Supplementary Materials

Perceived racial discrimination, psychological distress, and suicidal behavior in adolescence: Secondary analysis of cross-sectional data from a statewide youth survey

**Table S1.** Comparison of Student Demographics: KIP 2021 and Kentucky Department of Education Enrollment 2020-2021

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | KIP 2021 | | KY Total Enrollment  2020-2021b | | KY Enrollment w/o Jefferson County 2020-2021c | |
| Characteristics | | n | (%) | n | (%) | n | (%) |
| Overall | | 93,812 | (100) | 217,566 | (100) | 185,515 | (100) |
| School Grade | |  |  |  |  |  |  |
|  | 6 | 25,552 | (27.2) | 54,479 | (25.0) | 46,490 | (25.1) |
|  | 8 | 26,712 | (28.5) | 56,558 | (26.0) | 48,281 | (26.0) |
|  | 10 | 23,632 | (25.2) | 56,352 | (25.9) | 47,633 | (25.7) |
|  | 12 | 17,916 | (19.1) | 50,177 | (23.1) | 43,111 | (23.2) |
| Gender Identitya | |  |  |  |  |  |  |
|  | Female | 42,065 | (44.8) | 106,035 | (48.7) | 90,116 | (48.6) |
|  | Male | 46,052 | (49.1) | 111,531 | (51.3) | 95,399 | (51.4) |
|  | Questioning/unsure | 1,524 | (1.6) |  |  |  |  |
|  | Not listed | 2,103 | (2.2) |  |  |  |  |
|  | Prefer not to say | 1,756 | (1.9) |  |  |  |  |
| Race-Ethnicitya | |  |  |  |  |  |  |
|  | Non-Hispanic White | 66,829 | (71.2) | 162,853 | (74.9) | 149,495 | (80.6) |
|  | Black | 5,920 | (6.3) | 24,480 | (11.3) | 12,356 | (6.7) |
|  | Hispanic or Latino | 8,265 | (8.8) | 16,650 | (7.7) | 12,898 | (7.0) |
|  | Asian | 1,227 | (1.4) | 3,867 | (1.8) | 2,599 | (1.4) |
|  | Native Hawaiian or Pacific Islander | 148 | (0.2) | 298 | (0.1) | 253 | (0.1) |
|  | American Indian or Alaska Native | 918 | (1.0) | 293 | (0.1) | 257 | (0.1) |
|  | Multiracial | 5,619 | (6.0) | 9,125 | (4.2) | 7,657 | (4.1) |
|  | Other | 1,743 | (1.9) |  |  |  |  |
| Rural | |  |  |  |  |  |  |
|  | Yes | 52,087 | (55.5) | 107,506 | (49.4) | 107,506 | (58.0) |
|  | No | 41,725 | (44.5) | 110,060 | (50.6) | 77,895 | (42.0) |

aOverall characteristics may not add to 100% due to missingness; b Total enrollment for Grades 6, 8, 10, and 12 with Jefferson County School District; cTotal enrollment for Grades 6, 8, 10, and 12 without Jefferson County School District.

