Exploring Monoracial/Ethnic and Multiracial/Ethnic Classification in the Context of Mental Health Among High School Students

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Abstract

Objectives.—To explore the prevalence of Multiracial/ethnic identity and its association with mental health among high school students.

Methods.—The 2021 national Youth Risk Behavior Survey (N=17,232) data were used. Respondents were classified as monoracial/ethnic or Multiracial/ethnic.

Results.—Overall, 21.5% of students were Multiracial/ethnic. Multiracial/ethnic status was most prevalent among students who identify as American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and Hispanic or Latino. Logistic regression models showed Multiracial/ethnic classification was associated with persistent feelings of sadness or hopelessness among students identifying as American Indian or Alaska Native, Asian, Black, and White. Multiracial/ethnic Asian students had significantly higher odds of all four indicators of poor mental health compared with monoracial/ethnic Asian students.

Conclusion.—Multiracial/ethnic students constitute a heterogenous group. This study found important subgroup differences in indicators of mental health that might be missed when Multiracial/ethnic groups are considered in aggregate.

Keywords

Adolescent; Multiracial; mental health

During 2010– 2019, the U.S. population who identified as two or more races (i.e., Multiracial) increased by 30%.[1] The increasing diversity of the U.S. is especially notable

among those under age 18 years: the population identifying as Multiracial increased from 2.1% in 2010 to 8.8% in 2020 among adults 18 years and over, but increased from 5.6% to 15.1% during this time among children under age 18 years.[2] These trends call for a better understanding of the experiences and health needs of Multiracial youth so that relevant health-related policies and practices can be implemented to address those needs.

Some studies suggest that those identifying with more than one racial or ethnic group are more likely to experience worse health outcomes or seek care for those outcomes, including poorer mental health[3,4,5,6] compared with those identifying with a single racial or ethnic group, (i.e., monoracial/ethnic). For example, previous research using data from the National Survey on Drug Use and Health showed young adults identifying as belonging to two or more races were more likely to report any mental illness within the past year compared with those identifying as belonging to a single racial or ethnic group[5] and were more likely than most other racial and ethnic groups to have received mental health services in a specialty setting.[3] Similarly, data from the National Longitudinal Study of Adolescent to Adult Health also showed young adults identifying as Multiracial experienced worse mental health than monoracial groups.[7] However, perhaps as a result of varying approaches to studying Multiracial groups, findings on health disparities comparing Multiracial and monoracial youth and young adults are mixed, with some studies finding no differences in mental health between these groups[8,9] and others finding differences for some but not all Multiracial categories.[7]

Some theories explaining health disparities propose that disparities among racial groups and among social groups reflect underlying disparities in social and structural stressors. For example, the minority stress theory posits minority groups are more likely to experience social stressors such as discrimination and victimization that increase their likelihood of adverse mental and behavioral health outcomes.[10,11] Multiracial individuals might have a qualitatively different experience of such social stressors compared with monoracial minority groups as they do not fit into existing socially constructed categories the way that monoracial individuals do, and are often a dual minority – that is, they are a minority within their own racial communities.[9,11] Such social stressors among Multiracial youth might help explain differences in indicators of mental health and health risk behaviors compared with their monoracial peers.

It is not uncommon for research on racial and ethnic health disparities to exclude individuals identifying with multiple races or to categorize them into a single group.[12] However, such practices do not allow for important exploration of a quickly increasing population that has a lot of diversity.[1,2,13,14] Similarly, the practice of either ignoring Multiracial groups altogether, or defaulting to labeling Multiracial groups as "other" perpetuates marginalization of an important and growing segment of society.[13,14] Another complexity includes the epidemiological treatment of Hispanic or Latino (hereafter Hispanic) ethnicity. It is common practice to categorize survey respondents who identify as Hispanic as that ethnic group regardless of their racial identification. In essence, Hispanic ethnicity trumps any racial categories, and for epidemiological purposes, Hispanic ethnicity is treated as a racial group.[15] This can be problematic because this practice masks other indicated racial identities. For example, in a 2019 study by Everett Jones and Satter, Youth Risk

