Racial Differences in Risk Factors Associated with Suicidal Behavior among Young Adults in the United States

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ABSTRACT

Introduction: Studies have shown a range of risk factors for suicidal behavior. Racial differences in the prevalence of suicidal behavior and the magnitude of the effects of its risk factors have received little attention.

Methods: Using nationally representative data (n= 8, 909) from Add Health, we calculate the prevalence of suicidal behavior and associated risk factors for White and Black youth (18-26) and estimate logistic regression models of suicidal ideation stratified by race.

Results: Whites have higher rates of suicidal ideation, but racial differences in attempts are not statistically significant. Whites are more likely to possess key risk factors for suicide. Other than gender and marijuana use, the effects by race of these risk factors on suicidal ideation are similar.

Discussion: Effects of risk factors appear similar by race, so the higher prevalence of suicidal ideation in Whites may be driven by their greater exposure to risk factors. More research is needed to uncover why Whites have higher rates of suicidal ideation and completion than Blacks, but comparable rates of attempts. Implications for public health programs are discussed.

INTRODUCTION

Suicide is the third leading cause of death for young adults aged 18-24, responsible for 12% of all deaths in this age group (1, 2). Approximately 6.7% of young adults (18-25) reported serious suicidal ideation, and 1.2% reported at least one suicide attempt in 2008, placing this age group among the highest in rates of suicidal behavior (3). Suicidal behavior (ideation and attempts) presents a serious public health problem in the U.S., accounting for approximately $1 billion in treatment for failed attempts and up to $30 billion in lost productivity (4).

Rates of completed suicides vary substantially by race. In 2006, the rate of completed suicide for Non-Hispanic Whites (hereafter called Whites) aged 18 to 26 was 13.7 per 100,000, compared to 8.4 for non-Hispanic Blacks (hereafter called Blacks) (2). Suicidal ideation and prior suicide attempts are key predictors for suicide completion (5, 6), and although some studies find higher rates of such behaviors among Whites (7-9), others do not (10-12). Noting that research in racial/ethnic variation in suicidal behavior is "still in its infancy," several researchers call for more research using larger, nationally representative data sets (12, 17, 19).

Past research examining racial differences in risk factors for suicidal behavior takes two approaches. One argues that racial groups are exposed to different risk factors for suicide such as poor mental health or substance abuse, and the difference in exposure is reflected in the race disparities in suicide rates (13). A second line of inquiry maintains that race is associated not only with the types of risks factors to which individuals are exposed, but also the ways in which these affect the likelihood of suicidal behavior. Individuals from different backgrounds exposed to the same risk factors may not respond in the same way because different social arrangements and values affect how they process these strains (14).

While a few studies examine subsets of these risk factors (see 15, 16 for reviews), there is not, to our knowledge, a comprehensive study examining factors that contribute to racial differentials in suicidal behavior among young adults. Using data from the National Longitudinal Study of Adolescent Health, we examine whether there are racial differences in the (1) levels of reported suicidal ideation and attempts; (2) prevalence of key risk factors for suicidal behavior; and (3) size of the association between risk factors and both suicidal ideation and attempts. Our results should contribute to the scarce literature on process differences by race in mental health outcomes (14, 17).

METHODS

Data Source

We use data from Wave III of the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative study of U.S. adolescent health behaviors and outcomes over time (18). The baseline study involved in-home interviews with a sample of 20,745 adolescents selected from grades 7 to 12 of 80 schools nationwide in 1994-1995. Details on its complex sampling design can be found elsewhere (33). Wave III in 2001-2002 included 15,170 respondents ages 18-26 or 73% of the baseline sample.

Final Sample

The final sample consists of 8, 909 participants after excluding those of other racial and ethnic groups (n = 4, 976) and those missing data on any of the variables listed below (n = 1,286). 82.1% of our sample (n = 6,509) is White and the remaining 17.9% (n = 2, 400) is Black.

Exploratory analyses (not shown) revealed that there are no significant differences in race, gender, age, or suicidal behavior between respondents excluded and those included.

Dependent variables

Suicidal behavior in the Add Health is ascertained by two measures. The suicidal ideation measure is based on whether the respondent "ever seriously thought about committing suicide" in the 12 months preceding the interview. Those who answered yes to this question were asked how many times they actually attempted suicide during that period. Only a small number (n = 127) reported that they attempted suicide at least once in the prior 12 months, so we focus on the presence of suicidal ideation in inferential analyses.