**Table S2.** Characteristics of middle school students

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | Overall | | | | SPD | | | | Suicide Ideation | | | | Suicide Attempt | | | |
| Characteristics | | n | | (%) | | n | | (%) | | n | | (%) | | n | | (%) | |
| Overall | | 52,264 | | (100) | | 9,217 | | (17.6) | | 6,179 | | (11.8) | | 3,876 | | (7.4) | |
| School Grade | |  | |  | |  | |  | |  | |  | |  | |  | |
|  | 6 | | 25,552 | | (48.9) | | 3,823 | | (15.0) | | 2,443 | | (9.6) | | 1,669 | | (6.5) |
|  | 8 | | 26,712 | | (51.1) | | 5,394 | | (20.2) | | 3,736 | | (14.0) | | 2,207 | | (8.3) |
| Gender Identitya | |  | |  | |  | |  | |  | |  | |  | |  | |
|  | Female | | 22,866 | | (43.7) | | 4,791 | | (21.0) | | 3,114 | | (13.6) | | 1,974 | | (8.6) |
|  | Male | | 25,821 | | (49.4) | | 2,729 | | (10.6) | | 1,733 | | (6.7) | | 1,101 | | (4.3) |
|  | Questioning/unsure | | 993 | | (1.9) | | 559 | | (56.3) | | 431 | | (43.4) | | 241 | | (24.3) |
|  | Not listed | | 1,220 | | (2.3) | | 714 | | (58.5) | | 595 | | (48.8) | | 353 | | (28.9) |
|  | Prefer not to say | | 1,181 | | (2.3) | | 401 | | (34.0) | | 290 | | (24.6) | | 195 | | (16.5) |
| Sexual Orientationa | |  | |  | |  | |  | |  | |  | |  | |  | |
|  | Heterosexual | | 32,689 | | (62.6) | | 4,075 | | (12.5) | | 2,476 | | (7.6) | | 1,459 | | (4.5) |
|  | Gay or lesbian | | 2,893 | | (5.5) | | 1,464 | | (50.6) | | 1,218 | | (42.1) | | 763 | | (26.4) |
|  | Questioning/unsure | | 2,768 | | (5.3) | | 761 | | (27.5) | | 536 | | (19.4) | | 306 | | (11.1) |
|  | Not listed | | 3,717 | | (7.1) | | 1,437 | | (38.7) | | 1,151 | | (31.0) | | 682 | | (18.4) |
|  | Prefer not to say | | 4,861 | | (9.3) | | 834 | | (17.2) | | 421 | | (8.7) | | 322 | | (6.6) |
| Race-Ethnicityab | |  | |  | |  | |  | |  | |  | |  | |  | |
|  | NH White (White) | | 35,439 | | (67.8) | | 6,126 | | (17.3) | | 3,992 | | (11.3) | | 2,290 | | (6.5) |
|  | NH Black (Black) | | 3,555 | | (6.8) | | 534 | | (15.0) | | 442 | | (12.4) | | 327 | | (9.2) |
|  | Hispanic | | 4,839 | | (9.3) | | 931 | | (19.2) | | 648 | | (13.4) | | 492 | | (10.2) |
|  | NH Asian/NH/PI  (Asian/Pacific Islander) | | 700 | | (1.3) | | 112 | | (16.0) | | 74 | | (10.6) | | 41 | | (5.9) |
|  | NH AI/AN (Native American) | | 650 | | (1.2) | | 137 | | (21.1) | | 85 | | (13.1) | | 70 | | (10.8) |
|  | NH Other (Other) | | 1,348 | | (2.6) | | 268 | | (19.9) | | 182 | | (13.5) | | 133 | | (9.9) |
|  | NH Multiracial (Multiracial) | | 3,242 | | (6.2) | | 799 | | (24.7) | | 572 | | (17.6) | | 378 | | (11.7) |
| Rural | |  | |  | |  | |  | |  | |  | |  | |  | |
|  | Yes | | 28,925 | | (55.3) | | 5,322 | | (18.4) | | 3,541 | | (12.2) | | 2,233 | | (7.7) |
|  | No | | 23,339 | | (44.7) | | 3,895 | | (16.7) | | 2,638 | | (11.3) | | 1,643 | | (7.0) |
| Perceived Racial Discriminationa | |  | |  | |  | |  | |  | |  | |  | |  | |
|  | Yes | | 2,557 | | (4.9) | | 1,018 | | (39.8) | | 763 | | (29.8) | | 529 | | (20.7) |
|  | No/Not sure | | 43,225 | | (82.7) | | 7,178 | | (16.6) | | 4,778 | | (11.1) | | 2,818 | | (6.5) |

aOverall characteristics may not add to 100% due to missingness; bNH= Non-Hispanic; NH/PI=Native Hawaiian or Pacific Islander; AI/AN=American Indian or Alaska Native

