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Sexual Minority Status Trajectories and Mental Health: A Longitudinal Analysis

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Sexual Minority Status Trajectories and Mental Health: A Longitudinal Analysis

Abstract:

Previous research has shown that sexual minority (SM) adolescents are at risk for worse mental health than their non-SM peers. This paper seeks to expand upon previous findings by using longitudinal data to examine how variations in the timing and patterns of SM status identification are related to depression and suicidal thoughts in young adulthood. I find that those individuals who report opposite sex only attraction in adolescence and identify as bisexual or “mostly straight” in young adulthood are at risk for worse mental health outcomes compared to non-sexual minorities. Moreover, those individuals who report same-sex attraction in adolescence, regardless of their future sexual identity, are not associated with worse mental health in young adulthood after controlling for social ties and victimization. These findings highlight the importance of differential sexual identity trajectories as important mechanisms through which mental health outcomes are mediated.

Key Words: Sexual Minority Status, Development, Adolescent, Mental Health, Depression, Suicide

Introduction

Despite increasing awareness of the correlates and predictors of mental health outcomes, large disparities in the prevalence of depression and suicidal ideation across adolescent and young adult populations remain. Indeed, much research has shown that sexual minority (SM) persons exhibit worse mental health outcomes than their non-SM peers on several dimensions including depression, suicidal thoughts, and suicide attempts (Garofalo et al., 1999; Hershberger, Pilkington, & D'Augelli, 1997; Remafedi et al, 1991; Russell, 2003; Russell & Joyner, 2001). Understanding the specific mechanisms through which these inequalities are perpetuated or mitigated remains critical for improving the mental health of sexual minority populations. While many previous studies have sought to elucidate these mechanisms, this research has often been limited by the use of cross-sectional, clinical samples, and limited measures of social support. This study seeks to improve upon existing work by using nationally representative, longitudinal data to examine the relationship between SM status identification trajectories and mental health in young adulthood.

Theories of social stress emphasize the impact of negative social interactions, both institutional and interpersonal, as sources of disruption to individuals' routine behaviors and emotional statuses (Cohen and Wills 1985; for a review see Thoits 1995). These theories posit that social support and connectedness—as measured through the amount and quality of relationships adolescents have to family members, peers, their schools, and other relevant social institutions—have important implications for mental health (Brent & Birmaher, 2002; Gould et al., 2003; Pelkonen & Marttunen, 2003). Sexual minorities report higher rates of social isolation, discrimination, and victimization, as well as increased levels of alienation from many normative

institutions, such as marriage and religion, resulting in phenomenon called “minority stress” (Herek 2009; Meyer 2003). Thus, minority stress works both independently and additively to other general social stressors that affect persons of all status positions; its effects are therefore inescapable and chronic. To be sure, several studies have found that indicators of social support such as family acceptance and victimization are important mediators between sexual minority status and mental health (Hershberger, Pilkington, & D’Augelli, 1997; Russell & Joyner 2001; Savin-Williams, 1994). The existing research, however, has not examined how social support may work across differential sexual identity trajectories, and how mental health may vary across these sexual orientation pathways.

Sexual identity models proposed by Cass (1979), Coleman (1982), and Troiden (1989) suggest that the link between sexual orientation and mental health is in large part due phasic transitions during the development of a cohesive sexual identity. To simplify, as sexual minorities move from being “confused” or “ashamed” of their sexual orientation towards establishing a cohesive gay or lesbian public identity, they experience varying mental health risks that accompany each stage. Theoretically these risks subside once a stable sexual identity is established. These models, however, have been heavily criticized for their limited recognition of within-group variation in the timing and direction of sexual identity trajectories (Diamond, 2008; Russell, 2003; Savin-Williams, 2001, 2005). In fact, using the National Longitudinal Study of Adolescent Health (Add Health), it has been shown that depending on the measure of sexual orientation, SM prevalence rates can fluctuate from 1 to 15% of the population, and that individuals’ reports of sexual orientation are subject to variation throughout time (Savin-Williams & Ream, 2007). Moreover, sexual identity trajectories are not necessarily linear; research has shown that some individuals may transition in and out of SM statuses and labels

multiple times over the life course (Diamond 2008; Savin-Williams, 2005; Savin-Williams & Ream, 2007). Therefore, an examination of the relationship between sexual orientation trajectories and mental health is warranted, and may yield important insights into SM mental health outcomes.

