S**upplementary Materials** Logistic regression of ADOS-2 Items

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **χ2** | ***p* value** | **Cramer’s Φ**  **effect size** |
| Speech Abnormalities | 0.792 | 0.673 | 0.041 |
| Echoed Language | 0.425 | 0.809 | 0.030 |
| Stereotyped Language | 3.341 | 0.188 | 0.084 |
| Offers Information | 9.686 | 0.008\* | 0.144 |
| Asks for Information | 0.741 | 0.691 | 0.040 |
| Reporting of events | 9.609 | 0.008\* | 0.143 |
| Conversation | 14.738 | <0.001\* | 0.177 |
| Gestures | 13.214 | 0.001\* | 0.168 |
| Unusual Eye Contact | 5.523 | 0.063 | 0.109 |
| Directed Facial Expressions | 24.983 | <0.001\* | 0.231 |
| Shared Enjoyment | 17.192 | <0.001\* | 0.192 |
| Empathy | 6.295 | 0.043 | 0.116 |
| Insight | 13.985 | <0.001\* | 0.173 |
| Quality of Social Overtures | 6.678 | 0.035 | 0.119 |
| Amount of Social Overtures | 4.216 | 0.121 | 0.100 |
| Quality of Social Response | 6.372 | 0.04 | 0.117 |
| Amount of Reciprocal Social Communication | 27.269 | <0.001\* | 0.241 |
| Quality of Rapport | 8.368 | 0.015\* | 0.134 |
| Imagination | 14.397 | <0.001\* | 0.176 |
| Unusual Sensory Interests | 5.475 | 0.065 | 0.108 |
| Hand Finger Mannerisms | 4.686 | 0.096 | 0.100 |
| Self-Injurious Behaviors | 4.929 | 0.085 | 0.103 |
| Excessive Interests | 4.636 | 0.98 | 0.100 |
| Compulsions | 7.351 | 0.025 | 0.007 |

\* Significant with Hochberg False Discovery Rate

Comparison of Demographics by ADOS-2 Module

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Demographic** | **Combined**  **N=468** | **Module 3**  **N=394** | **Module 4**  **N=73** | **Statistic, p value** |
| Females N(%) | 147 (31.4) | 121 (30.7%) | 25 (34.2%) | χ*2=*.32 (.57) |
| Age *M*years (SDyears) | 12.20 (2.85) |  |  | *t*(98)=-7.94 (<.001)\*\* |
| IQ Mean (SD) | 102.08 (18.18) |  |  | *t*(96)=.12 (.900) |
| Race N(%) |  |  |  | χ*2=*7.39 (.060) |
| White | 313 (66.9%) | 268 (67.8%) | 45 (61.6%) |  |
| Black/African American | 11 (2.4%) | 11 (2.8%) | 0 (0%) |  |
| More than one race | 57 (12.2%) | 42 (10.6%) | 15 (20.5%) |  |
| Other | 57 (12.2%) | 74 (18.7%) | 13 (17.8%) |  |
| Unknown | 30 (6.4%) | 0 (0%) | 0 (0%) |  |
| Ethnicity N(%) |  |  |  | χ*2=*7.64 (.006)\* |
| Non-Hispanic | 340 (72.6%) | 56 (14.2%) | 38 (52.1%) |  |
| Hispanic | 73 (15.6%) | 302 (76.5%) | 17 (23.3%) |  |
| Unknown | 55 (11.7%) | 37 (9.4%) | 18 (24.7%) |  |
| Maternal Education N(%) |  |  |  | χ*2=*2.35 (.309) |
| Less than or some college | 104 (22.2%) | 87 (22.0%) | 17 (23.3%) |  |
| Bachelor’s or Associate’s Degree | 125 (26.7%) | 105 (26.6%) | 20 (27.4%) |  |
| More than Bachelor’s or Associate’s degree | 150 (32.1%) | 135 (34.2%) | 16 (21.9%) |  |
| Unknown | 89 (19.0%) | 68 (17.2%) | 20 (27.4%) |  |
| Paternal Education N(%) |  |  |  | χ*2=*1.55 (.671) |
| Less than or some college | 127 (27.1%) | 109 (27.6%) | 18 (24.7%) |  |
| Bachelor’s or Associate’s degree | 107 (22.9%) | 90 (22.8%) | 17 (23.3%) |  |
| More than Bachelor’s or Associate’s degree | 130 (27.8%) | 112 (28.4%) | 18 (24.7%) |  |
| Unknown | 104 (22.2%) | 84 (21.3%) | 20 (27.4%) |  |
| Social Affect Mean(SD) | 9.79 (4.1) | 9.70 (4.07) | 10.48 (4.30) | *t*(97)=-1.50 (.137) |
| Social Affect CSS Mean(SD) | 7.1 (2.21) | 7.12 (2.19) | 7.22 (2.17) | *t*(101)=-.51 (.613) |
| RRB Mean (SD) | 3.12 (1.99) | 2.61 (1.55) | 3.63 (2.10) | *t*(96)=-2.26 (.026) |
| RRB CSS Mean(SD) | 7.15 (2.44) | 6.97 (2.36) | 7.34 (1.93) | *t*(122)=-.87 (.385) |
| Total Score Mean(SD) | 12.9 (4.93) | 12.32 (4.63) | 14.11 (5.56) | *t*(92)=-2.06 (.042)\* |
| Total CSS Mean(SD) | 7.15 (2.29) | 7.05 (2.21) | 7.27 (2.36) | *t*(98)=-.51 (.612) |

\**p* < .05; \*\**p*<.001