minority youth. Using self, teacher and primary caregiver reports of victimization from the Study of Early Child Care and Youth Development (SECCYD: NICHD Early Child Care Research Network, 2005), the current exploratory study examined trajectories of victimization between ages nine and 15 among children who do and do not report same-sex attraction at age 15. We hypothesized that we would observe sexual orientation differences in victimization by age 9, whereby youth who reported a sexual minority status by age 15 would indicate higher self, teacher, and primary caregiver reported victimization. We also expected that these differences would increase as youth approached adolescence.

Method

Data Source

Data are from the Study of Early Child Care and Youth Development (SECCYD), a longitudinal study, started in 1991, when 1364 families were recruited at the birth of the target child at 10 different hospital sites across the United States (for additional details see NICHD Early Child Care Research Network, 2005; <http://www.nichd.nih.gov/research/supported/seccyd.cfm>). Families were excluded from participation if the birth mother was under 18, did not speak English, had a substance abuse problem or planned to move, or if the child was hospitalized for more than seven days post birth. Though not nationally representative, participant race/ethnicity and socioeconomic status reflected the populations

within the catchment areas of each study site. Subsequent data collections occurred until the target child was 15. The current sample was drawn from the 952 adolescents who provided information on same- and other-sex attraction at age 15.

Measures

Sexual minority status—When they were 15 years old, youth were asked if they were attracted to boys, girls, or boys and girls: A total of 42 youth reported either exclusive same-sex or same- and other-sex attraction. Same-sex attraction reflects only one element of sexual minority status, but is a relevant marker of sexual minority status for this stage of development (Igartua et al., 2009). Research on sexual minority development milestones indicates that youth are able to pinpoint early awareness of differences early on (ages 7-11), but may not come to label that awareness as sexual or themselves as a lesbian/gay or bisexual (or something else) until later in adolescence (ages 14-18; Mustanski et al., 2014; Savin-Williams & Cohen, 2007). Furthermore, previous research suggests that youth feel more comfortable answering questions on sexual attraction relative to questions on sexual identity (Austin, Conron, Patel & Freedner, 2007). We believe, therefore, that reports of attraction offer a developmentally appropriate assessment of sexual minority status for youth in this age range and are consistently relied upon in studies of sexual minority youth and health (see Temkin, Belford, McDaniel, Stratford, & Parris, 2017).

Victimization—Child-reported victimization was assessed at approximately ages nine ($M = 8.99$, $SD = 0.31$), ten ($M = 9.86$, $SD = .31$), eleven ($M = 10.66$, $SD = .32$), twelve ($M = 11.90$, $SD = 0.35$) and fifteen ($M = 15.05$, $SD = .16$) using the victimization subscale of the Kids in My Class/Kids in My School Measure (Kochenderfer & Ladd, 1996), which contains four questions (e.g., does anyone pick on you at school), with four response options (0) never, (1) hardly ever, (2) sometimes, (3) most of the time (4) always. These items were summed (higher scores indicated higher levels of victimization), were normally distributed, had adequate internal reliability across the four time points (i.e., between $\alpha = .74$ and $\alpha = .85$), and were included as continuous in longitudinal analyses.

Both primary caregiver and teacher reported youth victimization were assessed using a seven-item scale adapted from the victimization subscale of the Kids in My Class/Kids in My School Measure at ages nine, ten, 11 and 12 (Kochenderfer & Ladd, 1996). Teachers and primary caregivers were asked questions such as if the child “is picked on by other children,” where response options were never true (0), sometimes true (1), or often true (2). Responses were summed, with higher scores indicating higher levels of victimization (reliability across waves ranged between Cronbach’s $\alpha = .86$ to $\alpha = .91$ for teachers and primary caregivers). Responses to these items were zero inflated (52-58% of teachers reported no victimization, and 48-55% of primary caregivers reported no victimization), thus teacher and primary caregiver victimization were treated as count variables for all longitudinal analyses. Descriptive statistics for victimization are displayed in Table 2. Taking a multi-rater approach to understanding victimization is particularly valuable, as child, teacher, and primary caregiver reports are differentially associated with child outcomes (e.g., Ladd & Kochenderfer-Ladd, 2002; Shakoor et al., 2011) and offer insight into the context of victimization.