This paper builds upon previous work by Russell and Joyner (2001), who examined the link between sexual minority status and suicidal thoughts using wave I of the Add Health data. They found that the relationship between sexual minority status and suicidal thoughts was largely mediated by depression, substance abuse, victimization, and the suicide or suicidal attempt of a friend and/or family member. Moreover, they found that rather than all sexual minorities have elevated risk of worse mental health, that much of the risk was concentrated among individuals who reported both sex attractions. Their work, however, did not examine the relationship between differential sexual minority status trajectories on mental health, via the impact of earlier same sex romantic attraction and subsequent sexual orientation identification.

According to traditional sexual identity models described earlier, those individuals who identify their same-sex attraction earlier and are able to quickly transition through all phases to a final “gay” or “lesbian” identity will have better mental health than those individuals who are still currently in the process of doing so, indicating that divergent pathways may lead to disparate outcomes. Conversely, others have argued that the mental health risks to SM youth have largely subsided and that youth in recent years have greater amounts of flexibility and freedom to express their sexuality in a plethora of ways (Savin-Williams 2005), indicating that differential trajectories will have no impact on mental health.

Thus, I test the following research questions: (1) Do differences in the timing of same-sex attraction identification and subsequent SM status identification lead to differential risks of

reporting higher levels of depression and suicidality, and (2) What impact do victimization, attachment to school, and romantic relationships have on reducing the risks of worse mental health among sexual minorities

Methods

Data

This research uses data from the National Longitudinal Study of Adolescent Health. The Add Health study began in the fall of 1994 and involves a nationally representative, longitudinal sample of US adolescents. The initial Add Health sample was drawn from 80 high schools and 52 middle schools throughout the United States (Bearman, Jones, & Udry, 1997). The first wave of the Add Health study surveyed 90,118 adolescents who filled out a brief in-school survey. A subsample of students (n=20,747) and their parents were asked to additionally fill out an in-depth home interview survey. High school seniors in Wave I of Add Health were not selected for follow-up for Wave II, but were reclaimed for the Wave III sample, conducted in 2001 and 2002. Response rates for this study were 79% for wave 1, 88% for Wave II, and 77.4% for Wave III. High school seniors were not followed for the wave II sample; thus, this study is restricted to waves I and III of the survey in order to retain the largest number of respondents. This results in a total number of 14,322 eligible cases; 1,737 respondents were removed due to missing information on the main independent variable or they did not identify that they were attracted to males or females; an additional 956 respondents were removed due to missing information on the dependent variables and additional covariates, resulting in a final sample of 11,629 respondents.

Measures

Sexual Orientation Trajectories: Among youths, qualitative research suggests that sexual orientation identification may not be the best indicator of sexual minority status; rather, physical

and cognitive attraction are identified as being more suitable to this population (Friedman et al., 2004). Therefore, asking adolescents to identify as “gay,” “lesbian,” or “bisexual” may miss a large proportion of SM youth not ready or willing to label themselves as such (Savin-Williams, 2001; Savin Williams 2005). Other literature suggests that the typical age of same-sex romantic attraction is established around ages 8-9 and sexual minority identification occurs around the age of 18 (Savin-Williams and Diamond 2000). Thus, SM status in wave I is derived from a question that asks respondents to identify whether they have ever been romantically attracted to a male or a female, a measure previously used by Russell and Joyner (2001). In wave III, respondents are asked to “please choose the description that best fits how you think about yourself: 100% heterosexual (straight); mostly heterosexual (straight), but somewhat attracted to people of your own sex; bisexual—that is, attracted to men and women equally; mostly homosexual (gay), but somewhat attracted to people of the opposite sex; and 100% homosexual (gay).” From these two question, 8 mutually exclusive categories were derived: those individuals who report same or both sex romantic attraction at wave I and identity as “100% heterosexual” (N=551), “mostly heterosexual” (N=93), bisexual” (N=40), or “mostly homosexual” or “100% homosexual” (N=56) in wave III; and those individuals who report opposite sex attraction only and identify as “100% heterosexual” (N=9,876), “mostly heterosexual” (N=736), bisexual” (N=151), or “mostly homosexual” or “100% homosexual” (N=126) in wave III¹².

