

Correction

Vivek Kumar Sharma, Senthil Kumar Subramanian, Vinayathan A, Sarah R, Balasubramaniam SR, Velkumary S, Study of Effect of Age and Gender Related Differences on Common Paper and Pencil Neurocognitive Tests in Adolescents (Published in Journal of Clinical and Diagnostic Research. 2014 November: 8(11):). BC05-BC10

In this article typo errors were noticed. A correction has been done in the Title and [Table/Fig-1a,b,c], [Table/Fig-8], [Table/Fig-9a,b] and [Table/Fig-10a,10b].

| Parameters | Overall | | | Male | | | Female | | |
|---------------------|---------|---------|---------|------|--------|---------|--------|--------|---------|
| | N | F | p-value | N | F | p-value | N | F | p-value |
| Height (cm) | 421 | 83.044 | <0.001 | 240 | 77.408 | <0.001 | 181 | 19.273 | <0.001 |
| Weight (kilogram) | 421 | 90.009 | <0.001 | 240 | 90.364 | <0.001 | 181 | 16.325 | <0.001 |
| LCT comission | 415 | 2.062 | 0.069 | 238 | 1.376 | 0.234 | 177 | 1.551 | 0.177 |
| LCT comission | 415 | 1.358 | 0.239 | 238 | 0.963 | 0.441 | 177 | 0.627 | 0.680 |
| LCT time (seconds) | 415 | 13.967 | <0.001 | 238 | 10.211 | <0.001 | 177 | 6.244 | <0.001 |
| TTA (seconds) | 437 | 39.847 | <0.001 | 248 | 21.502 | <0.001 | 189 | 18.353 | <0.001 |
| TTB (seconds) | 405 | 32.792 | <0.001 | 237 | 20.655 | <0.001 | 168 | 12.717 | <0.001 |
| RFFT Designs | 439 | 103.442 | <0.001 | 250 | 52.390 | <0.001 | 189 | 52.676 | <0.001 |
| RFFT Rotations | 439 | 6.696 | <0.001 | 250 | 4.360 | 0.001 | 189 | 2.030 | 0.076 |
| RFFT Perseverations | 439 | 85.339 | <0.001 | 250 | 51.391 | <0.001 | 189 | 31.250 | <0.001 |

[Table/Fig-1a]: Age wise comparison of neurocognitive test, LCT – Letter cancellation test, TTA - Trail making test part A, TTB – Trail making test part B, RFFT –Ruff figural fluency test Analyzed using one way ANOVA, P<0.05 is considered statistically significant

