Supplemental Table. Associations obtained from complete case analyses between self-injurious behaviors and different factors in children with autism spectrum disorder (ASD) included in the Autism and Developmental Disability Monitoring (ADDM) Network and Autism Speaks-Autism Treatment Network (AS-ATN) datasets\*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variable** | **ADDM dataset** | | **AS-ATN dataset** | |
|  | **OR and 95% CI** | **P-value** | **OR and 95% CI** | **P-value** |
| Sex  Female  Male | 0.88 (0.71, 1.09)  1.00 | 0.26  1.00 | 0.86 (0.69, 1.07)  1.00 | 0.17  1.00 |
| Child’s age (per year) | N/A | N/A | 0.94 (0.92, 0.97) | **<0.0001** |
| Race of the child  NHAA  Hispanic  Others  NHW | 0.88 (0.72, 1.08)  0.98 (0.75, 1.28)  0.85 (0.59, 1.21)  1.00 | 0.23  0.87  0.38  1.00 | 0.75 (0.53, 1.06)  0.96 (0.71, 1.30)  1.17 (0.82, 1.68)  1.00 | 0.10  0.81  0.40  1.00 |
| Regression  Yes  No | 1.34 (1.10, 1.64)  1.00 | **0.004** | 1.37 (1.14, 1.65) | **0.0007** |
| Aggression  Yes  No | 2.45 (2.05, 2.93)  1.00 | **<0.0001**  1.00 | 3.18 (2.67, 3.78)  1.00 | **<0.0001**  1.00 |
| Temper tantrums  Yes  No | 1.84 (1.54, 2.20)  1.00 | **<0.0001**  1.00 | N/A  N/A | N/A  N/A |
| Argumentative behaviors  Yes  No | 1.28 (1.05, 1.57)  1.00 | **0.02**  1.00 | N/A  N/A | N/A  1.00 |
| Psychiatric conditions/Anxiety  Yes  No | 1.60 (1.08, 2.37)  1.00 | **0.02**  1.00 | 1.57 (1.28, 1.93)  1.00 | **<0.0001**  1.00 |
| Psychiatric conditions/  Mood problems  Yes  No | 1.60 (1.08, 2.37)  1.00 | **0.02**  1.00 | 1.64 (1.36, 1.98)  1.00 | **<0.0001**  1.00 |
| Developmental conditions/  Hyperactivity  Yes  No | 1.17 (0.98, 1.38)  1.00 | 0.08  1.00 | 1.45 (1.17, 1.80)  1.00 | **0.0006**  1.00 |
| Developmental conditions/  Attention problems  Yes  No | 1.17 (0.98, 1.38)  1.00 | 0.08  1.00 | 0.90 (0.68, 1.17)  1.00 | 0.42  1.00 |
| Neurologic conditions  Yes  No | 1.46 (1.05, 2.04)  1.00 | **0.02**  1.00 | N/A  N/A | N/A  N/A |
| Genetic conditions  Yes  No | 0.31 (0.04, 2.74)  1.00 | 0.29  1.00 | N/A  N/A | N/A  N/A |
| IQ scores (per 1 unit) | N/A | N/A | 0.99 (0.99, 1.00) | 0.27 |
| Cognitive ability  Above intellectual disabled range  Intellectual disability | 0.76 (0.63, 0.91)  1.00 | **0.003**  1.00 | N/A  N/A | N/A  N/A |
| Adaptive skills scores (per 1 unit) | N/A | N/A | 0.97 (0.96, 0.98) | **<0.0001** |
| Adaptive impairment  No (adaptive score >70)  Yes (adaptive score <=70) | 0.91 (0.76,1.09)  1.00 | 0.32 | N/A  N/A | N/A  N/A |
| Severity of autism\*\* | N/A | N/A | 0.96 (0.92, 0.97) | **0.02** |
| Sensory problems  Yes  No | 1.41 (1.15, 1.71)  1.00 | **0.0006**  1.00 | 1.54 (1.23, 1.93)  1.00 | **0.0002**  1.00 |
| Sleep problems\*\*\*  Yes  No | 1.48 (1.25, 1.76)  1.00 | **<0.0001**  1.00 | 1.37 (1.11,1.70)  1.00 | **0.003**  1.00 |
| Gastrointestinal problems\*\*\*  Yes  No | N/A  1.00 | N/A  N/A | 1.22 (0.99, 1.51)  1.00 | 0.06  1.00 |
| Maternal age (per year)\*\*\* | N/A | N/A | 0.99 (0.98, 0.99) | **0.0006** |
| Paternal age (per year)\*\*\* | N/A | N/A | 0.99 (0.98, 1.01) | 0.06 |
| Maternal education  No college degree  College degree or higher | N/A  N/A | N/A  N/A | 1.38 (1.16, 1.64)  1.00 | **0.0002**  1.00 |
| Health insurance  Public  Other  Private | N/A  N/A  N/A | N/A  N/A  N/A | 1.36 (1.11, 1.67)  1.28 (1.01, 1.63)  1.00 | **0.003**  **0.04**  1.00 |
| Previous diagnosis of ASD  Yes  No | 1.32 (1.09, 1.58)  1.00 | **0.003**  1.00 | N/A  N/A | N/A  N/A |
| Census tract median income quartiles  <$35,000 (Lowest)  $35,000 to <$50,000  $50,000 to <$65,000  ≥$65,000 (Highest) | 1.44 (1.10, 1.88)  1.18 (0.93, 1.51)  1.19 (0.93,1.53)  1.00 | **0.007**  0.17  0.17  1.00 | N/A  N/A  N/A  N/A | N/A  N/A  N/A  N/A |

\*Estimates are adjusted for the other variables included in the model

\*\*Severity of autism was based on ADOS standardized scores

\*\*\*Collected only during specific study years in the AS-ATN dataset

Abbreviations: CI, Confidence interval; IQ, Intelligence quotient; NHAA, Non-Hispanic African American; NHW, Non-Hispanic white; OR, Odds ratio