¹ The “mostly homosexual” and “100% homosexual” respondents were collapsed due to sample size limitations.

² Males and female respondents are analyzed together due to sample size limitations. Analysis not shown did disaggregate the sample by sex and found that the coefficients are in the same direction for both sexes for sexual identity trajectories and mental health, although the magnitude differed. Many of the estimates in these models, however were not stable or inflated.

Dependent Variables: The dependent variables in this analysis capture two domains of mental health: depression and suicidal thoughts. Depression is measured using a ten-item CES-D scale that ranges from 0-30 (for similar coding see Meadows, Brown & Elder, 2006). The indicator for suicidal thoughts is derived from a variable that asks respondents if they, “during the last 12 months had ever seriously thought about committing suicide,” and is also coded as a dummy variable (referent=no). Identical measures are derived from wave I of the survey and included as controls in model two for both dependent variables.

Controls: Included as separate controls in the models are: age (11 to 14; 14 to 16; 16-18; and 18+ [referent]), race/ethnicity (non-Hispanic white [referent], non-Hispanic black, Hispanic, Asian, or other); sex (female=1, male=0 [referent]), respondent’s parent’s education, and respondent’s education at wave III.

Mediating Pathways: I include a series of variables from both wave I and wave III of the survey to examine the mediating effect of social ties³ and victimization on the relationship between SM status and mental health. Adolescents’ attachment to school at wave I is a scaled measure that ranges from 1.25 to 6.25 and has a Cronbach alpha of .84 constructed from a series of questions that ask respondents to identify if: 1) they feel close to people at their school, 2) they feel like they are part of their school, 3) they are happy to be at their school, 4) teachers at their school treat students fairly, 4) and they feel safe at school. Victimization is measured as a dummy variable that captures if respondents report in the last 12 months that they had been shot, stabbed, jumped, had a knife or gun pulled on them, or gotten into a physical fight (referent=no).

³ Previous models not shown tested for, and found no significant impact of number of evening family meals, attachment to neighborhood, reported satisfaction with parent relationship, and religiosity (all measured at wave I) on mental health status and were therefore not included in order to preserve parsimony in the model.

These questions are asked at both waves I and III are coded and entered into the analyses separately.

The establishment of a romantic relationship is an important mechanism through which both adolescents and young adults derive senses of self (Harter 1999; Kuttler, LaGreca & Prinstein 1999). Therefore, I include indicators of both same-sex and opposite-sex relationships at both waves I and III. Respondents are asked to identify in wave I if they “in the last 18 months have had a special romantic relationship with any one?” In wave III, respondents are asked to identify their romantic relationships and list the sex of their partner. Respondents are then asked to identify the sex of their identified romantic partner, these answers are then cross-tabbed with the sex of the respondent to determine if the relationship was a same-sex or opposite-sex romantic relationship

Results

Descriptive Statistics

Table 1 presents the descriptive statistics for the independent, dependent, and other covariates included in the analysis for the total sample as well as by the sex of individuals respondents self-reported as having ever been romantically attracted to at wave I. This table shows that the large majority (85%) of persons included in the sample report opposite sex only attraction at wave I, and a 100% heterosexual identity. Those individuals who report same or both sex romantic attraction at wave I, make up 6.67% of the sample population; this sample is further subdivided by subsequent sexual orientation identification. Of those that report same or both sex attraction, those persons who report a 100% homosexual identity make up .5% of the total sample, those that report a bisexual identity compose .3% of the total sample, those that report a “mostly heterosexual identity” compose .89% of the total sample, and those that report

100% heterosexual identity make up 5% of the total sample. While these percentages are quite small, due to the large sample size of the Add Health study the Ns for each subpopulation are still adequate to perform multivariate analyses on these detailed sub-groups.