Independent variables

Race is classified as White or Black among those not of Hispanic origin.

Risk factors for suicidal behavior include measures from five conceptual groups of risk factors previously found as important predictors of suicidal behavior: demographics (10, 15, 16), physical and mental health (5, 15, 16, 19), substance abuse (15, 16, 20), suicidal behavior of friends /family (15, 16, 21, 22), and religiosity (15, 16, 23-25).

Demographic factors include: gender; age in years at the time of the survey; sexual orientation (100% straight vs. 'sexual minorities', those reporting some same-sex attraction or being asexual); and socioeconomic status (SES). Since many youth in our sample have not completed their education, we rely on parents' highest level of education (the respondent's self

report of their biological parents' [or residential, if not available] educational level from the latest wave when available) as a proxy for SES (26).

Physical and mental health measures include: current self-rated health (five-point Likert scale ranging from 'Poor' [1] to 'Excellent' [5]); depressive symptoms in the past week (on a scale from 0 to 3 with higher scores indicating more, and longer lasting symptoms), calculated from the mean of 4 items of the Center for Epidemiological Studies Depression Scale (CES-D) shown to be valid in contrasting depressive symptoms between racial groups (27); and a lifetime diagnosis of depression, ascertained by the respondent's report of ever having been diagnosed with the condition (yes/no).

Substance use measures refer to the 12 months preceding the survey. Alcohol use is defined as problematic if the respondent said "yes" to any of six questions about problems precipitated by substance use (drunkenness at school, physical fights, sexual encounters, problems with parents, a date, or at school/work). Drug use is considered 'problematic' by one positive response to the analogous set of questions. Both measures are dichotomous indicators of problematic alcohol/drug use. We use a stricter measure of problematic alcohol because it is a more normative behavior for this age group (28, 29). Additional measures include the average number of drinks the respondent consumed whenever s/he drank in the past year, and type of drugs consumed. We distinguish between those who reported using no drugs, marijuana only, or hard drug use only (LSD, crystal methamphetamine, cocaine, non-prescribed pills, and steroids) and/or use of more than one drug type (poly-drug use, which was typically marijuana and another hard drug).

We include measures of whether or not a respondent reported that a *friend and/or family member died from suicide*.

Religiosity is assessed with three measures: religious affiliation and attendance to religious services, coded as shown in Table 1, and self-rated religiosity on a five point Likert scale with a higher score indicating more religiosity.

Analytic Plan

We use Adjusted Wald F to test for racial differences in levels of suicidal behavior and exposure to each of the risk factors. We then estimate logistic regressions of suicidal ideation, and test for significant differences in coefficients using Wald Chi Square statistics. All analyses are weighted and conducted in STATA version 10 (30) to adjust for the complex sampling design of the dataset (31).

RESULTS

Racial differences in suicidal behavior

As shown in Table 1, Whites report higher levels of suicidal ideation (7%) than Blacks (4%; $p<.001$). However, the difference in suicide attempts between Whites (1.4%) and Blacks (1.5%) is small and not statistically significant ($p = 0.87$).

Racial differences in exposure to risk factors

Whites have higher rates of exposure to many of the risk factors for suicidal behavior. With the exception of Whites' greater likelihood of reporting belonging to a sexual minority

(10.8% vs. 6.4%; $p < .001$), there are no appreciable demographic differences between the groups. Almost three times as many Whites (14%) as Blacks (5.7%) report ever being diagnosed with depression, although Blacks have slightly higher mean CES-D scores (0.50 vs. 0.41; $p < .001$). Twice as many Whites as Blacks report problematic alcohol use (17.1% vs. 7.9%), and Whites consume greater quantities when they drink ($p < .001$). Three times as many Whites (15.6%) as Blacks (4.2%) report having used hard drugs in the past year ($p <.001$). Finally, Whites are more likely to have been exposed to suicide, with 7.7% reporting a friend suicide compared to 3.8% of Blacks ($p < .001$).

Whites are less likely to experience the protective effects of religion. Almost a quarter (23.4%) of Whites reports no religious affiliation, compared to 16.5% of Blacks. Blacks are more likely to attend religious services on a regular basis and report higher levels of religiosity.

Logistic regression of suicidal ideation

Pooled Model. As shown in Table 2, mental and physical health indicators, substance misuse variables and a friend or family member's suicide are strong predictors of suicidal ideation.