Propensity score matching

Establishing whether sexual minority status differences in victimization were not artifacts of measurement or other sociodemographic factors was important for the current analyses. Therefore, to account for potential confounding factors, and address the limitations with sample size, we implemented propensity score matching procedures, which rendered the heterosexual and sexual minority youth comparison groups as similar as possible via matching on key variables. Propensity score matching provides an appropriate comparison group (Austin, 2011), and can be effectively used with small samples (Holmes & Olsen, 2010). We start by comparing heterosexual and sexual minority youth on a number of demographic (i.e., child sex, family socioeconomic status, race/ethnicity, and family structure), family-functioning (i.e., family environment, maternal depression, and stressful life events), and individual-level variables (i.e., cognitive functioning and body mass index) (see Table 1).

Demographic variables—*Child sex* was measured by primary caregiver report at baseline, as was *race/ethnicity* (coded African American, White, and Other). *Family socioeconomic status* was assessed via three continuous variables: (1) income to needs ratio, calculated based on primary caregiver-reported income divided by household size; (2) parent-reported family income; and (3) primary caregiver-reported maternal years of education. Children's *family structure* was also compared using maternal reports of whether the biological father lived in the home or not (father absent was the referent category).

Home environment variables—The *quality of parental support* and stimulation for the child was measured by the middle childhood scoring sheet of the Home Observation Measure of the Environment Scale (HOME; Caldwell & Bradley, 1984), a 59-item measure completed by trained observers via a combination of observations and structured interview questions ($\alpha = .82$). *Primary caregiver depression* was assessed using the 20-item Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977; $\alpha = .91$). Children were also compared based on *stressful life events*. For this scale, primary caregivers were presented with a list of 71 life events (e.g., change in work situation, change in residence) from the Life Events Survey (LES; Sarason, Johnson, & Siegel, 1978), which they rated as negative, neutral or positive (scored as -3 to 3). The total number of negative items rated by primary caregivers was summed. As different primary caregivers reported different numbers of events, reliability could not be calculated. For all variables, higher scores indicated higher levels of home quality, primary caregiver depression, or stressful life events.

Child variables—*Cognitive functioning* was assessed at grade three using the Broad Reading Cluster score (100 items; $\alpha = .93$) and Math Cluster Score (118 items; $\alpha = .89$) from the Woodcock-Johnson Psycho-Educational Battery, Revised (Woodcock & Johnson, 1989-1990); Higher scores indicate greater reading and math abilities. Children's *body mass index* (BMI) was calculated based on standardized measures of the child's height and weight (see Martin-Storey & Crosnoe, 2015), where higher scores indicate greater BMI.

Analytic Sample and Matching—As can be seen in Table 1, ANOVAs and χ^2 test of independence indicated significant differences on nearly all factors on the basis of same-sex

attraction. Thus, we performed propensity score matching in Stata 13 (StataCorp, 2013) to derive a matched comparison sample of other-sex (only) attracted youth who did not statistically differ from their same-sex attracted peers using demographic, family and individual-level characteristics. To reduce bias inherent in fixed-control methods (Ming & Rosenbaum, 2000), we used resampling of matched controls so that up to ten potential neighbors were permitted for each sexual minority youth using “greedy” sampling. A caliper point difference of 0.025 was selected to maximize the similarity between sexual minority and heterosexual groups and to minimize the loss of sexual minority youth for failure to match (Morgan & Harding, 2006). All sexual minority youth in the current analysis had at least three matches, and the majority of sexual minority youth had 10 matches. Given some overlap in matches, the final sample consisted of the 42 same-sex attracted and 268 matched other-sex attracted youth (for a total analytic sample of 310 youth). Post-hoc comparative analyses indicated no significant differences between same-sex attracted and the propensity matched other-sex attracted youth (see Table 1), differences in propensity scores between sexual minority and heterosexual youth were also reduced when comparing matched and non-matched samples. Thus, the remainder of analyses were conducted using the same-sex attracted and the propensity-matched sample.

Planned analyses

Following sample identification, growth curve models were calculated to assess trajectories of victimization across time using Mplus 7.4 (Muthén & Muthén, 1998-2015). Trajectories were modelled in two steps. First, an unconditional baseline models was estimated to assess model fit to the data for linear and quadratic models, and the best fitting model was selected. Second, adolescent same-sex attraction was regressed onto the intercept, slope, and where appropriate, quadratic. In the case of both teacher and primary care-giver reported victimization, zero-inflated Poisson models were employed to address zero inflation in the data (Atkins & Gallop, 2007; Liu, 2007). As a consequence, however, traditional fit indices (e.g., RMSEA and CFI indices) are not available. To test potential differences in trajectories of victimization, we also assessed whether models were moderated by sex, though results indicated that they did not vary between boys and girls. We also opted to not include sex as a control variable as it had been accounted for during propensity score matching.