(Table 1 about here)

Table 1 also shows interesting differences by romantic attraction. Those individuals who report opposite-only attraction at wave I are more likely to be younger, and female than those individuals who report same or both sex attraction at wave I. Moreover, those individuals who report opposite sex only attraction in wave I have higher levels of school attachment, lower CESD depression scores and rates of suicidal thought at wave I, and lower levels of CESD depression scores in wave III. Finally, those individuals who report same/both sex romantic attraction are significantly more likely to engage in same-sex relationships at both waves I and III, and less likely to engage in opposite sex relationships at wave III. There is no significant difference, however, between engaging in opposite-sex relationships at wave I by romantic attraction.

Multivariate Analysis of Depression

The first three columns of Table 2 present the betas for the relationship between sexual minority status trajectories and depression derived from ordinary least squares multivariate regressions⁴. Model 1 shows that controlling for only sociodemographic features reveals that all SM trajectories are positively and significantly associated with higher CESD depression scores. For example, those individuals who report other sex attraction only at wave I and a bisexual identity at wave III report a CESD score 2.21 points higher ($p < .001$) than those that report opposite sex only attraction at wave I a 100% heterosexual identity at wave III. Those

⁴ All models for both depression and suicidal thought analyses, control for Add Health's complex survey design using the "svy" commands in Stata version 9.0.

individuals who report a “mostly straight/heterosexual” identity, regardless of whether they report opposite sex only attraction at wave I ($\beta=2.07$, $p<.001$) or same/both sex attraction ($\beta=2.65$, $p<.001$), have similarly elevated depression scores compare to their non-SM peers.

In model 2, controlling for school attachment, victimization, romantic relationships, and previous mental health, mediates the relationship between sexual orientation trajectories such that among persons who report same/both-sex attraction at wave I, only those that identify as “mostly straight/heterosexual” are significantly associated with higher depression scores ($\beta=1.97$, $p<.01$). Those individuals that report opposite sex only attraction at wave I and a SM identity at wave III, however, are still significantly associated with higher depression scores. Attachment to school significantly reduces depression scores, while victimization increases them. Engaging in a same-sex relationship in adolescence is also associated with higher depression scores. Not surprising, previous depression scores are positively associated with current depression levels.

Model three adds controls for self-reported life satisfaction, victimization, and romantic relationships as measured in wave III. The link between sexual orientation trajectories and mental health is further mediated in this model such that only those persons who report opposite sex only attraction and either a bisexual ($\beta=1.30$, $p<.05$), or a mostly straight/heterosexual ($\beta=1.48$, $p<.001$) identity have significantly higher depression scores than non-SMs.

(Table 2 about here)

Multivariate Analysis of Suicidal Thoughts

The last three columns in Table 2 present the betas derived from logistic regressions between SM status and other covariates on suicidal thoughts as reported in wave III. In model one, many SM trajectories are associated with increased odds of reporting suicidal thoughts

compared to those individuals who report opposite sex only attraction in wave I and a “100% heterosexual” identity in wave III, including those who report same-both sex attraction and a gay ($\beta=1.63$, $p<.01$) or mostly straight ($\beta=1.45$, $p<.001$) identity, and those who report opposite sex attraction and a gay ($\beta=1.05$, $p<.001$), bisexual ($\beta=1.25$, $p<.001$), or a mostly straight ($\beta=1.13$, $p<.001$) identity in wave III. Adding additional controls measured at wave I reduces the magnitude of these relationships, but all previous trajectories remain associated with being more likely to report suicidal thoughts. In model three, however, with the inclusion of covariates measured at wave III, only those individuals who report opposite sex attraction in wave I and a mostly straight identity in wave III are significantly associated with suicidal thoughts ($\beta=.59$, $p<.001$).

In sum, these results suggest that after controlling for victimization, social ties, and previous mental health status, the majority of SM trajectories do not have significantly worse mental health outcomes than their non-sexual minority peers. Indeed, those individuals who report same-both sex attraction at wave I, regardless of their sexual identity at wave III have no significant risks associated with their SM status in wave III. Rather, it appears that those individuals who do not report same-sex attraction at wave I and in wave III report a bisexual or mostly straight identity that may be at risk for worse mental health as young adults.

