Mental Health among Minoritized Individuals in the United States

Extended Abstract

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Abstract

Objective: To examine the relationship between minoritized identity and mental health. **Methods:** Descriptive and logistic regression analyses were conducted on males and females separately using nationally representative data collected from the 2013-2017 NHIS. Individuals were placed in one of four categories: non-minoritized; minoritized based on racial/ethnic identity only; minoritized based on sexual identity only; or minoritized based on both racial/ethnic and sexual identity. Dichotomous measures of mental health were considered. **Results:** Individuals minoritized based on racial/ethnic identity were less likely to report poor mental health and individuals minoritized based on sexual identity were more likely to report poor mental health compared to non-minoritized individuals. Among individuals minoritized based on both racial/ethnic and sexual identity, only males were more likely to report poor mental health compared to non-minoritized individuals.

Conclusion: There remains a need to identify the pathways through which minoritization is detrimental or protective for mental health.

The National Institute of Mental Health estimates as many as 18% of adults over the age of 18 in the United States have a mental illness defined as any mental, behavioral, or emotional disorder (2016). The prevalence of mental illness varies by age, race/ethnicity, and sex. Prior research suggests that minorities are more likely to report poor mental health compared to nonminorities. The objective of this study is to examine mental health among minoritized¹ individuals. Particularly of interest is the mental health of individuals with intersecting minoritized identities.

Literature Review

Mental Health among Individuals Minoritized based on Race or Ethnicity

Several studies suggest individuals minoritized based on race and/or ethnicity experience worse mental health outcomes compared to non-minoritized individuals. Roberts et al. (2011) found minorities had higher risks of post-traumatic stress disorder (PTSD) after experiencing a traumatic event compared to white individuals. Roberts et al. (2011) also found that minorities were less likely to seek treatment for PTSD compared to whites. A competing body of literature suggests minorities experience mental health outcomes similar to or better than those of whites in the United States. Breslau et al. (2005) found Hispanics and blacks had lower risks of depression, generalized anxiety disorder, and social phobia compared to whites. The authors suggest there may be a protective mechanism originating in childhood that could help explain the lower risks among minorities.

Mental Health among Individuals Minoritized based on Sexual Orientation

¹ It is important to note the difference between minority and minoritized. Minority is a noun that describes a person, place, or thing that is smaller, numerically, than the majority. Minoritized is a verb that refers to being forced into a group that is mistreated or discriminated against. It captures differences in power and access that result in determinantal outcomes. Therefore, individuals who are mistreated or discriminated against based on different identities are not minoritized. Minoritized individuals could make up a larger share of the population numerically (be consider the majority) and still be treated unfair. Throughout the remainder of the paper, the verb minoritized will be used to describe these individuals.

Prior literature suggests sexual minorities experience worse mental health outcomes compared to their heterosexual counterparts (Cochran, Björkenstam, Mays, 2017; Cochran and Mays, 2013). Bostwick et al. (2010) found male and female sexual minorities were more likely to report any mood or anxiety disorders. Similarly, Cochran et al. (2003) found sexual minorities were more likely to report depression, panic attacks, and psychological distress. Gevonden et al. (2014), in a study among sexual minorities in the Netherlands, found sexual minorities were more likely to report psychotic symptoms compared to heterosexual individuals. A significant question that remains to be answered in the mental health literature is how do individuals with intersecting minoritized identities compared to individuals with single or no minoritized identities?

Theoretical Framework of Intersectionality

The theoretical framework of intersectionality posits that social identities experienced at the individual level, such as race, ethnicity, gender, and sexual orientation interact with and reinforce the relationships between systems of privilege and oppression (e.g., sexism, racism, and heterosexism) at the structural level. (Bowleg 2012; Hankivsky 2012; Grollman 2014). Bowleg (2012) suggests that the framework could be used to identify and address health disparities by acknowledging that (1) social identities intersect and are not independent or unidimensional, (2) researchers should start with and focus on groups with multiple oppressive and marginalized histories, and (3) multiple interacting social identities at the individual level (e.g., sexual orientation and race/ethnicity) intersect with multiple structural factors (e.g., racism and poverty).