Although some partial models indicated that Blacks are at lower risk for suicidal ideation (not shown), we do not find statistically significant racial differences in the odds of suicidal ideation once all risk factors are controlled. Partial models also revealed that: 1) once substance use is controlled, the racial differential in suicidal ideation disappears; and 2) sexual minority status is associated with elevated odds of suicidal ideation, but the magnitude of the effect diminishes when other factors, most notably mental health variables, are included (35). In terms

of demographic risk factors, odds of suicidal ideation decrease by 8% (OR = 0.92, 95% CI = 0.84 – 1.00, p = 0.05) with every one-year increase in age.

A lifetime diagnosis of depression more than triples the odds of suicidal ideation (OR = 3.46, 95% CI = 2.71 – 4.42, p <0.001), while current depressive symptoms (OR = 2.78, 95% CI = 2.37 – 3.25, p<0.001) increase the odds almost threefold with every one point increase in mean CES-D score. Problematic alcohol use is associated with higher odds (OR = 1.55, 95% CI = 1.13, 2.13, p = 0.007) of suicidal ideation, whereas using multiple- or hard drugs more than doubles the odds (OR = 2.17, 95% CI = 1.46 – 3.23, p < 0.001). Having a friend or family member who killed him/herself raises the risk of suicidal ideation substantially (OR = 2.60, 95% CI = 1.76 – 3.83, p = 0.01 and OR = 1.99, 95% CI = 1.16 – 3.43, p < 0.001, respectively). Conversely, religiosity variables are not predictive of suicidal ideation, even when different specifications are used (not shown).

Analyses of suicide attempts revealed patterns were identical to those for ideation, except that some coefficients are larger in size and not statistically significant (not shown).

Logistic Regression Models Stratified by Race. To determine whether risk factors operate in the same way for Whites and Blacks, we estimate models stratified by race (Table 3).We exclude parental education and religiosity in the stratified models because they were not statistically significant in the pooled models or the exploratory stratified models (not shown).

The effects of two risk factors differ significantly by race (x^2s > 3.85, *p*s>.05). First, marijuana use more than triples the odds of suicidal ideation (OR = 3.37, 95% CI = 1.96 – 5.82, p < .001) in Blacks, but has a much smaller, non-significant association among Whites (OR =

1.27, 95% CI = 0.91 – 1.78, p = .158). Second, the association between gender and suicidal ideation differs by race: White males are *more* likely than white females to have suicidal thoughts (OR = 1.49, 95% CI = 1.10, 2.02, p = 0.01), but no gender difference in ideation among Blacks is found (OR = 0.59, 95% CI = 0.31 – 1.14, p = 0.012).

Other risk factors (poly- or hard- drug use and a friend's suicide) appear to have a larger effect among Blacks. For example, knowing someone who committed suicide is associated with a five-fold increase in odds of reporting ideation among Blacks, (OR = 4.98, 95% CI = 2.05 – 12.11, p <.001), nearly twice the size of the effect among Whites (OR = 2.49, 95% CI = 1.60 – 3.89, p <.001). However, these racial differences are not significantly significant. Still other risk factors (age, sexual minority status, self-rated health, and problematic drinking) are statistically significant predictors of suicidal ideation among Whites but not among Blacks, although again, these differences are not statistically significant. For example, sexual minority status doubles the odds (OR = 1.74, 95% CI = 1.26 – 2.42, p <.001) of reporting suicidal ideation for Whites, but does not affect the risk for Blacks.

Finally, some risk factors (depressive symptoms in the past week, a lifetime diagnosis of depression, and a family member's suicide) affect suicidal behavior similarly for both racial groups.

DISCUSSION

Suicidal ideation in the prior year is more common among Whites than Blacks, but we observe no significant difference by race in the prevalence of suicide attempts. These results are consistent with those from other recent nationally representative datasets (32). Once we control

for other characteristics, however, the racial differential in odds of suicidal ideation is no longer significant.

In terms of risk factors for suicidal behavior, we find that Whites experience greater exposure to sexual minority status, a lifetime diagnosis of depression, substance misuse, and having a friend who killed him/herself, which may explain the racial differential in suicidal ideation. These patterns are consistent with other studies that have reported higher prevalence of mental disorders and their risk factors in Whites (33, 34). The process of suicidal ideation appears similar across racial groups, although the models as a whole seem to explain White's suicidal behavior better (i.e., more factors are statistically significant). Some risk factors that appear to be stronger predictors for Blacks include: marijuana use, poly- or hard- drug use and a friend's suicide. With the exception of marijuana use, these differences are not statistically significant.