Discussion

In recent years, a body of work has illustrated the complexity of sexual orientation and the variety of possible differential sexual identity trajectories (Diamond 2005; Savin-Williams and Diamond 2000). The findings presented in this paper present evidence for the need to conduct more nuanced investigations into the link between sexual orientation and mental health. In contrast to much existing evidence, sexual minority status does not engender people to

depression or suicidality; rather, it appears that there are specific pathways or trajectories through which risk is elevated. By disaggregating respondents in wave I into two distinct groups—those report same sex romantic attraction and those that do not—this research elucidates important subpopulation variations in mental health outcomes for sexual minority young adults.

Theories of sexual identity development argue that the longer individuals remain stable in their sexual minority status the mental health risks associated with this status will subside (Cass, 1979; Coleman 1982; Troiden, 1989). I find partial support for these theories. The analysis reveals that indeed, those persons who identify same-both sex attractions at wave I do not significantly differ in their mental health outcomes from non-sexual minorities. Rather, it is those individuals who do not report same sex attraction at wave I and report either a bisexual or mostly heterosexual identity that are significantly associated with worse mental health compared to their non-SM peers. Interestingly, those persons who do not report same-sex attraction at wave I, but report a mostly homosexual or 100% homosexual identity at wave III, do not have significantly worse mental health, suggesting that there may be something about delayed same-sex attraction identification and these two identities that is unique.

Traditional theories of sexual identity development make no space for individuals to report identities other than 100% homosexual or 100% heterosexual, therefore, bisexually or mostly heterosexually identified persons are conceptualized as in “transitory” identities, and therefore at risk for worse mental health. Traditionally, there have been very few examinations of individuals who report “mostly heterosexual” identities. Yet recent examinations have suggested that “mostly heterosexual” persons fall between 100% straight and bisexual identified persons in their same sex orientation attractions, orientations, and fantasies, suggesting that “mostly straight” persons are a distinct subpopulation with a unique set of characteristics and risk factors

(Thompson and Morgan 2008). While for some, a mostly straight or bisexual identity may be a transitional space to a different sexual identity, for many individuals mostly straight or bisexual will remain their permanent sexual identity, yet, there are limited social support networks or “mostly straight” advocates that work towards affirming a “mostly straight” identity. Similarly, bisexuals have been found to have higher levels of identity confusion and lower levels of perceived community connectedness (Balsam and Mohr 2007; Hutchins 1996). While this research finds that those persons who identify as bisexual or mostly straight are indeed more likely to report worse mental health, this result is only true for those persons who do not identify same-sex attraction at wave I. This suggests that these identities are not invariably related to worse mental health, but that time spent in a SM identity may be associated with increased comfortableness and confidence, as well as increased access and involvement in SM social networks.

Importantly, in line with theories of minority stress, victimization, and attachment to school are important mechanisms through which the relationship between SM status and mental health are mediated and may be improved. While engaging in a same-sex romantic relationship in wave I may be positively associated with worse mental health, same-sex relationships have a negative, although non-significant, relationship. Additionally, this findings point to improving individuals overall satisfaction with their lives as a mechanism through which mental health risks can be mediated.

This research is not without limitations. While the use of same-sex “romantic attraction” as the indicator of SM status in wave I is a more salient measure for this population, unfortunately, it obscures the differences that may exist between those individuals who have publicly labeled themselves as gay, lesbian, or bisexual to their family member and peers, and

those who have not. Additionally, I am unable to measure gender non-conformity, which has previously been shown to be an important predictor of worse mental health among sexual minorities (Lasser & Tharinger, 2003). Finally, while the use of longitudinal data allows me to examine the timing of SM identification, I cannot assess causality. It may be that endogenous factors, such as hostile environments that cause an individual to both have worse mental health and delay SM identification.

Despite these limitations, this research points to the timing and pattern of sexual identity development as an important mechanism through which sexual minority mental health can be improved. Contrary to much of the existing research, not all sexual minority adolescents are predetermined to have poor mental health outcomes. Rather than being passive subjects of discrimination, sexual minorities are capable of managing and improving their mental health status through a variety of techniques (Eccles et al., 2004; Lasser & Tharinger, 2003; Maguen et al., 2002; Russell, 2005). It is critical, however, that advocacy and social support networks are extended to all SM persons, this means, providing increased support for those persons who identify as bisexual or mostly heterosexual, a population where research is severely lacking.