Results

Initial bivariate analyses (presented in Table 2) indicated higher levels of self-reported victimization among same-sex attracted youth at ages nine, ten, twelve, and fifteen, and higher teacher-reported victimization at ages nine and ten. No significant differences were observed for primary caregiver-reported victimization.

Next, we estimated a series of growth curve models. For self-reported victimization, a quadratic model indicated the best fit (AIC = 5778.89, Sample Size Adjusted BIC = 5786.24, $\chi^2 = .15$, $df = 1$, $p = .69$, RMSEA = .00, CFI = 1.00). The mean of the intercept ($B = 3.60$, $p < .000$), and the quadratic were significant ($B = -.07$, $p < .000$) as were the variance of the intercept ($B = 12.11$, $p = .00$), the slope ($B = 2.91$, $p = .002$), and quadratic ($B = 0.05$, $p = .001$), suggesting that victimization was stable, then declined with significant individual

variation for the intercept, slope, and quadratic. The model maintained good fit when sexual minority status was regressed onto the intercept, slope, and quadratic (see Table 3). Same-sex attraction was significantly associated with the intercept, but not the slope or quadratic of victimization. In other words, same-sex attraction at age 15 was associated with higher levels of victimization starting at age nine, but was not related to changes in victimization over time.

Estimated models for teacher-reported victimization indicated that a linear model fit the data best (AIC = 3094.99; Adjusted BIC = 3097.70, $\chi^2 = 1559.03$, $df = 9936$, $p = 1.00$). With teacher reported victimization, the intercept mean ($B = -.91$, $p = .001$) was significant, as were the variances for the intercept ($B = 2.54$, $p = .001$) and slope ($B = 0.32$, $p = .001$), suggesting overall stability with significant variation. Again, same-sex attraction was significantly and positively associated with initial teacher-reported victimization, but not with change in victimization over time.

Finally, estimated growth curve models for primary caregiver-reported victimization indicated that a quadratic model best fit the data (AIC = 3919.69; Adjusted BIC = 3925.77, $\chi^2 = 2406.18$, $df = 9910$, $p = 1.00$). The mean of the slope ($B = -.54$, $p = .010$) and quadratic ($B = .19$, $p = .003$) were significant, as were the variance for the intercept ($B = 2.23$, $p = .001$), slope ($B = 1.24$, $p = .001$) and quadratic ($B = .10$, $p = .004$). These findings suggest a decrease, rather than an increase in primary caregiver-reported victimization, but with significant variation across time. Same-sex attraction was not significantly associated with either initial levels of primary caregiver-reported victimization, or change over time.

Discussion

Peer victimization in childhood has serious consequences across the lifecourse (Klomek et al., 2015; Reintjes et al., 2010), and is a robust mechanism for sexual orientation-related health and mental health disparities (Hatzenbuehler, 2009; Meyer, 2003). Using multi-informant data, these preliminary findings present trajectories of victimization among same-sex and other-sex attracted youth, starting at age nine. In line with our initial hypothesis, children who later report same-sex attraction had higher levels of victimization as reported by both themselves and their teachers as early as age eight or nine. These findings support and extend prior work indicating higher levels of victimization and lower levels of mental health among individuals who later reported sexual minority identities at age 11 (e.g., La Roi et al., 2016; Schuster et al., 2015), as reported by both youth and teachers.

Contrary to the second hypothesis, however, sexual minority status-related differences in victimization did not increase from late childhood to early adolescence. While some (Becker et al., 2014; La Roi et al., 2016) but not all previous research (Marshall et al., 2013) has suggested that disparities in depressive symptoms between sexual minority and heterosexual youth continue to increase over adolescence among sexual minority youth, the current findings did not suggest that victimization among sexual minorities increased during adolescence. In part, this may reflect that though victimization may contribute to the onset of depressive symptoms, increases in victimization may not be required for future increases in depressive symptoms. More simply, these findings may be related to the timing of data

collect as youth were only followed into middle adolescence. Specific to youth report, stability may be an artifact of repeated self-report over short periods of time (e.g., the youth themselves over one-year increments) Finally, it is important to note that the majority of sexual minority youth in the current study reported both same- and different-sex attraction, relative to exclusive same-sex attraction. Trajectories of victimization may differ for youth who report exclusive same-sex attraction, though future research is needed to support this hypothesis.