Behavior Survey (YRBS) data showed that only 18% of students who self-identified as American Indian or Alaska Native (AI/AN) were single race, non- Hispanic.[16] The other 82% of students who selected AI/AN as their race also identified with some other combination of race or Hispanic ethnicity.[16] Importantly, 46% of students who identified their race as AI/AN (only or in addition to another race) also identified as Hispanic.[16] The problem with a typical racial and ethnic classification is that AI/AN students who are also Hispanic are classified as only Hispanic, masking their AI/AN identity for epidemiological purposes. Similarly, AI/AN students who identify with another racial group are classified as Multiracial, also masking their AI/AN identify for epidemiological purposes. Such practices have been referred to as racial "erasure."[12,16] Related work has not yet adequately explored the extent to which other racial groups identify with more than one race, with or without Hispanic ethnicity, in data systems involving youth. That is, it is unknown the extent to which such "erasure" may be happening with other racial groups. The goal of this work was not to show that any combination of racial or ethnic groups may be more at risk for poor mental health than another. Instead, it was, in part, to demonstrate that when data from only monoracial groups are presented, when Hispanic ethnicity trumps any race category, or when all multiracial groups are combined into one group, important information is lost, including information about mental health.

When the YRBS began in 1991, race and ethnicity were incorporated into one question; however, starting with the 2005 YRBS, the federal Office of Management and Budget (OMB) required that the YRBS use two separate questions to assess Hispanic or Latino identity and racial identity. Two separate questions could be a struggle for many students who identify as Hispanic or Latino and who perceive the race questions as irrelevant for them.[17] In January 2023, the Office of Management and Budget posted a notice in the Federal Register seeking comments related to "Updating OMB's Race and Ethnicity Statistical Standards," which proposes, among other changes, to revert to including race and Hispanic or Latino classification into one question for federal surveys, but still allowing for respondents to choose more than one response option.[18] The request for public comment notes, in part, the "growing number of people who identify as more than one race or ethnicity."[18[p.5377]] More accurate classification of racial and ethnic groups, which better reflect lived experiences, is important for work meant to understand differences in health behaviors and outcomes across racial and ethnic groups.

Thus, the current study disentangles race and ethnicity data within Multiracial or ethnic groups to elucidate the complexity of racial and ethnic identity across the five OMB race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or other Pacific Islander, and White) and Hispanic or Latino ethnicity. This study also applied the findings related to heterogeneity of Multiracial/ethnic groups to examine whether the prevalence of four mental health indicators differed among monoracial/ethnic and Multiracial/ethnic students within each racial group.

Methods

This study analyzed data from the 2021 national Youth Risk Behavior Survey (YRBS). The YRBS is a school- based survey that has been conducted by the Centers for Disease

Control and Prevention (CDC) during odd- numbered years since 1991. Each survey year, an independent three- stage, cluster sample design is used to obtain a nationally representative sample of public and private school students in grades 9– 12 in the 50 U.S. states and the District of Columbia. Student participation in the survey is voluntary, and local parental permission procedures are used that allow parents to opt their child out of participation. Students complete the YRBS in school, during a regular class period. Beginning in 2021, anonymous participant responses have been self- reported using tablets. More information about the YRBS sampling and psychometric properties has been published elsewhere.[19,20]

In 2021, the number of students in the sample was N = 17,232, the school response rate was 72.7%, the student response rate was 79.1%, and the overall response rate (the product of the school and student response rates) was 57.5%. The CDC's institutional review board approved the protocol for the national YRBS.

Measures.

Demographics.—The questionnaire asked students to identify their sex (female or male) and their grade (9, 10, 11, or 12).

Race and ethnicity.—The questionnaire also included two questions to measure race and ethnicity. First students were asked, "Are you Hispanic or Latino?" with response options yes and no. Second, students were asked, "What is your race? (Select one or more responses.)" The response options were American Indian or Alaska Native (AI/AN), Asian, Black or African American (Black), Native Hawaiian or Other Pacific Islander (NH/OPI), and White.