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Table 1. Descriptive statistics of covariates for the total sample and by WI self reported romantic attraction

	N/Range	Weighted per cent/Mean	Other Sex Attraction, WI	Same/Both Sex Attraction, WI
<i>Sexual Identity Trajectories</i>				
Same/both WI, Gay WIII	56	0.49%		
Same/both WI, Bisexual WIII	40	0.33%		
Same/both WI, Mostly Straight WIII	93	0.89%		
Same/both WI, Straight WIII	551	4.96%		
Opposite WI, Gay III	126	1.08%		
Opposite WI, Bisexual WIII	151	1.23%		
Opposite WI, Mostly Straight	736	6.33%		
Opposite WI, Straight WIII	9,876	84.69%		
<i>Age</i>				
11 to 14	1,556	17.05%	17.29%	13.98%
14 to 16	3,538	32.30%	32.17%	33.94%
16 to 18	4,680	34.64%	34.66%	34.32%
18+	1,855	16.01%	15.87%	17.76%
Female	6,200	49.94%	50.66%	*** 40.88%
Male	5,429	50.06%	49.34%	59.12%
<i>Race/Ethnicity</i>				
Non-Hispanic White	6,437	60.02%	69.39%	64.29%
Non-Hispanic Black	2,332	14.76%	14.66%	16.11%
Hispanic	1,859	11.21%	10.99%	13.98%
Asian	800	3.33%	3.33%	3.31%
Other	201	1.67%	1.62%	2.31%
Parent Education	0 to 18	13.27	13.28	13.16
Respondent Education	6 to 22	13.31	13.3	13.06
<i>WI, Social Psychological Mediators</i>				
Attachment to school	0 to 6.25	4.64	4.65	** 4.5
Victimized WI	4,310	37.75%	37.55%	40.31%
Any SS Relationship, WI	195	1.48%	1.21%	*** 4.79%
Any OS Relationship, WI	7,676	66.11%	66.23%	64.67%
CESD scale WI	0 to 25	10.97	10.05	* 10.34
Suicidal WI	1,626	13.79%	13.23%	*** 20.74%
<i>Wave III, Social Psychological Mediators</i>				
Self Satisfaction, WIII	1 to 5	1.92	1.92	2.02
Victimized, WIII	1,177	10.40%	10.22%	12.56%
Any SS Relationship, WIII	330	1.48%	2.41%	*** 10.54%
Any OS Relationship, WIII	9,642	84.07%	84.56%	*** 77.83%
<i>Dependent Variables</i>				
Depression Scale, WIII	0 to 28	5.34	5.29	*** 5.96
Suicidal Thoughts, WIII	710	6.83%	6.66%	8.89%

* p<.05; ** p<.01; *** p<.001

The "Same/both" refers to self-reported same or both sex attraction as reported in Wave I,

while "Opposite" refers to opposite sex only attraction as reported in Wave I

Results control for complex survey design using "svy" commands in Stata 9.0

Source: National Longitudinal Study of Adolescent Health

Table 2: Betas derived from multivariate OLS (depression scales) and logistic regressions (suicidal thoughts) for outcomes at Wave II