After controlling for a host of characteristics, White males are at greater risk of suicidal ideation than their female counterparts, but we find no gender difference among Blacks. The higher risk of suicidal ideation among White males is consistent with their higher rates of completed suicide. This pattern concurs with the higher prevalence of mood, anxiety, and substance-related disorders in Whites (34), but not with their greater access to, higher utilization of, and better quality of mental health services (36, 37)(35, 36) that should help buffer them against the effects of mental health problems. The higher prevalence of suicidal ideation among White females might be explained by the fact that White females report significantly higher depressive symptoms in the past week and are more likely to have ever been diagnosed with depression than White males; symptoms of depression also have a bigger effect on suicidal

ideation for females than males. Once we control for these characteristics, White males emerge as the group with greater suicidal risk.

Our findings also suggest that drug use may pose more of a risk for suicidal ideation among Blacks than Whites. Marijuana use is an important predictor of suicidal ideation for Blacks but not for Whites, and the effect of poly/hard drug use appears larger for Blacks than Whites (although the difference is not statistically significant). Marijuana use is more common among Whites and thus may be a more normative behavior not indicative of other problems or associated with suicidal thoughts. Furthermore, to the extent that drug use disrupts interpersonal relations, the impact may be more detrimental for Blacks as such problems may be more likely to produce adverse health outcomes in Blacks than in Whites (14, 17).

These findings offer valuable suggestions for public health and suicide prevention actions. Most prevention programs are targeted at adolescents (38), but attention must also be directed toward young adults. The vast majority of programs aimed at this group are college-based, such as the College Screening Project, a web-based method to encourage college students at risk for suicide to seek treatment (39, 40). Given that most young adults who die from suicide are not students (41, 42), alternative strategies that have a growing evidence base, such as public education programs on the early identification of suicidal behavior and its risk factors, should also be considered. The efficacy of these programs may be enhanced by employing dissemination strategies that appeal to the young adult demographic (e.g., the internet, social networks) regardless of student status. One such recent example is an internet-based, self-help, cognitive-behavioral treatment for depressive symptoms in young adults (43).

To identify priorities for public health efforts in this area, we also calculated the population attributable risk (PAR) associated with each risk factor (not shown). The PAR is the proportion of suicidal ideation cases that could be eliminated if a given risk factor were removed (35). Consistent with our analyses, the PAR results identify White race, a lifetime diagnosis of depression, and poly- or hard-drug use as among the major contributors of suicidal ideation in young adults. For example, about a third (PAR = 33.1%, RR = 5.1) of reported cases of suicidal ideation would be eliminated if young adults never met criteria for a lifetime diagnosis of depression. However, our analysis also highlights several important differences in risk factors by race. While our PAR calculations confirm that sexual minority status, depression, problematic drug and alcohol use, and the suicidal behavior of friends are important predictors of suicidal behavior in young adults, problematic alcohol use may be a more important intervention target in Whites (PAR = 22.0%, RR = 2.7) than in Blacks (PAR = 10.4%, RR = 2.5). Conversely, marijuana use would appear more important in Blacks (PAR = 38.9%, RR = 3.89) than in Whites (PAR = 11.7%, RR = 1.62). If attention is directed towards racial differences as the ones we have outlined, the value of prevention efforts may be enhanced.

There are drawbacks to our study. Although our sample size is considerable (n = 8909), only 555 report suicidal ideation, limiting statistical power especially among Blacks, for whom only 112 reported suicidal ideation, and offering a possible explanation for why some well-known are not statistically significant. The cross-sectional data impede our ability to draw causal conclusions or evaluate trajectories of risk factors and/or suicidal behavior. Analyses are also limited by the measurement of some variables. Temporality was not consistent across all variables (i.e. some were lifetime, some were 12 month, and others were past week measures).

Additionally, most of the self-reported behaviors assessed are susceptible to underreporting because they are socially stigmatized (44).

These limitations are offset by important study strengths. We analyze racial differences in suicidal behavior using nationally representative data with an oversample of minority populations to ensure that both groups are accurately represented. Moreover, we included a variety of psychosocial variables in our analysis, ensuring coverage of important predictors of suicidal behavior. Finally, the Add Health is administered by experienced survey researchers with specific attention to problems of social desirability bias and underreporting (e.g., the sensitive questions are administered by computerized software; 18, 45).