Over several decades, researchers have examined the relationship between mental health and race or ethnicity and the relationship between mental health and sexual orientation separately. However, Grollman (2012) suggests that focusing on a single disadvantage status misses important with-in group variations in the health among minority groups. Only a few studies have examined how the intersection of race/ethnicity and sexual interaction influences mental health. Studies such as Bostwick et al. (2014) examined individuals who were both racial/ethnic and sexual minorities. However, no study has used nationally representative data to quantitatively examine how multiple minoritized identities come together to influence mental health outcomes. The first objective of this study is to construct and test an independent variable that straightforwardly captures the intersection of race/ethnicity and sexual orientation. The purposed measured allows for comparisons between and within minoritized groups without the use of interaction terms. The second objective is to use nationally representative data to create a profile of minoritized individuals in the United States. Finally, the third objective is to examine the association between minoritized status and mental health. Particularly of interest is the association among individuals intersecting minoritized identities.

Two research questions guide the analysis. First, does mental health vary by dimensions of minoritized identity? Second, do differences in differences in mental health among minoritized individuals persist after controlling for sociodemographic, socioeconomic, neighborhood, and health characteristics? It is important to note that according to the framework of intersectionality, social identities such as race/ethnicity or sexual orientation, are not additive but multiplicative (conceptually not mathematically (Bauer, 2014)), and therefore, cannot be ranked. No one form of social inequality (e.g., sexism, racism, or heterosexism) is more salient than another (Bowleg, 2012, Bauer 2014). Therefore, the main hypothesis is that minoritized individuals, whether racial, sexual or both racial and sexual, will face greater barriers to care than non-minoritized individuals.

Methods

Data and Sample

Data for this analysis come from the 2013, 2014, 2015, 2016, 2017 waves of the National Health Interview Survey (NHIS), organized by the National Center for Health Statistics. The objective of the NHIS is to monitor the health of the population by collecting data on a variety of health topics through in-person interviews using computer-assisted personal interviewing (CAPI). The NHIS uses a multistage area probability sampling design that results in cross-sectional nationally representative data. The sampling frame for the NHIS is all households in the United States. The variables used in this analysis were drawn from the Sample Adult Core. The sample adult was one adult selected at random from each household in the NHIS.

The response rate for the Sample Adult Core varied from wave to wave of the NHIS. The response rates were 61.2% in 2013, 59.8% in 2014, 55.2% in 2015, 54.6% in 2016, and 53.0% in 2017. The sample size of the combined 2013 through 2017 waves of the NHIS was 164,696 sample adults. Sample adults with missing information on any of the variables used in the analysis were included. A total of 13,929 females and 10,492 males were excluded. The final analytic sample consisted of 140,275 sample adults, 76,771 females and 63,504 males. *Measures*

Dependent variable. The objective of this analysis was to examine the relationship between dimensions of minoritized identity and mental health outcomes. Mental health was measured using four indicators. The first indicator was *serious psychological distress* (no, yes). The serious psychological distress measure was constructed using the Kessler 6 (K6) nonspecific distress scale (Cohen and Zammitti, 2016). The K6 scale asked individuals about the frequency of symptoms such as sadness, nervousness, restlessness, hopelessness, worthlessness, and feeling

that everything was an effort in the past 30 days. The responses included none of the time (0), a little of the time (1), some of the time (2), most of the time (3), and all of the time (4). The individual items were summed, and the scale ranged from 0 to 24. Individuals with a total score of 13 or higher were categorized as having serious psychological distress (1).

From the K6 scale, a measure of *interference* was constructed. Individuals who reported any of the K6 symptoms were asked how often those symptoms interfered with their lives or activities. The responses included a lot (1), some (2), a little (3), or not at all (4). Individuals who reported a lot, some or a little were categorized as experiencing interference in life due to K6 symptoms (1) and individuals who reported not at all or did not report any K6 symptoms were categorized as not experiencing interfering feelings (0).