| Parameters | Age (yr) | Mean ± SD | | | | p-value 1 year difference | | | | p-value 2 year difference | | | | p-value 3 year difference | | |
|--------------------|---------------|----------------|----------------|----------------|----------|---------------------------|--------|--------|----------|---------------------------|--------|--------|----------|---------------------------|--------|--------|
| | | Overall | Male | Female | | Overall | Male | Female | | Overall | Male | Female | | Overall | Male | Female |
| LCT time (seconds) | 12 | 117.71 ± 25.58 | 119.29 ± 24.83 | 116.43 ± 26.41 | 12 vs 13 | 1.000 | 1.000 | 1.000 | 12 vs 14 | 1.000 | 1.000 | 1.000 | 12 vs 15 | 0.117 | 1.000 | 0.083 |
| | 13 | 115.56 ± 24.76 | 114.78 ± 23.62 | 116.56 ± 26.51 | 13 vs 14 | 1.000 | 0.990 | 1.000 | 13 vs 15 | 0.640 | 1.000 | 0.126 | 13 vs 16 | 0.030 | 0.658 | 0.198 |
| | 14 | 117.80 ± 19.47 | 123.17 ± 20.65 | 111.14 ± 15.83 | 14 vs 15 | 0.144 | 0.937 | 1.000 | 14 vs 16 | 0.004 | 0.002 | 1.000 | 14 vs 17 | <0.001 | <0.001 | 0.012 |
| | 15 | 108.47 ± 16.61 | 114.13 ± 15.75 | 102.81 ± 15.71 | 15 vs 16 | 1.000 | 1.000 | 1.000 | 15 vs 17 | 0.002 | 0.002 | 0.634 | | | | |
| | 16 | 104.85 ± 18.88 | 106.13 ± 19.73 | 102.05 ± 16.99 | 16 vs 17 | 0.058 | 0.260 | 1.000 | | | | | | | | |
| TTA (seconds) | 12 | 45.78 ± 6.23 | 46.32 ± 6.87 | 45.33 ± 5.72 | 12 vs 13 | 1.000 | 1.000 | 1.000 | 12 vs 14 | <0.001 | <0.001 | 0.001 | 12 vs 15 | <0.001 | <0.001 | <0.001 |
| | 13 | 46.16 ± 6.59 | 46.05 ± 6.79 | 46.29 ± 6.43 | 13 vs 14 | <0.001 | <0.001 | <0.001 | 13 vs 15 | <0.001 | <0.001 | <0.001 | 13 vs 16 | <0.001 | <0.001 | <0.001 |
| | 14 | 40.15 ± 4.16 | 40.10 ± 3.67 | 40.20 ± 4.70 | 14 vs 15 | 1.000 | 1.000 | 1.000 | 14 vs 16 | 0.418 | 1.000 | 0.432 | 14 vs 17 | 0.003 | 0.133 | 0.125 |
| | 15 | 38.61 ± 4.90 | 38.26 ± 4.62 | 38.97 ± 5.23 | 15 vs 16 | 1.000 | 1.000 | 1.000 | 15 vs 17 | 0.728 | 1.000 | 1.000 | | | | |
| | 16 | 38.10 ± 6.17 | 38.65 ± 6.47 | 36.86 ± 5.35 | 16 vs 17 | 1.000 | 1.000 | 1.000 | | | | | | | | |
| TTB (seconds) | 12 | 115.95 ± 28.73 | 113.26 ± 30.10 | 118.12 ± 27.75 | 12 vs 13 | 1.000 | 1.000 | 1.000 | 12 vs 14 | 1.000 | 1.000 | 1.000 | 12 vs 15 | <0.001 | <0.001 | <0.001 |
| | 13 | 115.64 ± 30.23 | 118.55 ± 29.38 | 111.68 ± 31.45 | 13 vs 14 | 1.000 | 1.000 | 1.000 | 13 vs 15 | 0.001 | 0.001 | 0.001 | 13 vs 16 | <0.001 | <0.001 | 0.007 |
| | 14 | 112.10 ± 33.16 | 115.74 ± 31.85 | 107.54 ± 34.77 | 14 vs 15 | <0.001 | <0.001 | 0.006 | 14 vs 16 | 0.001 | 0.001 | 0.041 | 14 vs 17 | <0.001 | <0.001 | 0.001 |
| | 15 | 82.72 ± 21.78 | 83.32 ± 20.77 | 82.03 ± 23.21 | 15 vs 16 | 1.000 | 1.000 | 1.000 | 15 vs 17 | 1.000 | 1.000 | 1.000 | | | | |
| | 16 | 87.61 ± 21.80 | 89.34 ± 23.79 | 83.55 ± 15.97 | 16 vs 17 | 0.136 | 0.172 | 1.000 | | | | | | | | |
| 17 | 75.77 ± 19.53 | 75.80 ± 20.37 | 75.70 ± 17.79 | | | | | | | | | | | | | |

[Table/Fig-1b]: Agewise comparison of neurocognitive tests, LCT – Letter cancellation test, TTA - Trail making test part A, TTB – Trail making test part B, Analyzed using one way ANOVA with bonferroni post hoc test., P<0.05 is considered statistically significant

