SOC8802: GISD Proseminar Final Paper
Self-Rated Health of Sexual Minorities

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1 Introduction

Sociologists and demographers have long been interested in the health of the population. In particular, they have examined how inequality relates to health as some populations experience better health than others. And while the causal mechanism remains harder to identity, it is fascinating nonetheless to explore associations between one's identity and self-rated health.

One contemporary mechanism of stratification is sexual identity, and research has typically shown that lesbian, gay, bisexual, and queer individuals (referred to as sexual minorities) often have worse self-rated health than do their heterosexual counterparts (Institute of Medicine 2011). Popular explanations highlight the role of differential treatment via microaggressions and discrimination sexual minorities experience at home and in the workplace relative to heterosexuals (Gorman et al. 2015) and the importance of the "minority identity"—known as Minority Stress Theory (MST) (Meyer 2003).

While self-rated health is, by definition, not the most "objective" measure of health, self-rated health nevertheless has proven to be a robust and even independent predictor of disability, morbidity, mortality, and well-being (Idler and Benyamini 1997). Therefore, self-rated health is an important variable and serves as the dependent variable of interest in the OLS regression models that are the focus of this paper. I examine self-rated health differentials between sexual minorities and heterosexuals. In the next section, I present information regarding the data, the methods, and describe how the variables were coded. I then briefly present the results.

2 Data and Method

2.1 Data

Data come from the National Health Interview Survey (NHIS), a nationally-representative sample of the civilian, noninstitutionalized population in the United States. The NHIS is housed within the National Center for Health Statistics, one part of the Centers for Disease Control (CDC). Data collection began in 1957 and has continued every year since. The sample design is cross-sectional at the household level and interviews are ongoing through the duration of the year. The NHIS utilizes an area probability design that allows representative sampling of households and noninstitutionalized group areas. The core questionnaire involves questions related to four different parts: 1) household; 2) family; 3) sample adult; 4) sample child. Basic health and demographic information, as well as information on "current health topics" are asked in relation to each of the four topics listed above. Put another way, an individual is asked to provide health and demographic information on everyone who resides in the household, everyone in their family, and then an adult is randomly selected to provide information on themselves and a child.

To analyze disparities in self-rated health between sexual minorities and heterosexual respondents and to ensure that enough sexual minorities were in the sample for meaningful analysis, I pooled data from the 2017 and 2018 years of the NHIS.

2.2 Variables

Self-Rated Health. The dependent variable for the OLS regressions is self-rated health. Respondents were asked how they would rate their overall health and were given the following options to choose from: 1) excellent; 2) very good; 3) good; 4) fair; or 5) poor.

I coded the variable as follows: 1=poor; 2=fair; 3=good; 4=very good; 5=excellent. Most people generally rated their health positively. The average was about 3.37, and only 13.9% of individuals rated their health as poor or fair.

Sexual Identity. The main independent variable of interest is sexual identity. Adults in the sample were asked, "Which of the following best represents how you think of yourself?" They were given the following responses: 1) lesbian or gay; 2) straight, that is, not gay or lesbian; 3) bisexual; 4) something else; 5) I don't know the answer. Respondents who answered "I don't know" were coded as missing since there is a plethora of sexual identities with which they might identify, making it arduous to group them into one meaningful category, or respondents might not have understood the question. Table 1 indicates that 96.3% of respondents identified as straight or heterosexual, 1.92% identified as lesbian or gay, 1.31% identified as bisexual, and 0.49% identified as "something else."

Socioeconomic Status. I analyzed two different measures related to one's socioeconomic status. The first is total family income (0 = less than \$35,000; 1 = \$35,000-\$74,999; 2 = \$75,000-\$99,999; 3 = \$100,000 and over). The second is education (0 = less than high school; 1 = high school; 2 = some college or Associate's; 3= Bachelor's degree; 4 = Master's, Professional, or Doctoral Degree).

Other Control Variables. I also controlled for respondent's sex (0 = male; 1 = female), race (0 = non-Hispanic White; 1 = non-Hispanic Black; 2 = Hispanic or Latinx; 3 = Other), marital status (0 = married; 1 = previously married (widowed, divorced, separated); 2 = never married), and age (mean = 50.8, sd = 18.4). Lastly, I controlled for the year the survey was administered and completed because I pooled data from 2017 and 2018 (2017 = 0; 2018 = 1).

2.3 Analytic Plan

I used Ordinary Least Squares (OLS) regression to predict self-rated health. In model 1, I included sexual identity, as well as a host of basic demographic controls (sex, race, age, and year). In model 2, I introduced marital status as a categorical variable, as an indicator of one's social resources, to see how that would influence the relationship between sexual identity and self-rated health. Finally, in model 3, I added total family income and education to see how controlling for economic resources influences the relationship of interest.

3 Results

In the first model, those who were gay and lesbian, bisexual, and those who identified as "something else" all had worse self-rated health than did heterosexuals. After controlling for marital status, the health differentials did decrease in magnitude for all three sexual minority groups, suggesting that at least some of the difference can be attributed to differences in the respondents' marital status. In the third and final model, after introducing socioeconomic status variables, sexual minorities still have worse self-rated health relative to those who are heterosexual. For instance, gays and lesbians have about 0.16 units lower self-rated health on average ($p < 0.001$), whereas bisexual people have about 0.35 units lower self-rated health on average ($p < 0.001$).