Given that victimization disparities were observed by age nine, and were stable across late childhood and early adolescence, one probable candidate for these differences is childhood gender nonconformity. Indeed, gender nonconformity renders children more vulnerable to rejection and victimization by peers and adults (e.g., Friedman et al., 2011; Roberts et al., 2012). This, coupled with the fact that adolescence who report same-sex attraction are more likely to indicate gender nonconformity at young ages (Li et al., 2016), suggests that sexual minority youth's vulnerabilities to minority stress start at very young ages. The present findings underscore the need for future work to address how the stigma regarding gender nonconformity shapes sexual-minority related stigma.

Significant sexual minority status-related differences in victimization were observed via teacher and child-reported victimization, but not primary caregiver reported victimization. Similar to findings from developmental psychopathology (De Los Reyes & Kazdin, 2005), differences across raters may reflect the different kinds of information that children, teachers, and parents receive regarding the social world of the child. The substantial number of teachers and primary caregivers who reported no victimization may reflect that these adults observe fewer incidents of victimization than youth themselves (Cooley, Fite & Pederson, 2017). More specifically, the current findings may suggest that youth who eventually report same-sex attraction may be more likely to experience victimization at school (and thus observed by teachers) as opposed to in contexts with primary caregivers.

The current study provides an important exploration of trajectories of victimization among children who later report same-sex attraction. Several limitations, however, should be addressed by future research. First, although typical in population-based studies, only a small number of youth reported same-sex attraction meaning that comparison are likely underpowered (e.g., Igartua et al., 2008). Future research could support and clarify the current findings by exploring variation across patterns of sexual attraction (e.g., exclusively same-sex vs same- and other-sex attracted youth) and sexual identity (e.g., individuals who later adopt non-heterosexual identities) in studies with larger subsamples of sexual minority youth. We use propensity score matching in the current study to address concerns about the relatively small number of sexual minority youth in the current study and to limit potential issues of identification and convergence when estimating latent trajectories across unbalanced groups with a large number of covariates. Given recent discussions on the limits of propensity score matching (e.g., King & Nielsen, 2016), we emphasise that our use of propensity score matching was not intended to infer causality, but to minimize the confounding influence of variables related to our outcome of interest. Second, while the SECCYD includes families from across the United States, it is not nationally representative. Third, participants were 15 when asked about their sexual attraction, and youth who are able

to identify and report same-sex attraction earlier may also differ in important ways than youth who report these patterns of attraction later in development. Finally, the SECCYD started data collection in 1991, and sexual minority status was assessed in 2006. Yet, there have been unprecedentedly swift social changes with regards to the lives of sexual minorities in the US and future studies should continue to incorporate prospective designs that measure sexual minority status and related experiences (e.g., victimization, stigma) to better understand these processes among modern cohorts of youth.

Ultimately, these findings provide important preliminary evidence adolescents who report same-sex attractions at age 15 already exhibited higher levels of victimization than their heterosexual peers starting as early as age 9. More work is needed, however, to understand when and how children internalize heteronormative messages, and how these messages result in more toxic social environments for sexual minority youth. These findings have direct implications for intervention and prevention, by suggesting that improving outcomes for sexual minority youth may require a better understanding of the onset and progression of homophobia starting during childhood, and encourage the development and evaluation of programs aimed at eliminating the stigma associated with sexual minority status prior to adolescence (e.g., Clark, 2016).

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Figure 1.
Estimated means for youth-reported victimization by sexual minority status

Figure 2.
Estimated means for teacher-reported victimization by sexual minority status

Table 1

Differences across sexual minority status prior to and following propensity score matching