| Parameters | Age (yr) | Mean ± SD | | | | p- value 1 year difference | | | | p- value 2 year difference | | | | p- value 3 year difference | | |
|---------------------|----------|--------------|--------------|--------------|----------|----------------------------|--------|--------|----------|----------------------------|--------|--------|----------|----------------------------|--------|--------|
| | | Overall | Male | Female | | Overall | Male | Female | | Overall | Male | Female | | Overall | Male | Female |
| | | | | | | | | | | | | | | | | |
| RFFT Designs | 12 | 11.91 ± 2.85 | 11.35 ± 3.10 | 12.36 ± 2.57 | 12 vs 13 | 1.000 | 0.248 | 1.000 | 12 vs 14 | <0.001 | <0.001 | <0.001 | 12 vs 15 | <0.001 | <0.001 | <0.001 |
| | 13 | 12.44 ± 3.21 | 13.24 ± 2.84 | 11.47 ± 3.41 | 13 vs 14 | <0.001 | <0.001 | <0.001 | 13 vs 15 | <0.001 | <0.001 | <0.001 | 13 vs 16 | <0.001 | <0.001 | <0.001 |
| | 14 | 17.29 ± 2.87 | 17.24 ± 2.58 | 17.34 ± 3.22 | 14 vs 15 | <0.001 | 0.082 | 0.017 | 14 vs 16 | <0.001 | 0.003 | 0.007 | 14 vs 17 | <0.001 | <0.001 | 0.057 |
| | 15 | 19.64 ± 3.23 | 19.44 ± 3.16 | 19.84 ± 3.34 | 15 vs 16 | 1.000 | 1.000 | 1.000 | 15 vs 17 | 1.000 | 1.000 | 1.000 | | | | |
| | 16 | 20.10 ± 4.02 | 19.98 ± 4.41 | 20.38 ± 3.01 | 16 vs 17 | 1.000 | 1.000 | 1.000 | | | | | | | | |
| | 17 | 20.40 ± 3.39 | 20.73 ± 3.53 | 19.72 ± 3.03 | | | | | | | | | | | | |
| RFFT Rotations | 12 | 5.89 ± 2.25 | 5.82 ± 2.04 | 5.95 ± 2.44 | 12 vs 13 | 1.000 | 1.000 | 1.000 | 12 vs 14 | 1.000 | 1.000 | 1.000 | 12 vs 15 | 1.000 | 1.000 | 1.000 |
| | 13 | 5.63 ± 2.12 | 5.68 ± 2.29 | 5.56 ± 1.93 | 13 vs 14 | 1.000 | 1.000 | 1.000 | 13 vs 15 | 1.000 | 1.000 | 1.000 | 13 vs 16 | 0.000 | 0.002 | 0.285 |
| | 14 | 5.92 ± 2.48 | 6.12 ± 2.61 | 5.69 ± 2.32 | 14 vs 15 | 1.000 | 1.000 | 1.000 | 14 vs 16 | 0.001 | 0.037 | 0.449 | 14 vs 17 | 0.189 | 1.000 | 1.000 |
| | 15 | 6.02 ± 2.98 | 6.47 ± 3.12 | 5.53 ± 2.81 | 15 vs 16 | 0.004 | 0.357 | 0.276 | 15 vs 17 | 0.442 | 1.000 | 0.869 | | | | |
| | 16 | 7.55 ± 2.91 | 7.73 ± 2.89 | 7.14 ± 2.99 | 16 vs 17 | 1.000 | 1.000 | 1.000 | | | | | | | | |
| | 17 | 6.91 ± 1.81 | 6.98 ± 1.74 | 6.76 ± 1.96 | | | | | | | | | | | | |
| RFFT Perseverations | 12 | 22.05 ± 4.05 | 22.50 ± 4.34 | 21.69 ± 3.80 | 12 vs 13 | 1.000 | 1.000 | 1.000 | 12 vs 14 | <0.001 | <0.001 | <0.001 | 12 vs 15 | 0.001 | 0.001 | 0.001 |
| | 13 | 21.79 ± 4.24 | 21.07 ± 4.01 | 22.65 ± 4.40 | 13 vs 14 | <0.001 | <0.001 | <0.001 | 13 vs 15 | <0.001 | <0.001 | <0.001 | 13 vs 16 | 0.001 | 0.001 | 0.001 |
| | 14 | 16.67 ± 3.93 | 16.37 ± 3.73 | 17.03 ± 4.17 | 14 vs 15 | 0.026 | 0.305 | 0.489 | 14 vs 16 | <0.001 | <0.001 | 0.001 | 14 vs 17 | 0.001 | 0.001 | 0.052 |
| | 15 | 14.42 ± 4.35 | 14.09 ± 3.80 | 14.78 ± 4.91 | 15 vs 16 | 0.001 | 0.018 | 0.393 | 15 vs 17 | 0.261 | 0.728 | 1.000 | | | | |
| | 16 | 11.33 ± 4.56 | 11.00 ± 4.75 | 12.10 ± 4.11 | 16 vs 17 | 0.717 | 1.000 | 1.000 | | | | | | | | |
| | 17 | 12.73 ± 4.31 | 12.25 ± 4.32 | 13.72 ± 4.20 | | | | | | | | | | | | |

