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Adolescent sexual orientation and developmental transition in emerging adulthood: Disparities in school, work, residence, and transportation

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Abstract

Purpose: To examine associations between adolescent sexual minority status and developmental transitions in school, work, residence, and transportation five years later.

Method: We analyzed data from Waves 2 (Mean age = 17.2) and 7 (Mean age = 22.6) of the NEXT Generation Health Study ($n = 2000$). Relative risks were estimated using Poisson regressions.

Results: Relative to heterosexual females, sexual minority females were more likely to report not attending school (RR = 1.27, 95% CI = 1.02, 1.59), not planning to complete college (RR = 1.60, 95% CI = 1.27, 2.01), and not having a driver's license (RR = 2.64, 95% CI 1.38, 5.05) at Wave 7. Relative to heterosexual males, sexual minority males were more likely to report living in three or more places in the past year (RR = 2.98, 95% CI = 1.31, 6.76).

Conclusions: Adolescent sexual minority status predicted worse educational outcomes among females and more unstable living environment among males.

Implications and Contributions:

Sexual orientation disparities among youth in the United States are not restricted to health outcomes, but extend to developmental transition outcomes related to education, living environment, and reduced mobility. More work is needed to understand reasons for, and develop empirically based strategies to reduce disparities in these developmental transition outcomes.

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Keywords

Sexual Orientation; Educational attainment; Occupational status; Residence status; Driver's license

The transition from adolescence into young adulthood is characterized by identity exploration and changes in school, work, and residence statuses.¹ Youth in their early twenties often take on new roles as they finish school and enter the workforce, reflecting a developmental transition culminating in adult independence. While sexual minority youth frequently experience distress due to minority status,² it is unclear if sexual minority status also impacts the transition to adulthood.

Sexual minority youth in the National Longitudinal Study of Adolescent Health had shortened educational careers, particularly among females and during the adolescent period.³ However, sexual orientation disparities in work status or income earned have not been reported. Among U.S. adults, sexual orientation disparities in income diminished over time,⁴ with recent national estimates showing higher income among sexual minority than among heterosexual adults.⁵ In terms of residence status, older sexual minority adults are more likely to live alone than older heterosexual adults,⁶ yet no parallel adolescent research is available. Finally, obtaining a driver's license can be a proxy for emerging adult independence and can increase transportation mobility. Yet, it is not known whether sexual minority adolescents have less access to a driver's license. Accordingly, this study examined whether sexual minority status was associated with developmental transitions relevant to adult independence in the domains of school, work, residence, and transportation.

Method

Sample

Data came from Waves 2 (11th grade) and 7 (4-years post-high school) of the NEXT Generation Health Study (NEXT), a 7-year longitudinal study of 2785 adolescents beginning in 2009/2010. A 3-stage stratified design was used to recruit a nationally representative sample of U.S. high school students. Sexual orientation was assessed at Wave 2; accordingly, we first restricted the sample to Wave 2 participants ($n = 2439$; 87.6% of the full sample; mean age = 17.2, SD = 0.51). The final analytic sample included 2000 youth (82.5% of Wave 2 sample; mean age = 22.6, SD = 0.53) who completed the Wave 7 questionnaire and provided responses to all study variables. Parents provided written consent for adolescent participation; upon turning 18 years of age, participants provided consent. The study was approved by the Institutional Review Board of the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development.

Measures

Sexual Orientation.—Participants were asked “Which of the following best describes your sexual orientation?” Table 1 presents frequencies and percentages of responses. Due to low frequencies, those endorsing any same-sex or questioning attraction were combined for analyses.

School Status.—Participants responded to two items indicating whether they are currently attending school and how much schooling they plan on completing.

Work Status.—Participants were asked whether they are currently working and to provide their best guess of pre-tax personal earnings.

Residence Status.—Participants reported the number of places they lived in the past 12 months (3 versus 0–2) and whether they currently live alone (alone versus else).

Driver's License.—Participants were asked if they have a driver's license. Those without any license were contrasted to those with a learner's permit or driver's license.

Covariates.—Race/ethnicity and family affluence measured by the Health Behaviour in School-Aged Children Family Affluence Scale⁷ were included as covariates.

Statistical Analyses

We estimated unadjusted and adjusted relative risks of disparities between sexual minority and heterosexual adolescents in developmental transition outcomes using sex-stratified Poisson regressions. Analyses were conducted in STATA and accounted for complex survey design.

Results

Sample characteristics for the Wave 2 NEXT sample and the final sample are largely similar (Table 1). Weighted percentages of young adulthood adjustment outcomes by sexual orientation are presented in Table 2. Relative to heterosexual females, sexual minority females were more likely to report not currently attending school (Adjusted Relative Risk [ARR] = 1.26, 95% CI = 1.04, 1.52) and not planning to finish college (ARR = 1.49, 95% CI = 1.22, 1.82). Sexual minority females were also more likely to report not having a driver's license (Relative Risk = 2.64, 95% CI = 1.38, 5.05), although this association was attenuated after controlling for covariates (ARR = 1.94, 95% CI = 0.92, 4.12). Relative to heterosexual males, sexual minority males were more likely to report living in three or more places over the last year (ARR = 4.53, 95% CI = 2.13, 9.62).

