**Supplementary Table 1: Bivariate associations with self-reported disability for lifetime history of traumatic brain injury with loss of consciousness and demographic characteristics--North Carolina Behavioral Risk Factor Surveillance System, 2018**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Disability Status (N = 3556)1 | Test-statistic | p-value | Hearing Disability (N = 3564)2 | Test-statistic | p-value |
|  | Yes# |  |  | Yes# |  |  |
| **Characteristic** | **N** | **WP or Mean (SE)** |  |  | **N** | **WP or Mean (SE)** |  |  |
| *Sex* |  |  | 2.8 | 0.10 |  |  | 3.2 | 0.08 |
| Males | 507 | 29.3 |  |  | 196 | 9.9 |  |  |
| Females | 690 | 32.6 |  |  | 160 | 7.8 |  |  |
| *Age (years)* |  |  | 9.4 | < 0.0001\* |  |  | 10.0 | < 0.0001\* |
| Mean | 1183 | 55.3 (0.7) |  |  | 353 | 62.1 (1.3) |  |  |
| *Race/Ethnicity* |  |  | 1.8 | 0.18 |  |  | 2.7 | 0.10 |
| Non-Hispanic White | 816 | 32.1 |  |  | 268 | 9.6 |  |  |
| Other | 364 | 29.2 |  |  | 83 | 7.3 |  |  |
| *Veteran Status* |  |  | 16.0 | < 0.0001\* |  |  | 42.4 | < 0.0001\* |
| Yes | 214 | 41.6 |  |  | 100 | 19.1 |  |  |
| No | 983 | 29.8 |  |  | 256 | 7.5 |  |  |
| *Marital Status* |  |  | 21.8 | < 0.0001\* |  |  | 0.04 | 0.84 |
| Married | 473 | 26.7 |  |  | 159 | 8.7 |  |  |
| Not married | 720 | 36.0 |  |  | 196 | 8.9 |  |  |
| *Educational Attainment* |  |  | 115.1 | < 0.0001\* |  |  | 13.6 | < 0.01\* |
| Completed high school or less | 574 | 41.1 |  |  | 148 | 10.0 |  |  |
| Some college | 374 | 30.7 |  |  | 127 | 9.8 |  |  |
| Bachelor's degree or higher | 246 | 15.8 |  |  | 79 | 5.3 |  |  |
| *Employment Status* |  |  | 208.3 | < 0.0001\* |  |  | 61.7 | < 0.0001\* |
| Currently employed | 311 | 17.9 |  |  | 90 | 4.6 |  |  |
| Unemployed | 879 | 47.4 |  |  | 264 | 14.0 |  |  |
| *Federal Poverty Level* |  |  | 118.7 | < 0.0001\* |  |  | 7.7 | 0.052 |
| < 100% (poor) | 195 | 47.8 |  |  | 37 | 9.3 |  |  |
| ≥ 100% - < 200% (near poor) | 343 | 43.0 |  |  | 92 | 10.0 |  |  |
| ≥ 200% (not poor) | 399 | 20.5 |  |  | 138 | 7.1 |  |  |
| Unknown | 260 | 35.5 |  |  | 89 | 11.4 |  |  |
| *Lifetime TBI with Loss of Consciousness* |  |  | 46.8 | < 0.0001\* |  |  | 12.8 | < 0.001\* |
| Yes | 410 | 42.6 |  |  | 128 | 12.4 |  |  |
| No | 787 | 27.3 |  |  | 228 | 7.6 |  |  |
| *TBI Severity* |  |  | 4.6 | 0.03\* |  |  | 1.4 | 0.24 |
| Mild (< 30 mins LOC) | 288 | 39.2 |  |  | 86 | 10.9 |  |  |
| Moderate/Severe (≥ 30 mins LOC) | 75 | 51.3 |  |  | 23 | 14.9 |  |  |
| *Veterans vs Non-Veterans with a Lifetime History of TBI with LOC* |  | 4.0 | 0.04\* |  |  | 15.4 | < 0.001\* |
| Veterans | 92 | 52.2 |  |  | 46 | 23.9 |  |  |
| Non-Veterans | 318 | 40.8 |   |   | 82 | 10.2 |   |   |

Abbreviations: TBI= traumatic brain injury; LOC = loss of consciousness; WP = weighted percentage; SE = standard error

1Analyses limited to those who answered the lifetime TBI with LOC and any disability questions

2Analyses limited to those who answered the lifetime TBI with LOC and hearing disability questions