[Table/Fig-1c]: Agewise comparison of neurocognitive tests, RFFT – Ruff figural fluency test, Analyzed using one way ANOVA with bonferroni post hoc test P<0.05 is considered statistically significant

| Parameters | Gender | N | Mean ± SD | p-value |
|---------------------|--------|-----|----------------|---------|
| Age (yr) | Female | 189 | 14.16 ± 1.69 | 0.001 |
| | Male | 250 | 14.71 ± 1.73 | |
| Height (cm) | Female | 181 | 1.51 ± 0.08 | <0.001 |
| | Male | 240 | 1.56 ± 0.12 | |
| Weight (Kilogram) | Female | 181 | 44.38 ± 7.24 | <0.001 |
| | Male | 240 | 47.67 ± 10.03 | |
| LCT omission | Female | 177 | 1.20 ± 1.69 | 0.181 |
| | Male | 238 | 1.01 ± 1.27 | |
| LCT commission | Female | 177 | 0.20 ± 0.49 | 0.353 |
| | Male | 238 | 0.16 ± 0.46 | |
| LCT time (seconds) | Female | 177 | 108.40 ± 22.12 | 0.208 |
| | Male | 238 | 111.14 ± 21.72 | |
| TTA (seconds) | Female | 189 | 41.35 ± 6.64 | 0.349 |
| | Male | 248 | 40.75 ± 6.68 | |
| TTB (seconds) | Female | 168 | 99.67 ± 31.29 | 0.528 |
| | Male | 237 | 97.69 ± 30.98 | |
| RFFT Designs | Female | 189 | 16.25 ± 4.77 | 0.020 |
| | Male | 250 | 17.34 ± 4.82 | |
| RFFT Rotations | Female | 189 | 6.00 ± 2.45 | 0.025 |
| | Male | 250 | 6.54 ± 2.55 | |
| RFFT Perseverations | Female | 189 | 17.71 ± 5.73 | 0.001 |
| | Male | 250 | 15.78 ± 5.96 | |

[Table/Fig-8]: Comparison of neurocognitive tests between male and female., LCT – Letter cancellation test, TTA - Trail making test part A, TTB – Trail making test part B, RFFT – Ruff figural fluency test, Analyzed using unpaired t test, P<0.05 is considered statistically significant