Our results indicate that young White adults have higher rates of suicidal ideation than their Black counterparts, but rates of suicide attempts are comparable by race. Why then do Whites exhibit much higher rates of completed suicide? Underreporting of completed suicides in Blacks may contribute to the differential, as suicide misclassification is more common among Blacks, but is unlikely to explain the entire racial suicide gap (46, 47). In part, the discrepancies may be due to measurement issues, as ideation and attempts are measured in the last year while completed suicides represent the accumulation of factors over a lifetime. Research shows that the greater the number of risk factors, the higher the likelihood that one completes suicide (48). As Whites experience greater exposure to risk factors for suicide, their suicidal ideation may be more likely to progress to multiple and/or more lethal attempts, resulting in higher rates of completed suicides. More work is needed to understand racial differences in the transition from ideation to attempts, attempts to completion, and/or ideation to completion. Longitudinal studies

that elucidate trajectories of suicidal behavior and risk factors could shed light on this seeming paradox.

Table 1.

Distribution of suicidal behavior and risk factors in Non-Hispanic White (N = 6509) and Non-Hispanic Black (N = 2400) adults aged 18-26 years in the United States, 2001-2002 National Longitudinal Study of Adolescent Health Wave III

	Whites		Blacks			
	%/M	(n/SD)	%/M	(n/SD)	Wald F	
Suicidal ideation	7.13%	(423)	4.04%	(105)	11.51	***
Suicide attempt	1.43%	(85)	1.50%	(34)	0.03	
Male gender	50.29%	(3050)	49.50%	(1035)	0.14	
Age (years)	21.76	(0.13)	22.00	(0.21)	1.17	
Sexual minority	10.75%	(727)	6.36%	(190)	22.17	***
Parental education					9.11	***
Less than HS school	8.40%	(522)	13.09%	(243)		
High school graduate	31.37%	(2027)	41.20%	(769)		
Some college	22.51%	(1444)	20.23%	(533)		
College or +	37.73%	(2516)	25.48%	(855)		
Depressive symptoms	0.41	(0.53)	0.50	(0.58)	16.16	***
Lifetime dx. of depression	13.61%	(891)	5.50%	(133)	61.22	***
Self-rated health	4.03	(0.02)	4.03	(0.26)	0.03	
Problematic alcohol use	16.95%	(1055)	7.85%	(168)	41.00	***
Average # drinks	4.74	(0.18)	3.29	(0.32)	15.44	***
Problematic drug use	12.07%	(762)	9.40%	(198)	3.45	||
Drug type used					30.95	***
Marijuana- only	21.52%	(1367)	21.95%	(562)		
Poly- or hard- only	15.58%	(1000)	4.23%	(92)		
Friends' suicide	7.71%	(498)	3.78%	(91)	29.43	***
Family's suicide	2.97%	(192)	2.59%	(66)	0.49	
Affiliation					39.60	***
Atheist/agnostic	23.42%	(1478)	16.52%	(353)		
Protestant	39.05%	(2613)	66.53%	(1570)		
Catholic	22.19%	(1409)	3.68%	(104)		
Others	4.51%	(301)	3.07%	(81)		
Other Christians	10.82%	(708)	10.20%	(292)		
Attendance					13.30	***
Never	29.32%	(1898)	19.77%	(424)		
Yearly	39.29%	(2543)	34.89%	(826)		
Monthly	16.29%	(1072)	22.13%	(536)		
Weekly	15.10%	(996)	23.21%	(614)		
Self-rated religiosity	1.31	(0.03)	1.69	(0.05)	51.54	***

Note. [a] Percentage (%) and sample size (n) used as descriptive statistics for categorical variables, mean (M) and standard deviation (SD) used as descriptive statistics for continuous variables. [b] Used in place of x^2 for weighted categorical data or t-tests for weighted continuous data. || p =0.07, * $p \leq .05$, *** $p \leq .001$, Dx. =Diagnosis

Table 2.