The third measure of mental health was history of interaction with a mental health professional in the past 12 months. Individuals were asked if they saw or spoke to a mental health professional such as a psychiatrist, psychologist, psychiatric nurse, or clinical social worker in the past 12 months. *Interaction with a mental health professional* was dichotomous, yes (1) versus no (0). The final measure of mental health measure access to mental health care. Individuals were asked if in the past 12 months they needed mental health care or counseling but did not get it because they could not afford it. *Unmet need for mental health care* was also dichotomous, needed but could not afford mental health care (yes, 1) versus no unmet need (no, 0).

Independent variable. The independent variable was dimensions of *minoritized identity*. Minoritization was conceptualized in terms of self-reported identity. Individuals can be minoritized based on one or many dimensions of identity including sex, race, ethnicity, sexual orientation, age, religion, socioeconomic status, and ability. Minoritization in this analysis was operationalized strictly based on race, ethnicity, and sexual orientation. Historically minoritized or excluded groups in the United States include individuals who are not white and do not identify as heterosexual. Before constructing the minoritization variable, race/ethnicity and sexual orientation were dichotomized. Race/ethnicity included non-Hispanic white, non-Hispanic black, Hispanic, and non-Hispanic other. Sexual orientation included straight, gay or lesbian, bisexual, something else, and do not know. The dichotomous race/ethnicity measure included any race/ethnicity other than white versus white. The dichotomous sexual orientation measure included any sexual orientation other than heterosexual versus heterosexual. Individuals were placed in one of four dimensions of minoritized identity, non-minoritized (white and heterosexual) (1), minoritized based on race/ethnicity only (not white and heterosexual) (2), minoritized based on sexual orientation only (white and not heterosexual) (3), and minoritized based on race/ethnicity and sexual orientation (not white and not heterosexual) (4). Covariates. Covariates were categorized into four groups: sociodemographic, socioeconomic, neighborhood, and health characteristics. Sociodemographic characteristics included age (18-24 years, 25-44 years, 45-64 years, and 65+ years), nativity status (foreign-born versus native-born), *marital status* (never married, currently cohabiting, currently married, and formerly married), and *region* (Northwest, Midwest, South, and West).

Socioeconomic characteristics included *educational attainment* (no high school diploma, high school diploma/GED, some college, and bachelor's degree or higher), *poverty status* as the ratio of family income to the federal poverty threshold (FPT) (poor (<100% FPT), near poor (\geq 100% to <200% FPT), and not poor (\leq 200% FPT)), *health insurance* (no coverage, public or other plan, and private plan), and *employment status* in the past 12 months (working, not working).

Neighborhood characteristics were individual-level and included *neighborhood tenure* (<3years, 4-10 years, 11-20 years, and >21 years) and a *neighborhood ecology scale* ranging from 1 to 4. Low neighborhood ecology was closer to 0, and high neighborhood ecology was closer to 4. Health characteristics included *self-reported health* (poor/fair, good/very good/excellent) and *activity limitations* (limited, not limited).

Statistical Procedures

Data for this study were analyzed using Stata version 15. Adjustments for sampling design were completed using the weighting command in Stata (*svy*). Descriptive and logistic regression analyses were used to examin the relationship between dimension of minoritization and mental health outcomes. Descriptive statistics included t-tests to test bivariate associations. Reduced and full logistic regression models were used to estimate the odds of favorable mental health (0) versus poor mental health (1). The reduced models include year and dimension of minoritization, while the full models include year, dimension of minoritization, and all the covariates.

Results

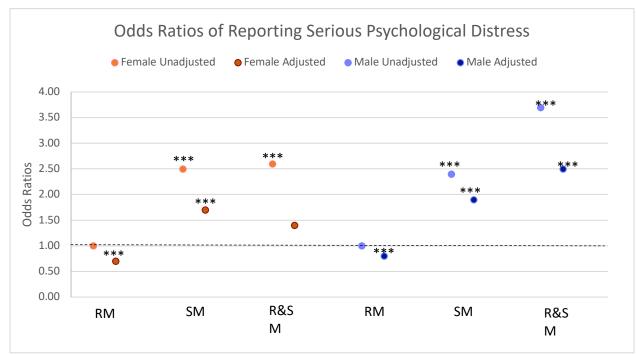
Tables 1 and 2 show the weighted percentages of the sample across the four dimensions of minoritization for males and females separately. Table 3 shows the preliminary results of the logistic regression model for males and females for four mental health outcomes.

