**Table S1. Varsity athlete measures of central tendency, reliability, and effect sizes for clinical concussion measures**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **n** | **Mean (SD)** | **Median (Q1 - Q3)** | **ICCc**  **(lower, upper)** | **ICCa**  **(lower, upper)** | **Bias (lower, upper)** | **Cohen's D** | |
| **SAC** | | | | | | | | |
| Year 1 | 1180 | 27.45 (1.87) | 28 (26 - 29) | 0.33 (0.27, 0.38) | 0.31 (0.25, 0.37) | 0.53\* (-3.5, 4.57) | 0.30 | |
| Year 2 | 1180 | 27.99 (1.67) | 28 (27 - 29) |  |  |  |  | |
| Year 1 | 205 | 27.64 (1.86) | 28 (27 - 29) | 0.17 (0.03, 0.3) | 0.15 (0.02, 0.28) | 0.69\* (-3.56, 4.94) | 0.41 | |
| Year 3 | 205 | 28.33 (1.47) | 28 (28 - 30) |  |  |  |  | |
| **BESS** | | | | | | | | |
| Year 1 | 1155 | 14.41 (6.83) | 13 (9 - 18) | 0.27 (0.22, 0.33) | 0.27 (0.22, 0.33) | -0.22\* (-16.4, 15.96) λ | -0.03 | |
| Year 2 | 1155 | 14.19 (6.88) | 13 (9 - 18) |  |  |  |  | |
| Year 1 | 201 | 14.83 (7.11) | 13 (10 - 18) | 0.24 (0.11, 0.37) | 0.25 (0.11, 0.37) | -0.08 (-16.71, 16.55) | -0.01 | |
| Year 3 | 201 | 14.75 (6.69) | 14 (10 - 18) |  |  |  |  | |
| **BSI-18 Total** | | | | | | | | |
| Year 1 | 1354 | 43.36 (9.38) | 42 (36 - 48) | 0.35 (0.30, 0.39) | 0.3 (0.16, 0.41) | -4.57\* (-22.06, 12.92) λ | -0.58 | |
| Year 2 | 1354 | 38.79 (5.85) | 36 (36 - 42) |  |  |  |  | |
| Year 1 | 205 | 40.85 (6.99) | 36 (36 - 45) | 0.27 (0.14, 0.39) | 0.25 (0.11, 0.37) | -2.67\* (-16.95, 11.62) λ | -0.44 | |
| Year 3 | 205 | 38.19 (4.89) | 36 (36 - 39) |  |  |  |  | |
| **SCAT Symptom Number** | | | |  | **Weighted Kappa**  **(lower, upper)** |  |  | |
| Year 1 | 1365 | 4.09 (4.81) | 2 (0 - 6) |  | 0.19 (0.17, 0.23) | -2.21\* (-11.47, 7.05) λ | -0.55 | |
| Year 2 | 1365 | 1.89 (2.96) | 1 (0 - 3) |  |  |  |  | |
| Year 1 | 206 | 2.28 (3.03) | 1 (0 - 3) |  | 0.29 (0.19, 0.40) | -0.85\* (-6.29, 4.58) λ | -0.32 | |
| Year 3 | 206 | 1.43 (2.21) | 0 (0 - 2) |  |  |  |  | |
| **SCAT Symptom Severity** | | | | | | | | |
| Year 1 | 1365 | 7.94 (11.56) | 3 (0 - 11) |  | 0.15 (0.12, 0.18) | -5.01\* (-27.61, 17.6) λ | -0.55 | |
| Year 2 | 1365 | 2.93 (5.58) | 1 (0 - 4) |  |  |  |  | |
| Year 1 | 206 | 3.57 (5.55) | 2 (0 - 4) |  | 0.31 (0.20, 0.42) | -1.29\* (-11.53, 8.95) λ | -0.26 | |
| Year 3 | 206 | 2.28 (4.35) | 0 (0 - 3) |  |  |  |  | |
| \* Bias confidence interval does not cover 0 mean difference  λ Levels of agreement change with size of mean | | | | | | | |