Logistic Regression of Suicidal Ideation in Non-Hispanic White and Non-Hispanic Black Adults (18 -26 yrs.), 2002 National Longitudinal Study of Adolescent Health Wave III

	AOR	95% CI
Demographics		
Black race[a]	**0.79**	**(0.52, 1.19)**
Male gender[b]	1.36	(0.52, 1.19)
Age (years)	0.92	(0.84, 1.00)
Sexual minority[c]	**1.55**	**(1.12, 2.15)**
Parental education[d]		
< H.S. school	0.74	(0.43, 1.27)
H. S. grad	0.80	(0.56, 1.15)
Some college	0.95	(0.68, 1.31)
Physical/Mental Health		
Depressive Symptoms	**2.78**	**(2.37, 3.25)**
Lifetime Diagnosis of Depression[e]	**3.46**	**(2.71, 4.42)**
Self-rated Health	**0.86**	**(0.77, 0.97)**
Substance Use		
Problematic drinking[f]	**1.55**	**(1.13, 2.13)**
Avg. Number of Drinks	**0.99**	**(0.98, 1.00)**
Problematic Drug Use[g]	1.11	(0.71, 1.72)
Marijuana-use only[h]	**1.42**	**(1.06, 1.91)**
Poly- or hard- drug use[h]	**2.17**	**(1.46, 3.23)**
Friend/Family Suicide		
Friends' Suicide[i]	**2.60**	**(1.76, 3.83)**
Family's Suicide[j]	**1.99**	**(1.16, 3.43)**
Religiosity		
Protestant[k]	0.88	(0.63, 1.25)
Catholic[k]	0.96	(0.65, 1.44)
Other Christians[k]	0.70	(0.42, 1.16)
Other[k]	1.24	(0.60, 2.56)
Attendance		
Yearly[l]	1.27	(0.89. 1.82)
Monthly[l]	1.18	(0.79, 1.78)
Weekly[l]	1.26	(0.81, 1.99)
Self-rated Religiosity	0.95	(0.85, 1.06)

Note. AOR – Adjusted Odds Ratio, Omitted categories: [a] – Whites, [b] – females, [c] -100% straight, [d] – college grad or higher, [e]-no diagnosis of depression, [f] – no problematic drinking, [g] – no problematic drug use, [h] –no drug use, [i] – no friend's suicide, [j] – no family member's suicide, [k] – atheists/agnostic/ none, [l] - never

Table 3.

Race-Stratified Logistic Regression of Suicidal Ideation: National Longitudinal Study of Adolescent Health, 2001–2002

	Whites		Blacks			
	AOR	**95% CI**	**AOR**	**95% CI**	x^2	
Demographics						
Male gender[a]	**1.49**	**(1.10, 2.02)**	0.59	(0.31, 1.14)	8.81	**
Age	**0.90**	**(0.82, 0.99)**	0.94	(0.78, 1.13)	0.15	
Sexual minority status[b]	**1.74**	**(1.26, 2.42)**	0.84	(0.33, 2.09)	3.54	
Physical and mental health						
Depressive symptoms	**2.68**	**(2.26, 3.18)**	**2.79**	**(1.82, 4.26)**	0.03	
Lifetime depression diagnosis[c]	**3.39**	**(2.64, 4.36)**	**4.90**	**(2.54, 9.46)**	0.81	
Self-rated health	**0.87**	**(0.77, 0.99)**	0.94	(0.69, 1.29)	0.17	
Substance use						
Problematic drinking[d]	**1.66**	**(1.19, 2.32)**	1.43	(0.54, 3.79)	0.09	
Avg. Number of drinks	0.98	(0.97, 1.00)	0.99	(0.97, 1.02)	0.78	
Problematic drug use[e]	1.05	(0.67, 1.66)	1.46	(0.53, 4.01)	0.27	
Marijuana use only[f]	1.27	(0.91, 1.78)	**3.37**	**(1.96, 5.82)**	4.85	*
Poly-or hard- drug use[f]	**2.14**	**(1.41, 3.23)**	**3.53**	**(1.01, 12.36)**	0.37	
Friend / family suicide						
Friend suicide[g]	**2.49**	**(1.60, 3.89)**	**4.98**	**(2.05, 12.11)**	1.17	
Family member suicide[h]	**1.96**	**(1.04, 3.67)**	**2.39**	**(0.82, 6.93)**	0.09	

Note. Non-Hispanic Whites (Whites; N = 6509) and Non-Hispanic Black (Blacks; N = 2400) Young Adults (18-26 yrs.), AOR = adjusted odds ratio, x^2 test statistic composed of the difference in the two regression estimates, divided by the difference of the standard errors of the estimates, ** p <0.01, p <.05, omitted categories: [a] – females, [b] -100% straight, [c]-no diagnosis of depression, [d] – no problematic drinking, [e] – no problematic drug use, [f] –no drug use, g[i] – no friend's suicide, [h] – no family member's suicide,

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