Descriptive Results

Non-minoritized individuals made up the largest share of the sample, followed by
individuals minoritized based on race/ethnicity only. Individuals minoritized base on
sexual orientation only or both race/ethnicity and sexual orientation made up small shares
of the sample.

- Individuals minoritized based on race/ethnicity only tended to be less educated than all other groups. Non-minoritized individuals and individuals minoritized based on sexual orientation only had the highest levels of educational attainment
- Individuals minoritized based on race/ethnicity only and individuals minoritized based on both race/ethnicity and sexual orientation were more likely to be poor or near-poor.
- Individuals minoritized based on sexual orientation only and individuals minoritized based on race/ethnicity and sexual orientation were more likely to have high residential mobility compared to non-minoritized individuals.
- Individuals minoritized based on race/ethnicity only and individuals minoritized both on race/ethnicity and sexual orientation reported higher levels of poor or fair health compared to compared to non-minoritized individuals and individuals minoritized on sexual orientation only.
- Individuals minoritized based on sexual orientation only had the highest level of any reported activity limitations
- Individuals minoritized based on sexual orientation only and individuals minoritized on both race/ethnicity and sexual orientation were more likely to report serious psychological distress, distress interfering with life or activities, interactions with mental health professionals, and unmet need for mental health care compared to individuals minoritized based on race/ethnicity and non-minoritized individuals minoritized based on race/ethnicity only.

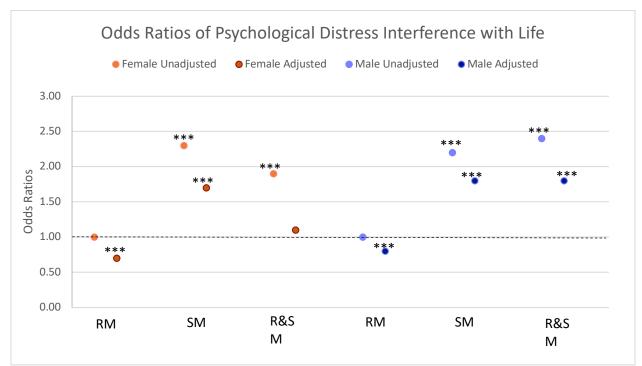
Regression Results



Notes: The adjusted models include sociodemographic, socioeconomic, neighborhood, and health characteristics.

RM= minoritized based on racial/ethnic identity, SM= minoritized based on sexual identity, R&SM= minoritized based on racial/ethnic identity and sexual identity *P≤.05; **P≤.01; ***P≤.001

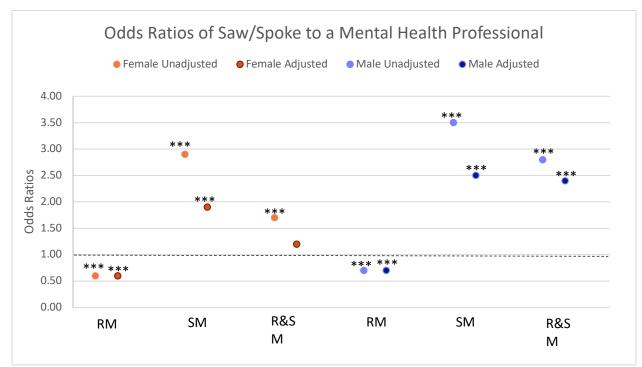
- Females and males minoritized based on race/ethnicity only were less likely to report serious psychological distress compared to non-minoritized individuals.
- Females and males minoritized based on sexual orientation only were more likely to report serious psychological distress compared to non-minoritized individuals.
- Only males minoritized based on race/ethnicity and sexual orientation were more likely to report serious psychological distress compared to non-minoritized individuals.