Classification into monoracial/ethnic and Multiracial/ethnic.—Students who selected only one race and were non- Hispanic were classified as monoracial/ethnic. Students who selected Hispanic and did not answer the race question were also classified as monoracial/ethnic. The data show that 83% (unweighted n = 1,215) of students with the missing data for the race question had responded yes to being Hispanic. In contrast, students who selected more than one race (with or without Hispanic ethnicity) and Hispanic respondents who selected one or more races were classified as Multiracial/ethnic.

For descriptive purposes, AI/AN, Asian, Black, NH/OPI, and White students were disaggregated into the following four categories: 1) monoracial non- Hispanic (chose one race and were non- Hispanic), 2) monoracial Hispanic (chose one race and were Hispanic), 3) Multiracial non- Hispanic (chose two or more races and were non- Hispanic), 4) Multiracial Hispanic (chose two or more races and were Hispanic) (Table 1). Students who chose all five race categories (n=21) were not included in the analytic sample because of concerns about interpretation and because they each add equally to the Multiracial groups.

Monoracial/ethnic categories are mutually exclusive; however, Multiracial/ethnic categories are not, which is a novel approach of this study. For example, a student who self-identified as non- Hispanic but chose both Asian and Black would be counted in two categories, Multiracial/ethnic Asian and Multiracial/ethnic Black. Similarly, students who

self- identified as Hispanic and White would be counted in two categories, Multiracial/ethnic Hispanic and Multiracial/ethnic White.

Mental health outcomes.—The following four questions were used as indicators of mental health: 1) During the past 30 days, how oft en was your mental health not good? (Poor mental health includes stress, anxiety, and depression.) (most of the time or always versus never, rarely, or sometimes; hereafter, poor mental health); 2) During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities? (yes versus no; hereafter, persistent feelings of sadness or hopelessness); 3) During the past 12 months, did you ever seriously consider attempting suicide? (yes versus no; hereafter, seriously consider attempting suicide); and 4) During the past 12 months, how many times did you actually attempt suicide? (1 or more times versus 0 times; hereafter, attempted suicide).

Analysis.

A weight based on student sex, race and ethnicity, and grade was applied to each record to adjust for school and student nonresponse and oversampling of Black and Hispanic students. To account for the complex sample design of the survey and weighting, all analyses were conducted using SAS- callable SUDAAN statistical software (version 11.0.4) (Research Triangle Institute, Research Triangle Park, North Carolina). First, accounting for students overall, weighted prevalence and 95% confidence intervals (CI) were calculated for each of the four indicators of mental health. Second, the unadjusted prevalence for each indicator of mental health was calculated for each monoracial/ethnic and Multiracial/ethnic group. Third, a series of logistic regression models, controlling for sex and grade, were used to calculate adjusted odds ratios (AOR) to assess the association between Multiracial/ethnic classification (compared with monoracial/ethnic classification) for each racial and ethnic group and each of the four indicators of mental health. Because Multiracial/ethnic categories are not mutually exclusive, comparisons across Multiracial/ethnic groups is not appropriate. Odds ratio findings were considered statistically significant if p-values for the t-test assessing beta=0 were < .05.

Results

Overall, 21.5% of students were Multiracial/ethnic. Monoracial/ethnic and Multiracial/ethnic classification for each group were as follows: AI/AN students comprised 19% monoracial/ethnic and 81% Multiracial/ethnic. Asian students comprised 65% monoracial/ethnic and 35% Multiracial/ethnic. Black students comprised 74% monoracial/ethnic and 26% Multiracial/ethnic. Hispanic students comprised 37% monoracial/ethnic and 63% Multiracial/ethnic. Native Hawaiian/Other Pacific Islander students comprised 24% monoracial/ethnic and 76% Multiracial/ethnic. White students comprised 81% monoracial/ethnic and 19% Multiracial/ethnic (Table 1).

Poor mental health.

During the 30 days before the survey 29.3% of students had poor mental health (Table 2). The odds of poor mental health were higher among Multiracial/ethnic Asian students

than monoracial/ethnic Asian students (AOR=1.6 [95% CI=1.1– 2.4], prevalence: 32.4% versus 22.8%) and higher among Multiracial/ethnic Hispanic students than monoracial/ethnic Hispanic students (AOR=1.5 [1.2–1.8], prevalence: 32.7% versus 24.9%).