4 Appendix

Table 1: **Descriptive Statistics Table**

Variable	Mean (SD)	Percent
Self-Rated Health	3.37 (1.06)	
Sexual Identity		
Heterosexual (ref)		96.3
Gay or Lesbian		1.92
Bisexual		1.31
Something Else		0.49
Sex		
Male (ref)		45.7
Female		54.3
Race		
White (ref)		69.6
Black		10.7
Latinx		12.2
Other		7.5
Age	50.8 (18.4)	
Year		
2017		51.1
2018		48.9
Marital Status		
Married (ref)		44.9
Divorced, Separated, or Widowed		28.9
Never Married		26.2
Family Income	1.28 (1.17)	
Education	2.01 (1.18)	

N = 46,359
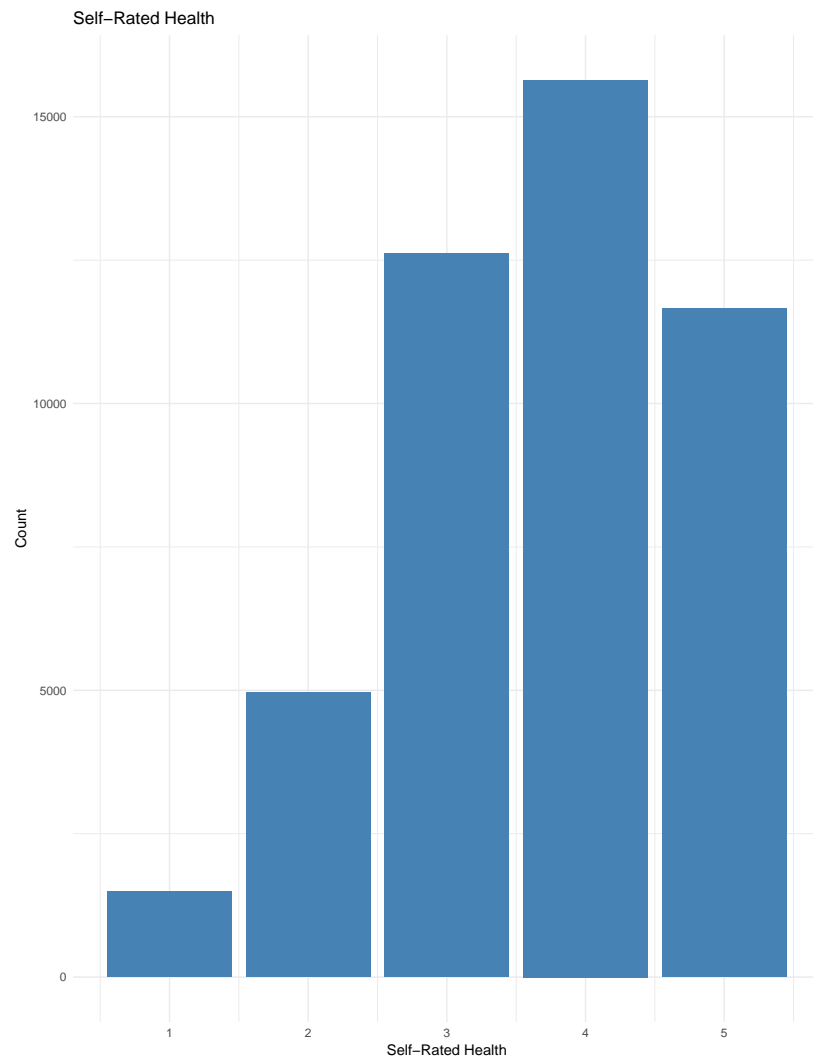
Figure 1: Self-Rated Health.

Table 2: **OLS Regression Results**

	Dependent Variable: Self-Rated Health		
	Model 1	Model 2	Model 3
Sexual Identity			
Gay or Lesbian	−0.11**	−0.07*	−0.16***
	(0.03)	(0.03)	(0.03)
Bisexual	−0.45***	−0.40***	−0.35***
	(0.04)	(0.04)	(0.04)
Something Else	−0.24***	−0.19**	−0.13*
	(0.07)	(0.07)	(0.06)
Sex			
Female	−0.002	0.01	0.02*
	(0.01)	(0.01)	(0.01)
Race			
Black	−0.32***	−0.28***	−0.15***
	(0.02)	(0.02)	(0.02)
Latinx	−0.20***	−0.20***	−0.01
	(0.01)	(0.01)	(0.01)
Other	−0.12***	−0.12***	−0.12***
	(0.02)	(0.02)	(0.02)
Age	−0.02***	−0.02***	−0.01***
	(0.0003)	(0.0003)	(0.0003)
Year	0.001	−0.002	−0.01
	(0.01)	(0.01)	(0.01)
Marital Status			
Divorced/Separated		−0.21***	0.001
		(0.01)	(0.01)
Never Married		−0.18***	0.04**
		(0.01)	(0.01)
Total Family Income			0.17***
			(0.005)
Education			0.15***
			(0.004)
Constant	4.60***	4.70***	3.90***
	(0.02)	(0.02)	(0.02)
Observations	46,359	46,359	46,359
R^2	0.09	0.10	0.17

Note:	*p<0.05; **p<0.01; ***p<0.001

5   References

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