Notes: The adjusted models include sociodemographic, socioeconomic, neighborhood, and health characteristics.

RM= minoritized based on racial/ethnic identity, SM= minoritized based on sexual identity, R&SM= minoritized based on racial/ethnic identity and sexual identity *P≤.05; **P≤.01; ***P≤.001

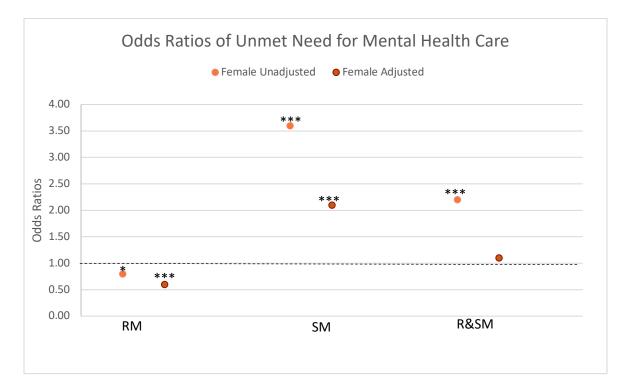
- Females and males minoritized based on race/ethnicity only were less likely to report psychological distress interfered with their life or activities compared to non-minoritized individuals.
- Females and males minoritized based on sexual orientation only were more likely to report psychological distress interfered with their life or activities compared to non-minoritized individuals.
- Only males minoritized based on race/ethnicity and sexual orientation were more likely to report psychological distress interfered with their life or activities compared to nonminoritized individuals.



Notes: The adjusted models include sociodemographic, socioeconomic, neighborhood, and health characteristics.

RM= minoritized based on racial/ethnic identity, SM= minoritized based on sexual identity, R&SM= minoritized based on racial/ethnic identity and sexual identity *P≤.05; **P≤.01; ***P≤.001

- Females and males minoritized based on race/ethnicity only were less likely to report interactions with mental health professionals compared to non-minoritized individuals.
- Females and males minoritized based on sexual orientation only were more likely to report interactions with mental health professionals compared to non-minoritized individuals.
- Only males minoritized based on race/ethnicity and sexual orientation were more likely to report interactions with mental health professionals compared to non-minoritized individuals.



Notes: The adjusted models include sociodemographic, socioeconomic, neighborhood, and health characteristics.

RM= minoritized based on racial/ethnic identity, SM= minoritized based on sexual identity, R&SM= minoritized based on racial/ethnic identity and sexual identity *P≤.05; **P≤.01; ***P≤.001

• Females minoritized based on race/ethnicity only were less likely to report an unmet need

for mental health care compared to non-minoritized individuals.

• Females minoritized based on sexual orientation only were more likely to report am

unmet need for mental health care compared to non-minoritized individuals.

• This outcome was not included for males due to sample size constraints.