Persistent feelings of sadness or hopelessness.

During the 12 months before the survey, 42.3% experienced persistent feelings of sadness or hopelessness. The odds of persistent feelings of sadness or hopelessness were higher among Multiracial/ethnic AI/AN students than monoracial/ethnic AI/AN students (AOR=1.5 [1.0– 2.2], prevalence: 53.3% versus 40.5%), higher among Multiracial/ethnic Asian students than monoracial/ethnic Asian students (AOR=1.8 [1.3– 2.6], prevalence: 49.2% versus 35.1%), higher among Multiracial/ethnic Black students than monoracial/ethnic Black students (AOR=1.6 [1.3– 2.0], prevalence: 52.8% versus 39.3%), and higher among Multiracial/ethnic White students than monoracial/ethnic White students (AOR=1.3 [1.1– 1.4], prevalence: 47.5% versus 41.1%).

Seriously considered attempting suicide.

During the 12 months before the survey, 22.2% had seriously considered attempting suicide. The odds of seriously considered attempting suicide were higher among Multiracial/ethnic Asian students than monoracial/ethnic Asian students (AOR=1.4 [1.0– 1.8], prevalence: 23.4% versus 17.7%) and higher among Multiracial/ethnic Hispanic students than monoracial/ethnic Hispanic students (AOR=1.4 [1.2– 1.8], prevalence: 24.1% versus 18.5%).

Attempted suicide.

During the 12 months before the survey, 10.2% had attempted suicide. The odds of having attempted suicide were higher among Multiracial/ethnic Asian students than monoracial/ethnic Asian students (AOR=1.9 [1.0– 3.4], prevalence: 11.9% versus 6.4%), but similar findings were not seen in other racial/ethnic groups.

Discussion

This study found that about one in five students were Multiracial/ethnic, that is, identified as two or more races or one or more races and Hispanic. Being Multiracial/ethnic was more common among certain groups than others. For example, among all students who indicated their race included AI/AN, 81% were Multiracial/ethnic. Among all students who indicated their race included NH/OPI, 75% were Multiracial/ethnic. Finally, among all students who indicated they were Hispanic, 63% were Multiracial/ethnic. Such findings are not surprising given the colonization history of the U.S., which included the mixing of Indigenous populations and immigrant populations as a result of communities living in close proximity to each other[21] Being Multiracial/ethnic was less prevalent among White (19%), Black (26%), and Asian (35%) students.

The goal of this work was, in part, to demonstrate that when data from only monoracial groups are presented, when Hispanic ethnicity trumps any race category, or when all multiracial groups are combined into one group, important information is lost. Because a

student identifies as Multiracial/ethnic, does not make that student less of any one racial group (or ethnicity) with which they identify. Further, adapting racial and ethnic tabulation to account for Multiracial/ethnic status within a race or ethnic group would provide better public health reporting of smaller racial groups. For example, because AI/AN and NH/OPI students oft en identify with more than one racial or ethnic group, if data are limited to monoracial/ethnic AI/AN or NH/OPI, a great deal of data reflecting those two racial groups is lost.[16] As described in the study by Everett Jones and Satter, AI/AN students are not less AI/AN because their ancestors include other racial or ethnic groups.

Secondarily, this study examined whether four indicators of poor mental health were different between monoracial/ethnic and Multiracial/ethnic students. The study found that the odds of each of the four mental health indicators (i.e., past 30-day poor mental health, and past 12-month persistent feelings of sadness or hopelessness, having seriously considered attempting suicide, and having attempted suicide) were significantly higher among Multiracial/ethnic Asian students than monoracial/ethnic Asian students. Among other groups, being Multiracial/ethnic was associated with poor mental health among Hispanic students; with persistent feelings of sadness or hopelessness among AI/AN, Black, and White students; and with seriously considering attempting suicide among Hispanic students.