3Analyses limited to those who answered the lifetime TBI with LOC and vision disability questions

4Analyses limited to those who answered the lifetime TBI with LOC and cognitive disability questions

5Analyses limited to those who answered the lifetime TBI with LOC and mobility disability questions

6Analyses limited to those who answered the lifetime TBI with LOC and self-care disability questions

7Analyses limited to those who answered the lifetime TBI with LOC and independent living disability questions

#Though the test statistic examined "Yes" vs "No", only the "Yes" column descriptive statistics are shown

\*Bivariate associates were determined by these tests: chi-square, t-test, and one-way ANOVA

††† Estimates not presented because they are unstable due to small sample size and/or relative standard error >30%

**Supplementary Table 1 (Continued): Bivariate associations with self-reported disability for lifetime history of traumatic brain injury with loss of consciousness and demographic characteristics--North Carolina Behavioral Risk Factor Surveillance System, 2018**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Vision Disability (N = 3563)3 | Test-statistic | p-value | Cognitive Disability (N = 3556)~~4~~ | Test-statistic | p-value |
|  | Yes# |  |  | Yes# |  |  |
| **Characteristic** | **N** | **WP or Mean (SE)** |  |  | **N** | **WP or Mean (SE)** |  |  |
| *Sex* |  |  | 0.58 | 0.45 |  |  | 1.6 | 0.21 |
| Males | 98 | 5.5 |  |  | 186 | 12.0 |  |  |
| Females | 138 | 6.3 |  |  | 262 | 13.9 |  |  |
| *Age (years)* |  |  | 3.56 | < 0.001\* |  |  | -0.5 | 0.61 |
| Mean | 232 | 55.6 (1.7) |  |  | 442 | 49.1 (1.2) |  |  |
| *Race/Ethnicity* |  |  | 0.74 | 0.39 |  |  | 0.01 | 0.94 |
| Non-Hispanic White | 151 | 6.1 |  |  | 290 | 13.0 |  |  |
| Other | 81 | 5.3 |  |  | 149 | 12.9 |  |  |
| *Veteran Status* |  |  | 3.01 | 0.08 |  |  | 3.2 | 0.07 |
| Yes | 44 | 8.4 |  |  | 72 | 16.8 |  |  |
| No | 192 | 5.6 |  |  | 376 | 12.5 |  |  |
| *Marital Status* |  |  | 9.94 | < 0.01\* |  |  | 24.5 | < 0.0001\* |
| Married | 75 | 4.3 |  |  | 145 | 9.3 |  |  |
| Not married | 158 | 7.6 |  |  | 300 | 16.9 |  |  |
| *Educational Attainment* |  |  | 20.87 | < 0.0001\* |  |  | 60.5 | < 0.0001\* |
| Completed high school or less | 119 | 8.0 |  |  | 237 | 18.3 |  |  |
| Some college | 73 | 5.7 |  |  | 141 | 12.9 |  |  |
| Bachelor's degree or higher | 43 | 2.6 |  |  | 69 | 4.7 |  |  |
| *Employment Status* |  |  | 37.8 | < 0.0001\* |  |  |  |  |
| Currently employed | 54 | 2.9 |  |  | 119 | 7.8 | 57.2 | < 0.0001\* |
| Unemployed | 181 | 9.6 |  |  | 325 | 19.3 |  |  |
| *Federal Poverty Level* |  |  | 38.4 | < 0.0001\* |  |  | 105.4 | < 0.0001\* |
| < 100% (poor) | 56 | 11.7 |  |  | 110 | 27.7 |  |  |
| ≥ 100% - < 200% (near poor) | 78 | 9.7 |  |  | 143 | 19.9 |  |  |
| ≥ 200% (not poor) | 64 | 3.3 |  |  | 98 | 5.9 |  |  |
| Unknown | 38 | 5.2 |  |  | 97 | 15.0 |  |  |
| *Lifetime TBI with Loss of Consciousness* |  |  | 12.7 | < 0.001\* |  |  | 52.4 | < 0.0001\* |
| Yes | 94 | 9.0 |  |  | 197 | 22.3 |  |  |
| No | 142 | 4.9 |  |  | 251 | 9.9 |  |  |
| *TBI Severity* |  |  | 4.4 | 0.04\* |  |  | 9.7 | < 0.01\* |
| Mild (< 30 mins LOC) | 61 | 8.0 |  |  | 127 | 19.1 |  |  |
| Moderate/Severe (≥ 30 mins LOC) | 24 | 14.9 |  |  | 47 | 34.0 |  |  |
| *Veterans vs Non-Veterans with a lifetime history of TBI with LOC* |  |  | 0.16 |  | 3.3 | 0.07 |
| Veterans | 21 | 13.6 |  |  | 40 | 30.2 |  |  |
| Non-Veterans | 73 | 8.2 |   |   | 157 | 20.9 |   |   |