**Table S3.** Characteristics of high school students

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | Overall | | SPD | | Suicide Ideation | | Suicide Attempt | |
| Characteristics | | n | (%) | n | (%) | n | (%) | n | (%) |
| Overall | | 41,548 | (100) | 10,093 | (24.3) | 6,345 | (15.3) | 3,048 | (7.3) |
| School Grade | |  |  |  |  |  |  |  |  |
|  | 10 | 23,632 | (56.9) | 5,715 | (24.2) | 3,694 | (15.6) | 1,870 | (7.9) |
|  | 12 | 17,916 | (43.1) | 4,378 | (24.4) | 2,651 | (14.8) | 1,178 | (6.6) |
| Gender Identitya | |  |  |  |  |  |  |  |  |
|  | Female | 19,199 | (46.2) | 5,792 | (30.2) | 3,354 | (17.5) | 1,618 | (8.4) |
|  | Male | 20,231 | (48.7) | 3,065 | (15.1) | 2,071 | (10.2) | 967 | (4.8) |
|  | Questioning/unsure | 531 | (1.3) | 330 | (62.2) | 253 | (47.7) | 112 | (21.1) |
|  | Not listed | 883 | (2.1) | 596 | (67.5) | 452 | (51.2) | 227 | (25.7) |
|  | Prefer not to say | 575 | (1.4) | 283 | (49.2)) | 196 | (34.1) | 109 | (19.0) |
| Sexual Orientationa | |  |  |  |  |  |  |  |  |
|  | Heterosexual | 30,199 | (72.7) | 5,461 | (18.1) | 3,124 | (10.3) | 1,439 | (4.8) |
|  | Gay or lesbian | 2,551 | (6.1) | 1,375 | (53.9) | 1,029 | (40.3) | 512 | (20.1) |
|  | Questioning/unsure | 1,575 | (3.8) | 704 | (44.7) | 495 | (31.4) | 224 | (14.2) |
|  | Not listed | 2,879 | (6.9) | 1,527 | (53.0) | 1,122 | (39.0) | 514 | (17.9) |
|  | Prefer not to say | 1,686 | (4.1) | 471 | (27.9) | 255 | (15.1) | 136 | (8.1) |
| Race-Ethnicityab | |  |  |  |  |  |  |  |  |
|  | NH White (White) | 31,390 | (75.6) | 7,637 | (24.3) | 4,726 | (15.1) | 2,140 | (6.8) |
|  | NH Black (Black) | 2,365 | (5.7) | 473 | (20.0) | 319 | (13.5) | 177 | (7.5) |
|  | Hispanic | 3,426 | (8.3) | 822 | (24.0) | 517 | (15.1) | 296 | (8.6) |
|  | NHAsian/NH/PI (Asian/Pacific Islander) | 675 | (1.6) | 139 | (20.6) | 88 | (13.0) | 40 | (5.9) |
|  | NH AI/AN (Native American) | 268 | (0.7) | 63 | (23.5) | 40 | (14.9) | 31 | (11.6) |
|  | NH Other (Other) | 395 | (1.0) | 104 | (26.3) | 67 | (17.0) | 44 | (11.1) |
|  | NH Multiracial (Multiracial) | 2,377 | (5.7) | 719 | (30.3) | 504 | (21.2) | 269 | (11.3) |
| Rural | |  |  |  |  |  |  |  |  |
|  | Yes | 23,162 | (55.8) | 5,760 | (24.9) | 3,603 | (15.6) | 1,828 | (7.9) |
|  | No | 18,386 | (44.3) | 4,333 | (23.6) | 2,742 | (14.9) | 1,220 | (6.6) |
| Perceived Racial Discriminationa | |  |  |  |  |  |  |  |  |
|  | Yes | 3,018 | (7.3) | 1,122 | (37.2) | 802 | (26.6) | 422 | (14.0) |
|  | No/Not sure | 34,581 | (83.2) | 8,084 | (23.4) | 4,992 | (14.4) | 2,259 | (6.5) |

aOverall characteristics may not add to 100% due to missingness; bNH= Non-Hispanic; NH/PI=Native Hawaiian or Pacific Islander; AI/AN=American Indian or Alaska Native

**Figure S1**. Prevalence of perceived racial discrimination among racial and ethnic minorities stratified by school level

Note: For all racial/ethnic groups besides Native Americans, high schoolers reported significantly higher rates of PRD than middle school students. The following are Cramer’s V for each racial/ethnic group with a significant relationship from left to right: 0.04, 0.10, 0.11, 0.14, -0.01, 0.11, 0.13.

**Figure S2.** Prevalence of SPD and suicidality among racial and ethnic minorities in middle school

**Figure S3.** Prevalence of SPD and suicidality among racial and ethnic minorities in high school

**Figure S4**. Adjusted odds of SPD and among racial and ethnic minorities stratified by school level

A graph with numbers and lines

Description automatically generated

**Figure S5.** Adjusted odds of suicidal ideation among racial and ethnic minorities stratified by school level

A graph with numbers and lines

Description automatically generated with medium confidence

**Figure S6**. Adjusted odds of suicide attempt among racial and ethnic minorities stratified by school level

A graph with lines and dots

Description automatically generated