As was found in this study, previous research examining indicators of mental health among Multiracial compared with monoracial youth has been mixed. This might in part be due to different study designs and conceptualizations of Multiracial used across studies. For instance, a 2019 study of young adults found that when aggregated into one category of Multiracial, Multiracial young adults were more likely to experience depression; but these results changed when the Multiracial population was disentangled into different racial groups with which the young adults identify.[7] Another study found depression was higher among Multiracial males compared with their peers, but this was not the case for Multiracial females.[6] In other measures of adjustment, no differences were found between single race and Multiracial youth in grades 7– 12.[6] In this study we showed that associations between Multiracial/ethnic classification and mental health outcomes varied by racial groups. This speaks to the heterogeneity within Multiracial/ethnic high school student groups and that important findings may be masked when Multiracial/ethnic students are treated as one homogeneous group.

Youth Risk Behavior Survey data indicated that the odds of poor mental health, persistent feelings of sadness or hopelessness, seriously considered attempting suicide, and attempted suicide were higher among Multiracial/ethnic Asian students than monoracial/ethnic Asian students. Further study could explore the unique characteristics and challenges of Multiracial/ethnic Asian youth to explain differences in mental health indicators across the two groups. For instance, Multiracial/ethnic Asian youth may face issues with discrimination and acceptance different from other Multiracial/ethnic youth, placing them at increased risk for poor mental health outcomes. Chau and Holiday- Moore,[22] as well as Iwamasa,[23] note that mental health problems may be stigmatized in some Asian and Pacific Islander communities and that such stigmatization could reduce the chances those affected

by mental health challenges will seek care. Thus, further study of Multiracial/ethnic Asian students' mental health will be important.

In addition, this study did not allow for an exploration of underlying disparities in social and structural stressors that could explain different findings in the association between Multiracial/ethnic status and indicators of mental health indicators among Asian and other racial groups. Thus, it is unclear whether some Multiracial/ethnic students, compared with their monoracial/ethnic peers, experienced higher levels of social stressors such as discrimination and victimization that increased their likelihood of adverse mental health outcomes.[10,11,23] Further study could explore the extent to which such social stressors vary between Multiracial/ethnic and monoracial/ethnic students to inform community and school-based strategies to reduce poor mental health outcomes. Additionally, further studies using these data could examine specific Multiracial/ethnic combinations for closer examination of Multiracial/ethnic groups and their health experiences.

Cooney and Radina note the importance of school environments that promote belonging among diverse student populations to address their findings related to Multiracial students' school success outcomes.[6] Such recommendations are supported by a growing body of research documenting the importance of school connectedness in reducing adolescent health risk behaviors and experiences.[24] Spaces that promote safe and supportive environments for all youth are meant to ensure students have a sense of belonging at school and believe others care for and are supportive of them.[24] Thus, while work to uncover the underlying factors playing a role in the mental health struggles of some Multiracial/ethnic youth, schools can use the guidance found in CDC's Promoting Mental Health and Well- Being in Schools: An Action Guide for School and District Leaders, which was created to provide strategies, approaches, and practices for school and district leaders to use in their efforts to improve students' mental health.[25]

Limitations.

This study has limitations that should be considered. First, students may have under or overreported their responses to the mental health indicators questions; however, each question could be skipped if desired and the questionnaire was completed anonymously, both of which suggest socially desirable responses were not likely to have driven responses. Second, the numbers of students who were monoracial/ethnic AI/AN and NH/OPI were small, which may have affected statistical power to detect statistically significant differences in the prevalence of the mental health indicators between monoracial/ethnic and Multiracial/ethnic AI/AN and NH/OPI students. Third, there is overlap in the Multiracial/ethnic groups across the different race categories; therefore, comparing the prevalence of mental health indicators across Multiracial/ethnic groups is not feasible. Fourth, the YRBS offers no way to uncover the extent to which Multiracial/ethnic students identify most with a particular racial or ethnic group, if at all, or the extent to which that cultural identity is protective of their mental health. Relatedly, it is clear that many Hispanic students do not distinguish between ethnicity and race. Consistent with Vaquera and Kao's findings among students in grades 7– 12,[26] most (83%) students in the current study with the missing data for the race question had responded yes to being Hispanic. This finding supports the OMB consideration

to include and race and ethnicity together in federal surveys. Finally, this study did not explore how sex or sexual identity might interact with Multiracial/ethnic identity. Such work would be an important next step to uncover whether the association between Multiracial/ethnic identify and mental health holds across sex, age, or sexual identity groups.