Discussion

Sexual minority females in the NEXT study were less likely to be currently enrolled in school and less likely to plan on completing college, which is consistent with prior research³ and may reflect elevated minority stress or higher rates of school bullying.² As education disparities may have long-term effects on health,⁸ other possible reasons for these disparities, including dissatisfaction in high school and reduced quality of social relationships, need to be investigated.

Our study is the first to show a lower likelihood of having a driver's license among sexual minority females. Young people wishing to obtain a driver's license often rely on supervised practice with a parent.⁹ Lower parental support may therefore be a barrier for sexual

minority youth to obtain a driver's license. By emerging adulthood, not having a driver's license could limit mobility and employment opportunities. Further studies are needed to identify possible causes and consequences of this disparity.

Analyses of work-related outcomes revealed few differences according to sexual orientation, which is consistent with research among adults that focused on income.^{4,5} In contrast, sexual minority males had markedly higher residential mobility than their heterosexual peers, which is linked with a wide range of long-term health outcomes.¹⁰ Examination of possible discrimination and rejection in the living environment as well as features of the neighborhood environment that increase mobility is warranted for sexual minority males.

Study limitations include the use of a single attraction item to measure sexual orientation and inadequate sample size to examine sexual orientation subgroup differences. Despite these limitations, findings contribute to our understanding of how sexual minority status may lead to social disadvantages during early adulthood and highlight the importance of identifying well-timed strategies to promote sexual minority youth's educational and vocational goals, improve their living environment, and increase their access to driver's licensure.

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Abbreviations:

ARR	adjusted relative risk
CI	confidence interval
RR	relative risk

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Table 1.

Sample characteristics for the Wave 2 NEXT sample and the analytic sample

	Wave 2 NEXT sample (n = 2439)			Analytic sample (n = 2000)					
	Overall			Overall		Males (n = 822)		Females (n = 1178)	
	Frequency	Percent		Frequency	Percent	Frequency	Percent	Frequency	Percent
Sex									
Male	1076	44.9%	822	40.4%	--	--	--	--	--
Female	1363	55.1%	1178	59.7%	--	--	--	--	--
Race/Ethnicity									
White	986	58.6%	834	59.4%	353	61.4%	481	57.9%	
African Americans	611	17.5%	525	19.7%	186	16.0%	339	22.2%	
Hispanic	715	19.6%	541	17.0%	246	17.9%	295	16.4%	
Other	120	4.3%	100	4.0%	37	4.7%	63	3.5%	
Family affluence									
Low	775	23.1%	622	22.9%	248	22.9%	374	22.9%	
Medium	1148	49.8%	944	49.9%	405	54.0%	539	47.1%	
High	516	27.1%	434	27.3%	169	23.2%	265	30.1%	
Sexual orientation									
Attracted to opposite gender	2196	93.7%	1831	93.7%	775	96.6%	1056	91.7%	
Attracted to same gender	45	1.2%	36	1.3%	20	1.6%	16	1.1%	
Attracted to both genders	119	3.7%	104	4.0%	19	1.1%	85	5.9%	
Questioning	42	1.4%	29	1.0%	8	0.7%	21	1.3%	

Note. Unweighted frequencies and weighted percentages are presented.

Table 2.

Developmental transition outcomes in emerging adulthood (Wave 7) by sexual orientation at Wave 2

	Females (<i>n</i> = 1178)					
	Weighted percentages		Unadjusted		Adjusted	
	Heterosexual	Sexual minority	Relative Risk	95% CI	Relative Risk	95% CI
Not currently attending school	56.4%	71.8%	1.27	1.02, 1.59	1.26	1.04, 1.52
Not planning to finish college	40.6%	65.0%	1.60	1.27, 2.01	1.49	1.22, 1.82
Not currently working	23.1%	35.6%	1.54	0.92, 2.58	1.41	0.92, 2.16
No personal earnings	7.8%	7.6%	0.96	0.52, 1.78	0.75	0.38, 1.49
Lived in 3 places in past year	12.5%	17.9%	1.43	0.42, 4.88	1.55	0.45, 5.32
Living alone	5.2%	4.0%	0.77	0.25, 2.37	0.94	0.31, 2.88
No driver's license	8.8%	23.2%	2.64	1.38, 5.05	1.94	0.92, 4.12

	Males (<i>n</i> = 822)					
	Weighted percentages		Unadjusted		Adjusted	
	Heterosexual	Sexual minority	Relative Risk	95% CI	Relative Risk	95% CI
Not currently attending school	67.1%	75.9%	1.13	0.92, 1.39	1.20	0.98, 1.47
Not planning to finish college	49.2%	41.4%	0.84	0.53, 1.33	0.81	0.53, 1.26
Not currently working	19.2%	23.3%	1.21	0.66, 2.22	1.11	0.64, 1.93
No personal earnings	5.0%	11.0%	2.18	0.75, 6.34	1.68	0.83, 3.43
Lived in 3 places in past year	11.3%	33.8%	2.98	1.31, 6.76	4.53	2.13, 9.62
Living alone	6.0%	2.3%	0.38	0.08, 1.75	0.33	0.09, 1.18
No driver's license	7.5%	12.8%	1.72	0.77, 3.82	1.32	0.71, 2.44

Note. Race/ethnicity and family affluence were controlled for in the adjusted models. Significant findings ($p < 0.05$) are presented in **bold**.