**Supplementary Table 1 (Continued): Bivariate associations with self-reported disability for lifetime history of traumatic brain injury with loss of consciousness and demographic characteristics--North Carolina Behavioral Risk Factor Surveillance System, 2018**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Mobility Disability (N = 3565)5 | Test-statistic | p-value | Self-care Disability (N = 3566)6 | Test-statistic | p-value |
|  | Yes# |  |  | Yes# |  |  |
| **Characteristic** | **N** | **WP or Mean (SE)** |  |  | **N** | **WP or Mean (SE)** |  |  |
| *Sex* |  |  | 11.9 | < 0.001\* |  |  | 1.3 | 0.25 |
| Males | 254 | 13.9 |  |  | 76 | 4.3 |  |  |
| Females | 440 | 19.3 |  |  | 107 | 5.5 |  |  |
| *Age (years)* |  |  | 14.8 | < 0.0001\* |  |  | 5.4 | < 0.0001\* |
| Mean | 686 | 60.3 (0.7) |  |  | 180 | 58.5 (1.6) |  |  |
| *Race/Ethnicity* |  |  | 0.4 | 0.51 |  |  | 1.9 | 0.16 |
| Non-Hispanic White | 456 | 16.5 |  |  | 108 | 4.5 |  |  |
| Other | 228 | 17.6 |  |  | 72 | 6.0 |  |  |
| *Veteran Status* |  |  | 6.3 | 0.01\* |  |  | 1.2 | 0.28 |
| Yes | 117 | 21.9 |  |  | 32 | 6.5 |  |  |
| No | 577 | 16.1 |  |  | 151 | 4.8 |  |  |
| *Marital Status* |  |  | 12.0 | < 0.001\* |  |  | 9.9 | < 0.01\* |
| Married | 265 | 14.2 |  |  | 54 | 3.4 |  |  |
| Not married | 426 | 19.6 |  |  | 128 | 6.7 |  |  |
| *Educational Attainment* |  |  | 57.6 | < 0.0001\* |  |  | 15.5 | < 0.001\* |
| Completed high school or less | 348 | 22.5 |  |  | 92 | 6.6 |  |  |
| Some college | 205 | 16.2 |  |  | 59 | 5.2 |  |  |
| Bachelor's degree or higher | 140 | 8.6 |  |  | 32 | 2.1 |  |  |
| *Employment Status* |  |  | 218.6 | < 0.0001\* |  |  | 49.3 | < 0.0001\* |
| Currently employed | 114 | 6.1 |  |  | 23 | 1.6 |  |  |
| Unemployed | 577 | 30.1 |  |  | 158 | 9.2 |  |  |
| *Federal Poverty Level* |  |  | 91.2 | < 0.0001\* |  |  | 44.4 | < 0.0001\* |
| < 100% (poor) | 129 | 31.2 |  |  | 48 | 12.3 |  |  |
| ≥ 100% - < 200% (near poor) | 210 | 23.5 |  |  | 56 | 6.3 |  |  |
| ≥ 200% (not poor) | 206 | 10.0 |  |  | 37 | 2.2 |  |  |
| Unknown | 149 | 18.2 |  |  | 42 | 6.3 |  |  |
| *Lifetime TBI with Loss of Consciousness* |  |  | 15.0 | < 0.001\* |  |  | 9.4 | < 0.01\* |
| Yes | 233 | 21.9 |  |  | 68 | 7.6 |  |  |
| No | 461 | 15.1 |  |  | 115 | 4.1 |  |  |
| *TBI Severity* |  |  | 5.8 | 0.02\* |  |  |  †††  |  †††  |
| Mild (< 30 mins LOC) | 156 | 18.8 |  |  | 45 | 6.5 |  |  |
| Moderate/Severe (≥ 30 mins LOC) | 48 | 29.8 |  |  |  †††  |  †††  |  |  |
| *Veterans vs Non-Veterans with a Lifetime History of TBI with LOC* |  |  | 0.16 |  |  †††  |  †††  |
| Veterans | 50 | 27.6 |  |  |  †††  |  †††  |  |  |
| Non-Veterans | 183 | 20.8 |   |   | 53 | 6.8 |   |   |