	Weighted % (n=76,771)	Non- minoritized (n=47,357)	Minoritized- Race/Ethnicity (n=26,725)	Minoritized- Sex. Orient. (n=1,719)	Minoritized- Race/Ethnicity & Sex. Orient. (n=970)
Total	100.0	63.2	33.2	2.3	1.3
Survey Year	100.0	03.2	p<.00		1.5
2013	19.1	19.4	18.7	16.3	13.4
2013	19.1	20.2	19.6	16.6	13.4
2014	20.0	20.2	19.8	20.4	14.0
2015	20.0	20.2	20.7	20.4	26.9
2010	20.3	20.2	20.7	20.0	20.9
2017		20 aphic Characteris		20.1	25.5
Race/Ethnicity	Socioucinogra	apine Characteris	p<.00	1	
Non-Hispanic White	65.5	100	0	100	C
Non-Hispanic Black	11.7	0	34	0	32.8
Hispanic	14.9	0	43.2	0	44.5
Non-Hispanic Other Sexual Orientation	7.9	0	22.8	0	22.7
	06.4	100	p<.00		
Straight Lesbian	96.4	100	100	0	0
Bisexual	1.5	0	0	42.1	40.3
	1.2	0	0	36	29.4
Something else Do not know	0.3	0	0	9.7	8.1
Age	0.6	0	0 p<.00	12.2	22.2
Age 18-24 years	11.0	0.7	-		29.5
25-44 years	11.9 34.1	9.7 30.2	14.7 41.2	22.9 36.1	28.7 41.1
45-64 years	34.1	36.5	41.2 31.1	29.9	23.6
43-04 years 65+ years			13.1	29.9 11	
Nativity Status	19.6	23.7	p<.00		6.6
Foreign-born	16.9	5.1	39.6	4.2	28.2
Native Marital Status	83.2	94.9	60.4 p<.00	95.8 1	71.8
Currently married	51.7	56.9	44.7	26.5	21.9
Formerly married	21.0	21.8	20.2	13.6	13
Currently cohabitating	7.2	6.6	6.9	22.3	15.2
Never married	20.2	14.7	28.2	37.6	49.9
Region			p<.00	1	
Northeast	17.8	19	15.4	21.4	14.6
Midwest	22.2	27.4	12.4	23.2	14.9
South	37.2	34.4	42.9	30.5	38.4
West	22.9	19.2	29.4	24.8	32.1
		mic Characteristi	ics		
Educational Attainment			p<.00	1	
No high school diploma	12.1	7.2	21.2	8.8	20.2
High school diploma/GED	23.8	23.9	24.0	19.1	21.8
Some college	32.2	32.9	30.4	33.4	36.3

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Bachelor degree or higher	32.0	36.0	24.4	38.7	21.6
Poverty Status			p<.001		
Poor (<100% of FPL)	14.0	8.9	23.0	16.3	28.1
Near poor (100-200% of FPL)	18.6	15.3	24.5	19.5	24.9
Not poor (>200% of FPL)	67.4	75.7	52.5	64.3	47.0
Health Insurance Coverage			p<.001		
No coverage	10.1	6.5	16.6	10.9	17.6
Public/private coverage	89.9	93.5	83.4	89.1	82.4
Employment Status			p<.001		
Not working	36.9	36.9	37.5	30.9	32.4
Working	63.1	63.1	62.5	69.1	67.6
	Neighborhood (Characteristics			
Neighborhood Tenure			p<.001		
<3 years	32.3	29.0	37.2	43.5	48.4
4-10 years	26.2	24.7	29.0	24.7	25.9
11-20 years	19.5	20.3	18.2	18.4	14.9
>21 years	22.0	26.0	15.6	13.4	10.9
Neighborhood Ecology Scale	-	2.2	2.0	2.0	0.7
(mean)	Health Chai	3.2	2.9	3.0	2.7
Solf reported health		acteristics	p<.001		
Self-reported health Poor/fair	12.0	11.5	-	12 1	16.2
Good/very good/excellent	13.0 87.0	11.5 88.5	15.5 84.5	13.1 86.9	
Activity Limitations	87.0	00.3	84.5 p<.001	80.9	83.8
Limited	16.4	17.2	p≤.001 14.1	24.7	19.8
Not limited		82.8	14.1 85.9		80.2
Not minted	83.6 Mental]		83.9	75.3	80.2
Serious Psychological Distress	Wientai	neattii	p<.001		
No	05.0	06.2	-	01.0	00.5
Yes	95.9	96.2	96.0	91.0	90.5
Psychological Distress Interfered	4.1	3.8	4.0	9.0	9.5
with Life			p<.001		
No	77.2	77.6	78.0	60.1	64.1
Yes	22.8	22.4	22.0	39.9	35.9
Saw/Spoke to Mental Health Professional			p<.001		
No	90.6	89.9	93.2	75.3	83.5
Yes	9.4	10.1	6.8	24.7	16.5
Unmet Need for Mental Health Care			p<.001		
No	97.5	97.5	97.9	91.5	94.8
Yes	2.6	2.5	2.1	8.5	5.2

