|  |  |  |  |
| --- | --- | --- | --- |
| 15 included in Silhouettes-A | | 15 excluded from Silhouettes-A | |
| Item | R  MCI(n=211)  AD(n=139) | Item | R  MCI(n=211)  AD(n=139) |
| kangaroo | 0.624\*  0.27  0.05 | deckchair | 0.354\*  0.25  0.12 |
| rabbit | 0.559\*  0.20 | glasses | 0.323\*  0.17  0.10 |
| penguin | 0.552\*  0.70  0.38 | crocodile | 0.307\*  0.24  0.17 |
| bear | 0.549\*  0.32  0.22 | rhinoceros | 0.277\*  0.11  0.10 |
| tractor | 0.509\*  0.56  0.41 | snail | 0.238\*  0.08  0.02 |
| ladder | 0.495\*  0.46  0.31 | pick axe | 0.204\*  0.11  0.13 |
| binoculars | 0.492\*  0.36  0.27 | watch | 0.190\*  0.19  0.19 |
| spanner | 0.450\*  0.62  0.54 | key | 0.162\*  0.31  0.27 |
| bike | 0.489\*  0.51  0.27 | dustpan | 0.161\*  0.11  0.08 |
| pig | 0.487\*  0.36  0.40 | cup | 0.155\*  0.98  0.94 |
| elephant | 0.443\*  0.80  0.63 | frog | 0.127  0.03  0.01 |
| cow | 0.348\*  0.55  0.50 | duck | 0.120  0.03  0.04 |
| shoe | 0.305\*  0.67  0.60 | cockscrew | 0.115  0.05  0.04 |
| scissors | 0.291\*  0.71  0.68 | sheep | 0.102  0.28  0.37 |
| camel | 0.288\*  0.95  0.89 | seal | 0.093  0.04  0.03 |

Supplementary Table 1. Item-total score correlation coefficients of Silhouettes test.

Notes: Silhouettes-A: the Abbreviated version of Silhouettes test; R: Spearman correlation coefficients; \*: p<0.001.

Supplementary Table 2 Effect of age, gender, and education on Silhouettes-A in NC (multivariate linear regression)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Unstandardised coefficients | | Standardised coefficients | | P |
| B | Standard error | Beta | T |
| Constant | 12.920 | 1.327 | - | 9.737 | <0.001 |
| Gender | -0.764 | 0.282 | -0.176 | -2.707 | 0.007 |
| Age | -0.033 | 0.019 | -0.124 | -1.772 | 0.078 |
| Education | 0.139 | 0.055 | 0.177 | 2.531 | 0.012 |

Notes: NC: cognitively normal controls; Silhouettes-A: the Abbreviated version of Silhouettes test.

Supplemantary Table 3 Correlation analysis between Silhouettes-A and other neuropsychological tests

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test | R | | P | |
| BNT | | 0.616 | | <0.001 | |
| AVLT-DR | | 0.587 | | <0.001 | |
| ST | | 0.432 | | <0.001 | |
| STT-B | | -0.430 | | <0.001 | |
| CFT-C | | 0.403 | | <0.001 | |
| DSST | | 0.385 | | <0.001 | |
| JLO | | 0.339 | | <0.001 | |

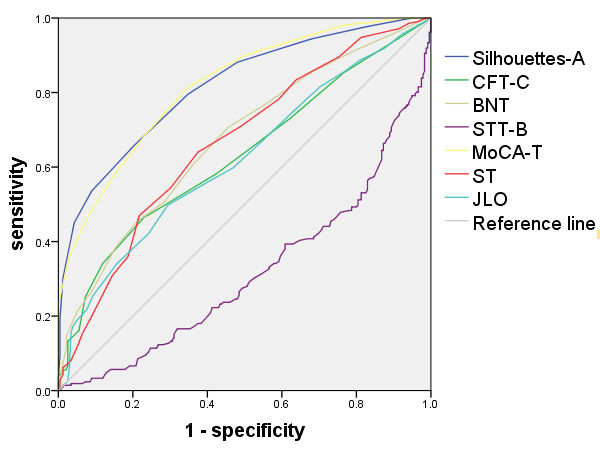
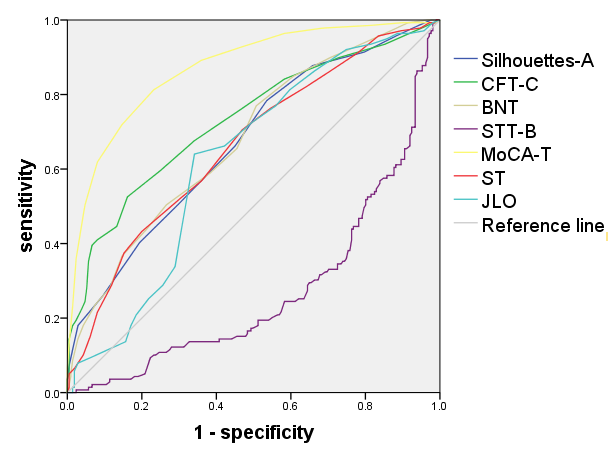
Notes: Silhouettes-A: the Abbreviated version of Silhouettes test. BNT: Boston Naming Test; AVLT-DR: Auditory Verbal Learning Test Delayed Recall; ST: Similarity Test; STT-B: Shape Trail test B; CFT-C: Rey Complex Figure Test Copy; DSST: Digit Symbol Substitution Test; JLO: Judgment of Line Orientation test; R: Spearman correlation coefficients.

Supplemantary Table 4 Effect of BNT, AVLT-DR, ST, STT-B, CFT-C, DSST and JLO.on Silhouettes-A

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Unstandardised coefficients | | Standardised coefficients | | P |
| B | Standard error | Beta | T |
| Constant | 0.237 | 0.886 | - | 0.267 | 0.789 |
| BNT | 0.228 | 0.024 | 0.333 | 9.410 | <0.001 |
| AVLT-DR | 0.387 | 0.041 | 0.335 | 9.453 | <0.001 |
| ST | 0.068 | 0.022 | 0.104 | 3.055 | 0.002 |
| STT-B | -0.003 | 0.001 | -0.075 | -2.097 | 0.036 |
| CFT-C | 0.049 | 0.023 | 0.075 | 2.133 | 0.033 |
| DSST | 0.001 | 0.008 | 0.003 | 0.080 | 0.936 |
| JLO | 0.035 | 0.018 | 0.062 | 1.974 | 0.049 |

Notes: Silhouettes-A: the Abbreviated version of Silhouettes test. BNT: Boston Naming Test; AVLT-DR: Auditory Verbal Learning Test Delayed Recall; ST: Similarity Test; STT-B: Shape Trail test B; CFT-C: Rey Complex Figure Test Copy; DSST: Digit Symbol Substitution Test; JLO: Judgment of Line Orientation test.

Supplementary Figure 1. Receiver Operating Characteristic Curve Analysis of Silhouettes-A and the Other Comparable Tests to Discriminate between NC, MCI and AD: (1) NC vs. MCI, (2) MCI vs. AD.

1.  (2)

Notes: NC: cognitively normal controls; MCI: mild cognitive impairment; AD: Alzheimer’s disease; Silhouettes-A: the Abbreviated version of Silhouettes test; CFT-C: Rey Complex Figure Test Copy; BNT: Boston Naming Test; STT-B: Shape Trail test B; BNT: Boston Naming Test; STT-B: Shape Trail test B; ST: Similarity Test; JLO: Judgment of Line Orientation test; MoCA-T: Total score of Montreal Cognitive Assessment.