	Depression Scales			Suicidal Thoughts		
	Model 1 β (SE)	Model 2 β (SE)	Model 3 β (SE)	Model 1 β (SE)	Model 2 β (SE)	Model 3 β (SE)
Sexual Identity Trajectories						
Same/both WI, Gay WIII	2.04 (.64) **	1.34 (.72)	0.50 (.81)	1.57 (.52) **	1.63 (.57) **	1.11 (.68)
Same/both WI, Bisexual WIII	1.37 (.66) *	1.00 (.63)	0.43 (.65)	0.66 (.58)	0.49 (.49)	0.17 (.52)
Same/both WI, Mostly Straight WIII	2.65 (.73) ***	1.97 (.67) **	1.07 (.62)	1.45 (.37) ***	1.14 (.37) **	0.84 (.47)
Same/both WI, Straight WIII	0.47 (.21) *	0.36 (.20)	0.38 (.20)	0.05 (.25)	-0.06 (.27)	-0.06 (.29)
Opposite WI, Gay III	1.08 (.44) *	1.01 (.42) *	0.48 (.54)	1.05 (.32) ***	1.12 (.33) ***	0.74 (.44)
Opposite WI, Bisexual WIII	2.21 (.51) ***	1.77 (.48) ***	1.30 (.51) *	1.25 (.32) ***	1.05 (.35) **	0.71 (.37)
Opposite WI, Mostly Straight	2.07 (.28) ***	1.86 (.26) ***	1.48 (.26) ***	1.13 (.14) ***	0.99 (.15) ***	0.59 (.15) ***
Age (ref 18+)						
11 to 14	0.60 (.19) **	0.82 (.19) ***	0.75 (.18) ***	0.55 (.19) **	0.55 (.20) **	0.40 (.20) *
14 to 16	0.33 (.15) *	0.44 (.15) **	0.39 (.14) **	0.37 (.18) *	0.34 (.18)	0.25 (.19)
16 to 18	0.28 (.14) *	0.29 (.14) *	0.23 (.13)	0.15 (.15)	0.11 (.15)	0.02 (.16)
Female						
	1.29 (.11) ***	1.15 (.12) ***	1.04 (.13) ***	-0.10 (.12)	-0.10 (.13)	-0.31 (.13) *
Race/Ethnicity (ref non-Hispanic white)						
Non-Hispanic Black	0.67 (.16) ***	0.51 (.15) ***	0.63 (.15) ***	-0.48 (.17) **	-0.55 (.18) **	-0.67 (.19) ***
Hispanic	0.71 (.20) ***	0.71 (.21) ***	0.78 (.20) ***	0.06 (.18)	0.03 (.19)	-0.08 (.20)
Asian	0.90 (.29) **	0.91 (.28) ***	0.88 (.27) ***	-0.05 (.30)	-0.17 (.32)	-0.08 (.20)
Other	0.38 (.45)	0.23 (.46)	0.33 (.46)	0.37 (.29)	0.29 (.27)	0.35 (.28)
Parent Education						
Respondent Education	-0.12 (.02) ***	-0.10 (.02) ***	-0.10 (.02) ***	0.05 (.03)	0.05 (.03)	0.08 (.03) **
	-0.11 (.03) **	-0.08 (.03) **	-0.08 (.02) ***	-0.09 (.03) *	-0.04 (.03)	-0.01 (.02)
WI, Social Psychological Mediators						
Attachment to school		-0.42 (.06) ***	-0.29 (.07) ***		-0.15 (.06) *	-0.07 (.06)
Victimized WI		0.39 (.12) ***	0.28 (.11) *		0.42 (.12) ***	0.35 (.13) **
Any SS Relationship, WI		0.96 (.43) *	0.82 (.40) *		-0.99 (.47) *	-1.13 (.47) *
Any OS Relationship, WI		-0.16 (.12)	-0.11 (.12)		-0.42 (.12) ***	-0.40 (.12) ***
CESD scale WI		0.24 (.02) ***	0.23 (.02) ***		0.04 (.02) *	0.00 (.02)
Suicidal WI					0.88 (.14) ***	0.68 (.14) ***
Wave III, Social Psychological Mediators						
Self Satisfaction, WIII			1.06 (.40) **			0.35 (.11) **
Victimized, WIII			0.98 (.51) ***			0.34 (.36) ***
Any SS Relationship, WIII			0.41 (.51)			0.34 (.36)
Any OS Relationship, WIII			-0.04 (.14)			-0.01 (.16)
CESD scale, WIII						0.13 (.01) ***
Constant	6.91 (.45) ***	6.25 (.44) ***	3.30(1.08) **	-2.55 (.50) ***	-2.94 (.59) ***	-5.05 (.62) ***

* p<.05; ** p<.01; *** p<.001

The "Same/both" refers to self-reported same or both sex attraction as reported in Wave I, while "Opposite" refers to opposite sex only attraction as reported in Wave I

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