Differences across sexual minority status prior to propensity score matching				
	Any Same-sex attraction (n = 42)	Exclusive other-sex attraction (n = 910)	Chi²/F values	Sig.
Sex (male or not) (%)	.26 ^{**}	.51	9.88	.002
Race/ethnicity				
African American or not (%)	.19	.12	2.01	.150
White or not (%)	.69 [*]	.82	4.44	.043
Other or not (%)	.12	.06	2.10	.187
Family income	48,195.80 (40,019.20) ^{**}	77,879.98 (66,102.57)		
Family income to needs ratio	2.85 (2.56) ^{**}	4.41 (3.71)	8.06	.005
Father present in the home (%)	.45 ^{**}	.72	15.53	.000
Maternal education in years	13.45(2.57) ^{**}	14.51 (2.42)	7.54	.006
Maternal depression	13.58 (10.25) ^{**}	8.93 (8.52)	8.37	.004
Cognitive functioning				
Reading percentile rank	58.58 (30.86) ^{**}	72.14 (23.69)	10.23	.001
Math percentile rank	55.82 (30.86) ^{**}	78.71 (24.55)	26.51	.000
Body Mass Index	18.43 (3.43)	18.28 (3.70)	.06	.82
Stressful life events	4.24 (4.53) [*]	3.39 (3.32)	2.48	.115
HOME Score	43.39 (6.63) ^{**}	46.69 (6.18)	10.81	.001
Differences across sexual minority status following propensity score matching				
	Any same-sex attraction (n = 42)	Exclusive other-sex attraction (n = 910)	Chi²/F values	
Sex (male or not) (%)	.26	.26	.00	1.00
Race/ethnicity				
African American or not (%)	.16	.19	.31	.65
White or not (%)	.69	.75	.77	.45
Other or not (%)	.12	.09	.37	.57
Family income	48195.89(40019.20)	59298.30(54153.69)	.01	.94
Family income to needs ratio	2.85(2.56)	3.39(3.02)	.03	.86
Father present in the home (%)	.43	.56	1.33	.27
Maternal education in years	13.45(2.58)	13.91(2.49)	1.20	.28
Maternal depression	13.58(10.25)	11.17(9.84)	.14	.71
Cognitive functioning				
Reading percentile rank	58.58(30.86)	64.95(26.98)	.01	.95
Math percentile rank	55.82(35.57)	64.19(30.06)	.01	.93
Body Mass Index	18.43(3.70)	18.43(3.48)	1.78	.18
Stressful life events	4.24(4.53)	3.88(3.77)	1.25	.27
HOME Score	43.39(6.64)	44.82(6.87)	.11	.74

**
= $p < .01$;

*
= $p < .05$

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Table 2

Descriptive statistics on child, primary caregiver and teacher victimization ages nine through 15

Child-reported victimization						Primary caregiver-reported victimization						Teacher-reported victimization					
Any Same-Sex Attraction			Exclusive Other-Sex Attraction			Any Same-Sex Attraction			Exclusive Other-Sex Attraction			Any Same-Sex Attraction			Exclusive Other-Sex Attraction		
M	SD		M	SD	F	M	SD		M	SD	F	M	SD		M	SD	F
Age 9	4.71	4.63	3.40	3.20	4.82* <i>p</i> = .03	2.03	2.67	1.87	2.57	.73 <i>n.s.</i>	1.65	2.50	0.96	1.82	4.39 <i>p</i> = .04		
Age 10						2.31	3.22	1.59	2.46	2.75 <i>n.s.</i>	1.97	3.08	0.97	1.79	7.50 <i>p</i> = .01		
Age 11	3.87	3.27	3.42	3.49	.63 <i>n.s.</i>	2.32	3.33	1.88	2.74	.85 <i>n.s.</i>	1.56	3.02	1.14	2.19	1.09		
Age 12	4.24	3.47	3.22	3.10	3.75* <i>p</i> = .049	2.59	3.00	1.97	2.55	1.94 <i>n.s.</i>	1.25	2.17	1.35	2.48	.05 <i>n.s.</i>		
Age 15	2.57	3.28	1.75	2.19	4.39* <i>p</i> = .04												

Note: Age 10 child-reported victimization was not measured. Age 15 parent and teacher-reported victimization was not measured.

* = *p* < .05. M = mean; SD = standard deviation; n.s. = not significant.

Table 3

Growth curve models of child and teacher-reported victimization

Model 1 Child-reported victimization					Model 2 Teacher-reported victimization					Model 3 Primary caregiver-reported victimization				
Intercept		Slope		Quadratic	Intercept		Slope			Intercept		Slope		Quadratic
Std Coef	S.E	Std Coef	S.E	Std Coef	Std Coef	S.E	Std Coef	S.E		Std Coef	S.E	Std Coef	S.E	Std Coef
.13*	.06	-.05	.07	.05	.17*	.08	-.11	.08		.06	.04	.09	.10	-.09
Sexual minority status														.36

Model 1: AIC = 5996.12, Adjusted BIC = 6006.29, $\chi^2 = 1.44$, df = 2, $p = .49$, RMSEA = .00 CFI = 1.00.

Model 2: AIC = 3314.35; Adjusted BIC = 3319.44, χ^2 test of model fit of count outcomes = 1558.39, df = 9936, n.s.

Model 3: AIC = 4143.21; Adjusted BIC = 4151.12; χ^2 test of model fit of count outcomes = 2310.21, df = 9909, n.s.

* = $p < .05$. Std Coef = standardized coefficient; SE = Standard Error.