	Weighted % (n=63,504)	Non- minoritized (n=40,883)	Minoritized- Race/Ethnicity (n=20,378)	Minoritized- Sex. Orient. (n=1,467)	Minoritized- Race/Ethnicity & Sex. Orient. (n=776)
Total	100.0	64.4	32.5	2.0	1.2
Survey Year	100.0	0111	p=.02		1.2
2013	19.1	19.5	18.6	17.9	13.5
2014	19.9	20.1	19.8	18.3	15.7
2015	20.0	20.0	19.9	19.0	22.3
2016	20.4	20.3	20.4	20.0	24.6
2017	20.6	20.1	21.2	24.8	23.9
	Sociodemogr	aphic Character	istics		
Race/Ethnicity			p<.0	01	
Non-Hispanic White	66.3	100.0	0.0	100.0	0.0
Non-Hispanic Black	10.3	0.0	30.7	0.0	29.5
Hispanic	16.0	0.0	47.5	0.0	49.1
Non-Hispanic Other	7.3	0.0	21.8	0.0	21.4
Sexual Orientation			p<.0	01	
Straight	96.8	100.0	100.0	0.0	0.0
Gay	1.9	0.0	0.0	63.7	50.3
Bisexual	0.6	0.0	0.0	18.6	16.
Something else	0.3	0.0	0.0	7.1	11.2
Do not know	0.5	0.0	0.0	10.7	22.0
Age			p<.0	01	
18-24 years	12.8	10.8	16.1	15.8	22.8
25-44 years	35.1	31.4	42.3	32.2	43.3
45-64 years	34.7	36.8	30.7	37.4	27.5
65+ years	17.4	21.0	10.9	14.6	6.4
Nativity Status			p<.0		
Foreign-born	17.3	5.1	41.7	3.9	35.0
Native	82.7	94.9	58.3	96.1	65.0
Marital Status			p<.0		
Currently married	56.6	60.7	51.9	21.9	25.8
Formerly married	12.1	12.8	10.8	11.6	8.4
Currently cohabitating	7.6	6.8	8.4	19.1	11.:
Never married	23.6	19.7	28.8	47.4	54.4
Region			p<.0		
Northeast	17.3	18.7	14.5	19.2	14.9
Midwest	22.9	28.1	13.0	22.9	14.5
South	35.8	33.1	41.6	30.0	36.3
West	24.0	20.2	30.9	27.9	34.2
Educational Attainment	Socioecono	omic Characterist		0.1	
Educational Attainment	10.0	0.2	p<.0		20
No high school diploma	12.8	8.3	21.7	6.7	20.8
High school diploma/GED	25.7	25.0	27.5	17.3	26.1
Some college	29.8	30.9	27.4	31.8	29.

Table 2: Minoritized Status across Sele	cted Characteristics Among	2 Males NHIS, 20	13-2017 (Weighted %)