**Supplementary Table 1 (Continued): Bivariate associations with self-reported disability for lifetime history of traumatic brain injury with loss of consciousness and demographic characteristics--North Carolina Behavioral Risk Factor Surveillance System, 2018**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Independent Living Disability (N = 3562)7 | Test-statistic | p-value |  | Number of disabilities (N = 1197)1 | Test-statistic | p-value |
|  | Yes# |  |  |  | Two or more |  |  |
| **Characteristic** | **N** | **WP or Mean (SE)** |  |  |  | **N** | **WP or Mean (SE)** |  |  |
| *Sex* |  |  | 18.3 | < 0.0001\* |  |  |  | 3.6 | 0.06 |
| Males | 107 | 5.6 |  |  |  | 225 | 43.3 |  |  |
| Females | 213 | 10.4 |  |  |  | 343 | 50.6 |  |  |
| *Age (years)* |  |  | 4.4 | < 0.0001\* |  |  |   | 3.0 | < 0.01\* |
| Mean | 313 | 55.4 (1.4) |  |  |  | 559 | 57.5 (1.0) |  |  |
| *Race/Ethnicity* |  |  | 2.6 | 0.11 |  |  |  | 8.8 | < 0.01\* |
| Non-Hispanic White | 194 | 7.5 |  |  |  | 355 | 43.5 |  |  |
| Other | 120 | 9.5 |  |  |  | 201 | 55.8 |  |  |
| *Veteran Status* |  |  | 0.4 | 0.55 |  |  |  | 0.3 | 0.58 |
| Yes | 44 | 7.4 |  |  |  | 104 | 49.9 |  |  |
| No | 276 | 8.3 |  |  |  | 464 | 47.0 |  |  |
| *Marital Status* |  |  | 8.0 | < 0.01\* |  |  |  | 4.2 | 0.04\* |
| Married | 110 | 6.6 |  |  |  | 196 | 43.0 |  |  |
| Not married | 208 | 9.9 |  |  |  | 369 | 51.0 |  |  |
| *Educational Attainment* |  |  | 30.5 | < 0.0001\* |  |  |  | 5.3 | 0.07 |
| Completed high school or less | 169 | 11.0 |  |  |  | 293 | 49.8 |  |  |
| Some college | 102 | 8.6 |  |  |  | 181 | 47.8 |  |  |
| Bachelor's degree or higher | 49 | 3.3 |  |  |  | 93 | 37.2 |  |  |
| *Employment Status* |  |  | 118.4 | < 0.0001\* |  |  |  | 33.6 | < 0.0001\* |
| Currently employed | 37 | 2.3 |  |  |  | 89 | 30.6 |  |  |
| Unemployed | 281 | 15.5 |  |  |  | 476 | 55.5 |  |  |
| *Federal Poverty Level* |  |  | 69.4 | < 0.0001\* |  |  |  | 28.2 | < 0.0001\* |
| < 100% (poor) | 78 | 19.0 |  |  |  | 128 | 66.4 |  |  |
| ≥ 100% - < 200% (near poor) | 98 | 11.1 |  |  |  | 173 | 47.3 |  |  |
| ≥ 200% (not poor) | 71 | 4.1 |  |  |  | 140 | 36.7 |  |  |
| Unknown | 73 | 9.0 |  |  |  | 127 | 48.0 |  |  |
| *Lifetime TBI with Loss of Consciousness* |  |  | 29.2 | < 0.0001\* |  |  |  | 6.7 | < 0.01\* |
| Yes | 126 | 13.6 |  |  |  | 219 | 54.2 |  |  |
| No | 194 | 6.4 |  |  |  | 349 | 44.0 |  |  |
| *TBI Severity* |  |  | 0.01 | 0.92 |  |  |  | 0.4 | 0.52 |
| Mild (< 30 mins LOC) | 88 | 12.9 |  |  |  | 151 | 52.5 |  |  |
| Moderate/Severe (≥ 30 mins LOC) | 22 | 13.3 |  |  |  | 44 | 57.7 |  |  |
| *Veterans vs Non-Veterans with a Lifetime History of TBI with LOC* |  |  | 0.91 | 0.34 |  | 3.0 | 0.08 |
| Veterans | 22 | 10.8 |  |  |  | 51 | 64.6 |  |  |
| Non-Veterans | 104 | 14.1 |   |   |   | 168 | 51.7 |   |   |