Conclusions.

Approximately one in five high school students is Multiracial/ethnic, which in and of itself warrants attention among public health researchers and practitioners because it is often an undefined population in epidemiological studies. In addition, some racial groups have a higher proportion of youth who have Multiracial/ethnic status than others. This study found that being Multiracial/ethnic was most common among AI/AN, NH/OPI, and Hispanic students. Those working to address health disparities must recognize the heterogeneity of Multiracial/ethnic groups to address the drivers of those health disparities most effectively. For example, this study found important subgroup differences in indicators of mental health that might be missed when Multiracial/ethnic groups are considered in aggregate.

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Table 1.

UNWEIGHTED SAMPLE SIZE AND PERCENTAGES OF STUDENTS IN MONORACIAL/ETHNIC
AND MULTIRACIAL/ETHNIC CATEGORIES—NATIONAL YOUTH RISK BEHAVIOR SURVEY, 2021

Race and Ethnicity Category[a]	Unweighted N	Unweighted N (%)
AI/AN monoracial, non-Hispanic	145	145 (19%)
AI/AN monoracial, Hispanic	246	
AI/AN Multiracial, non-Hispanic	298	633 (81%)[b]
AI/AN Multiracial, Hispanic	89	
Total AI/AN	778	778
Asian monoracial, non-Hispanic	850	850 (65%)
Asian monoracial, Hispanic	66	
Asian Multiracial, non-Hispanic	340	466 (35%)[b]
Asian Multiracial, Hispanic	60	
Total Asian	1316	1316
Black monoracial, non-Hispanic	2322	2322 (74%)
Black monoracial, Hispanic	182	
Black Multiracial, non-Hispanic	517	799 (26%)[b]
Black Multiracial, Hispanic	100	
Total Black	3121	3121
Hispanic, monoracial/ethnic	1213	1213 (37%)
Hispanic, Multiracial/ethnic	2031	2031 (63%)
Total Hispanic	3244	3244
NH/OPI monoracial, non-Hispanic	88	88 (24%)
NH/OPI monoracial, Hispanic	113	
NH/OPI Multiracial, non-Hispanic	119	280 (76%)[b]
NH/OPI Multiracial, Hispanic	48	
Total NH/OPI	368	368
White monoracial, non-Hispanic	9151	9151 (81%)
White monoracial, Hispanic	1216	
White Multiracial, non-Hispanic	817	2173 (19%)[b]
White Multiracial, Hispanic	140	
Total White	11,324	11,324

Note:

[a] Students who indicated they were Hispanic or Latino (hereaft er "Hispanic") were classified as Hispanic, monoracial if they did not answer the race question, and Multiracial/ethnic Hispanic if they chose one or more race options. Then, each race was disaggregated into the following four categories: 1) monoracial non-Hispanic (chose one race and were non-Hispanic), 2) monoracial Hispanic (chose one race and were Hispanic), 3) Multiracial non-Hispanic (chose two or more races and were non-Hispanic), 4) Multiracial Hispanic (chose two or more races and were Hispanic).

[b] Collectively, the student indicated race in combination with another race or Hispanic ethnicity.

Table 2.

ADJUSTED ODDS OF EXPERIENCING POOR MENTAL HEALTH INDICATORS AMONG MONORACIAL/ETHNIC AND MULTIRACIAL/ETHNIC STUDENTS—NATIONAL YOUTH RISK BEHAVIOR SURVEY, 2021

