**Supplementary Table 1.** The convergent validity of automated and experimenter-dependent verbal fluency measures controlling for age

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Switching** | | | **Mean Cluster Size** | | |
| **Variables** | **Total words** | **TSW** | **ASW-.50** | **ASW-.60** | **TMCS** | **AMCS-.50** | **AMCS-.60** |
| **TSW** | **0.62\*\*\*** |  |  |  |  |  |  |
| **ASW-.50** | **0.73\*\*\*** | **0.58\*\*\*** |  |  |  |  |  |
| **ASW -.60** | **0.80\*\*\*** | **0.68\*\*\*** | **0.90\*\*\*** |  |  |  |  |
| **TMCS** | 0.26 | **-0.45\*\*\*** | 0.13 | 0.10 |  |  |  |
| **AMCS-.50** | 0.09 | -0.12 | **-0.44\*\*\*** | **-0.29\*** | **0.28\*** |  |  |
| **AMCS-.60** | 0.13 | -0.03 | **-0.34\*\*** | **-0.30\*\*** | 0.17 | **0.83\*\*\*** |  |
| **CuRel** | **-0.30\*** | -0.18 | **-0.56\*\*\*** | **-0.50\*\*\*** | -0.04 | **0.67\*\*\*** | **0.53\*\*\*** |

**Note. \*\*\* < 0.001; \*\* < 0.01; \* < 0.05.** Partial spearman correlations, controlling for age.

**Supplementary Table 2.** The convergent validity of automated and experimenter-dependent verbal fluency measures controlling for education

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Switching** | | | **Mean Cluster Size** | | |
| **Variables** | **Total words** | **TSW** | **ASW-.50** | **ASW-.60** | **TMCS** | **AMCS-.50** | **AMCS-.60** |
| **TSW** | **0.67\*\*\*** |  |  |  |  |  |  |
| **ASW-.50** | **0.75\*\*\*** | **0.72\*\*\*** |  |  |  |  |  |
| **ASW -.60** | **0.83\*\*\*** | **0.73\*\*\*** | **0.91\*\*\*** |  |  |  |  |
| **TMCS** | 0.17 | **-0.47\*\*\*** | 0.05 | 0.01 |  |  |  |
| **AMCS-.50** | 0.02 | -0.18 | **-0.48\*\*\*** | **-0.34\*** | **0.29\*** |  |  |
| **AMCS-.60** | 0.03 | -0.11 | **-0.40\*\*** | **-0.37\*\*** | 0.19 | **0.84\*\*\*** |  |
| **CuRel** | **-0.31\*** | -0.19 | **-0.54\*\*\*** | **-0.48\*\*\*** | 0.067\*\* | **0.67\*\*\*** | **0.54\*\*\*** |

**Note. \*\*\* < 0.001; \*\* < 0.01; \* < 0.05.** Partial spearman correlations, controlling for education.

**Supplementary Table 3.** The correlations between automated and experimenter-dependent verbal fluency measures controlling for age and education

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Switching** | | |  | **Mean Cluster Size** | | |
|  | **Total words** | **TSW** | **ASW-.50** | **ASW-.60** | **TMCS** | **AMCS-.50** | **AMCS-.60** | **CuRel** |
| **Demographic** | | | | |  |
| Age | **-0.374\*\*** | **-0.345\*** | **-0.332\*** | **-0.395\*\*** | 0.095 | 0.188 | 0.223 | 0.065 |
| Education | 0.220 | 0.053 | 0.238 | 0.19 | 0.022 | 0.000 | 0.026 | -0.074 |