Bachelor degree or higher	31.8	35.8	23.4	44.2	23.6
Poverty Status			p<.001		
Poor (<100% of FPL)	10.6	7.3	16.6	10.3	21.4
Near poor (100-200% of FPL)	16.6	12.7	24.4	15.6	19.7
Not poor (>200% of FPL)	72.8	80.0	59.0	74.1	58.8
Health Insurance Coverage			p<.001		
No coverage	8.4	21.5	8.3	18.6	12.8
Public/private coverage	91.6	78.5	91.7	81.4	87.2
Employment Status			p<.001		
Not working	25.7	26.6	23.7	28.4	26.3
Working	74.3	73.4	76.3	71.6	73.7
	Neighborhood	Characteristics			
Neighborhood Tenure			p<.001		
<3 years	33.1	29.8	38.8	40.0	45.9
4-10 years	26.1	24.7	28.5	28.3	29.3
11-20 years	20.1	20.9	18.8	18.0	14.3
>21 years	20.8	24.6	14.0	13.8	10.5
Neighborhood Ecology Scale	_		• •	•	
(mean)		3.2	2.9	3.0	2.8
	Health Cha	racteristics	< 0.01		
Self-reported health	11.0	11.0	p<.001	10 5	14.6
Poor/fair	11.9	11.2	13.0	13.7	14.6
Good/very good/excellent	88.1	88.8	87.0	86.3	85.4
Activity Limitations	14.6	1.5.5	p<.001	0.0.1	160
Limited	14.6	15.7	12.1	20.1	16.3
Not limited	85.4	84.3	87.9	79.9	83.7
Continue Derich als singly Distance	Mental	nealth	m < 001		
Serious Psychological Distress	07.0	07.2	p<.001	02.0	00.0
No	97.2	97.3	97.3	93.9	90.8
Yes Psychological Distress Interfered	2.8	2.7	2.7	6.1	9.2
with Life			p<.001		
No	82.5	83.1	82.8	69.1	67.1
Yes	17.5	16.9	17.2	30.9	32.9
Saw/Spoke to Mental Health Professional			p<.001		
No	93.3	93.0	95.2	79.2	82.3
Yes	6.7	7.0	4.8	20.8	17.7
Unmet Need for Mental Health Care			p<.001		
No	98.6	98.7	98.6	96.2	95.0
Yes	1.4	1.3	1.4	3.8	5.0

	Females		Males	
	Unadjusted OR (95% CI)	AOR (95% CI)	Unadjusted OR (95% CI)	AOR (95% CI)
	Serious I	Psychological Distress		
Non-minoritized (ref)				
Minoritized-Race/Ethnicity	1.0 (0.9, 1.2)	0.7 (0.6, 0.8)***	1.0 (0.9, 1.2)	0.8 (0.7, 0.9)***
Minoritized-Sexual Orientation	2.5 (2.0, 3.1)***	1.7 (1.2, 2.2)***	2.4 (1.8, 3.2)***	1.9 (1.3, 2.7)***
MinRace/Eth. & Sex. Orient.	2.6 (2.0, 3.5)***	1.4 (1.0, 1.9)	3.7 (2.5, 5.6)***	2.5 (1.5, 4.2)***
	Psychological	Distress Interfered with	Life	
Non-minoritized (ref)				
Minoritized-Race/Ethnicity	1.0 (0.9, 1)	0.7 (0.7, 0.8)***	1.0 (1.0, 1.1)	0.8 (0.8, 0.9)***
Minoritized-Sexual Orientation	2.3 (2.0, 2.6)***	1.7 (1.4, 2.0)***	2.2 (1.9, 2.5)***	1.8 (1.5, 2.1)***
MinRace/Eth. & Sex. Orient.	1.9 (1.6, 2.3)***	1.1 (0.9, 1.4)	2.4 (1.9, 3.0)***	1.8 (1.4, 2.3)***
	Saw/Spoke t	o Mental Health Provide	er	
Non-minoritized (ref)				
Minoritized-Race/Ethnicity	0.6 (0.6, 0.7)***	0.6 (0.6, 0.7)***	0.7 (0.6, 0.7)***	0.7 (0.7, 0.8)***
Minoritized-Sexual Orientation	2.9 (2.5, 3.4)***	1.9 (1.6, 2.3)***	3.5 (2.9, 4.2)***	2.5 (2.0, 3.2)***
MinRace/Eth. & Sex. Orient.	1.7 (1.4, 2.2)***	1.2 (1.0, 1.6)	2.8 (2.1, 3.8)***	2.4 (1.7, 3.4)***
	Unmet Nee	d for Mental Health Care	2	
Non-minoritized (ref)				
Minoritized-Race/Ethnicity	0.8 (0.7, 1.0)*	0.6 (0.5, 0.7)***	-	-
Minoritized-Sexual Orientation	3.6 (2.8, 4.6)***	2.1 (1.6, 2.8)***	-	-
MinRace/Eth. & Sex. Orient.	2.2 (1.5, 3.0)***	1.1 (0.8, 1.5)	-	-

Table 3: Logistic Regression Models for Females and Males: NHIS, 2013-2017

*P≤.05; **P≤.01; ***P≤.00

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