	Poor mental health[a]		Persistent feelings of sadness or hopelessness[b,c]		Seriously considered attempting suicide[c]		Attempted suicide[c]	
	%[d] (95% CI)	AOR[e] (95% CI)	%[d] (95% CI)	AOR[e] (95% CI)	%[d] (95% CI)	AOR[e] (95% CI)	%[d] (95% CI)	AOR[e] (95% CI)
Total	29.3 (27.8–30.8)		42.3 (41.0–43.7)		22.2 (21.1–23.3)		10.2 (9.4–11.0)	
AI/AN, monoracial/ethnic	31.1 (23.1–40.3)	1.0 (ref.)	40.5 (31.5–50.2)	1.0 (ref.)	27.3 (19.6–36.6)	1.0 (ref.)	16.0 (10.5–23.7)	1.0 (ref.)
AI/AN, Multiracial/ethnic	34.9 (27.3–43.2)	1.0 (.6–1.7)	53.3 (47.6–58.8)	1.5 (1.0–2.2)*	28.7 (24.7–33.0)	.9 (.6–1.6)	14.2 (10.9–18.3)	.8 (.4–1.3)
Asian, monoracial/ethnic	22.8 (18.3–28.2)	1.0 (ref.)	35.1 (30.4–40.2)	1.0 (ref.)	17.7 (15.5–20.2)	1.0 (ref.)	6.4 (4.3–9.4)	1.0 (ref.)
Asian, Multiracial/ethnic	32.4 (26.4–38.9)	1.6 (1.1–2.4)*	49.2 (43.4–55.0)	1.8 (1.3–2.6)*	23.4 (19.4–28.0)	1.4 (1.0–1.8)*	11.9 (9.2–15.4)	1.9 (1.0–3.4)*
Black, monoracial/ethnic	26.5 (24.0–29.1)	1.0 (ref.)	39.3 (36.3–42.5)	1.0 (ref.)	21.6 (18.4–25.2)	1.0 (ref.)	14.5 (11.9–17.5)	1.0 (ref.)
Black, Multiracial/ethnic	31.0 (26.4–36.0)	1.2 (.9–1.6)	52.8 (47.4–58.2)	1.6 (1.3–2.0)*	27.2 (23.1–31.7)	1.2 (1.0–1.5)	16.3 (13.5–19.4)	1.0 (.8–1.3)
Hispanic, monoracial/ethnic	24.9 (22.4–27.6)	1.0 (ref.)	43.4 (38.9–48.1)	1.0 (ref.)	18.5 (17.1–20.0)	1.0 (ref.)	9.1 (7.4–11.3)	1.0 (ref.)
Hispanic, Multiracial/ethnic	32.7 (29.6–36.1)	1.5 (1.2–1.8)*	48.2 (44.6–51.9)	1.2 (1.0–1.5)	24.1 (22.3–26.0)	1.4 (1.2–1.8)*	11.6 (9.6–13.8)	1.3 (.9–2.0)
NH/OPI, monoracial/ethnic	20.1 (7.8–42.8)	1.0 (ref.)	39.2 (29.1–50.3)	1.0 (ref.)	21.4 (8.7–43.7)	1.0 (ref.)	9.7 (4.2–20.8)	1.0 (ref.)
NH/OPI, Multiracial/ethnic	38.0 (23.5–55.1)	1.9 (.3–13.7)	49.3 (40.3–58.5)	1.4 (.7–2.7)	28.9 (22.6–36.2)	1.4 (.4–5.2)	17.6 (13.1–23.2)	1.9 (.5–7.1)
White, monoracial/ethnic	30.2 (27.8–32.7)	1.0 (ref.)	41.1 (39.0–43.3)	1.0 (ref.)	22.7 (20.9–24.6)	1.0 (ref.)	9.0 (7.8–10.5)	1.0 (ref.)
White, Multiracial/ethnic	33.7 (31.4–36.0)	1.1 (1.0–1.3)	47.5 (44.7–50.4)	1.3 (1.1–1.4)*	23.1 (21.1–25.3)	1.0 (.9–1.1)	9.9 (8.4–11.6)	1.1 (.9–1.3)

Note:

AI/AN = American Indian or Alaska Native; AOR = Adjusted odds ratio; CI = confi dence interval; NH/OPI = Native Hawaiian or Other Pacific Islander; ref = referent.

[a]During the past 30 days, most of the time or always, mental health was not good.

[b]Felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities.

[c]During the 12 months before the survey.

[d]Unadjusted weighted percent.

[e]Based on logistic regression models that controlled for sex and grade.

*
p-value < .05