| Parameters | Gender | 12 | | | 13 | | | 14 | | |
|---------------------|--------|----|----------------|---------|----|----------------|---------|----|----------------|---------|
| | | N | Mean ± SD | p-value | N | Mean ± SD | p-value | N | Mean ± SD | p-value |
| Height (cm) | F | 41 | 1.44 ± 0.08 | 0.006 | 32 | 1.48 ± 0.07 | 0.630 | 33 | 1.52 ± 0.06 | 0.120 |
| | M | 33 | 1.39 ± 0.07 | | 41 | 1.48 ± 0.08 | | 34 | 1.55 ± 0.09 | |
| Weight (kilogram) | F | 41 | 38.93 ± 7.59 | 0.006 | 32 | 41.75 ± 5.67 | 0.171 | 33 | 43.58 ± 3.79 | 0.448 |
| | M | 33 | 34.97 ± 3.10 | | 41 | 39.93 ± 5.51 | | 34 | 44.47 ± 5.61 | |
| LCT omission | F | 42 | 0.83 ± 1.19 | 0.524 | 32 | 0.88 ± 1.18 | 0.350 | 29 | 1.83 ± 2.48 | 0.103 |
| | M | 34 | 0.68 ± 0.88 | | 41 | 1.12 ± 1.05 | | 36 | 1.06 ± 1.17 | |
| LCT commission | F | 42 | 0.24 ± 0.48 | 0.397 | 32 | 0.25 ± 0.44 | 0.871 | 29 | 0.24 ± 0.58 | 0.532 |
| | M | 34 | 0.15 ± 0.44 | | 41 | 0.27 ± 0.50 | | 36 | 0.17 ± 0.38 | |
| LCT time (seconds) | F | 42 | 116.43 ± 26.41 | 0.631 | 32 | 116.56 ± 26.51 | 0.763 | 29 | 111.14 ± 15.83 | 0.012 |
| | M | 34 | 119.29 ± 24.83 | | 41 | 114.78 ± 23.62 | | 36 | 123.17 ± 20.65 | |
| TTA (seconds) | F | 42 | 45.33 ± 5.72 | 0.495 | 34 | 46.29 ± 6.43 | 0.874 | 35 | 40.20 ± 4.70 | 0.921 |
| | M | 34 | 46.32 ± 6.87 | | 41 | 46.05 ± 6.79 | | 39 | 40.10 ± 3.67 | |
| TTB (seconds) | F | 42 | 118.12 ± 27.75 | 0.468 | 28 | 111.68 ± 31.45 | 0.365 | 28 | 107.54 ± 34.77 | 0.333 |
| | M | 34 | 113.26 ± 30.10 | | 38 | 118.55 ± 29.38 | | 35 | 115.74 ± 31.85 | |
| RFFT Designs | F | 42 | 12.36 ± 2.57 | 0.127 | 34 | 11.47 ± 3.41 | 0.016 | 35 | 17.34 ± 3.22 | 0.882 |
| | M | 34 | 11.35 ± 3.10 | | 41 | 13.24 ± 2.84 | | 41 | 17.24 ± 2.58 | |
| RFFT Rotations | F | 42 | 5.95 ± 2.44 | 0.806 | 34 | 5.56 ± 1.93 | 0.802 | 35 | 5.69 ± 2.32 | 0.447 |
| | M | 34 | 5.82 ± 2.04 | | 41 | 5.68 ± 2.29 | | 41 | 6.12 ± 2.61 | |
| RFFT Perseverations | F | 42 | 21.69 ± 3.80 | 0.389 | 34 | 22.65 ± 4.40 | 0.110 | 35 | 17.03 ± 4.17 | 0.467 |
| | M | 34 | 22.50 ± 4.34 | | 41 | 21.07 ± 4.01 | | 41 | 16.37 ± 3.73 | |

[Table/Fig-9a]: Agewise comparison of neurocognitive tests between male and female., F-female, M- male, LCT – Letter cancellation test, TTA - Trail making test part A, TTB – Trail making test part B, RFFT – Ruff figural fluency test, Analyzed using unpaired t test, P<0.05 is considered statistically significant

| Parameters | Gender | 15 | | | 16 | | | 17 | | |
|---------------------|--------|----|----------------|---------|----|----------------|---------|----|---------------|---------|
| | | N | Mean ± SD | p-value | N | Mean ± SD | p-value | N | Mean ± SD | p-value |
| Height (cm) | F | 32 | 1.55 ± 0.06 | 0.036 | 19 | 1.60 ± 0.07 | 0.037 | 24 | 1.54 ± 0.07 | 0.001 |
| | M | 34 | 1.58 ± 0.08 | | 48 | 1.64 ± 0.07 | | 50 | 1.67 ± 0.07 | |
| Weight (kilogram) | F | 32 | 48.53 ± 6.70 | 0.457 | 19 | 50.21 ± 6.01 | 0.001 | 24 | 48.17 ± 5.26 | 0.001 |
| | M | 34 | 47.26 ± 7.02 | | 48 | 57.77 ± 6.15 | | 50 | 55.16 ± 6.76 | |
| LCT omission | F | 32 | 1.38 ± 2.01 | 0.892 | 21 | 1.33 ± 1.46 | 0.233 | 21 | 1.19 ± 1.40 | 0.468 |
| | M | 32 | 1.44 ± 1.64 | | 46 | 0.91 ± 1.26 | | 49 | 0.92 ± 1.44 | |
| LCT commission | F | 32 | 0.16 ± 0.37 | 0.236 | 21 | 0.24 ± 0.77 | 0.822 | 21 | 0.05 ± 0.22 | 0.463 |
| | M | 32 | 0.06 ± 0.25 | | 46 | 0.20 ± 0.69 | | 49 | 0.10 ± 0.31 | |
| LCT time (seconds) | F | 32 | 102.81 ± 15.71 | 0.005 | 21 | 102.05 ± 16.99 | 0.416 | 21 | 90.95 ± 10.02 | 0.107 |
| | M | 32 | 114.13 ± 15.75 | | 46 | 106.13 ± 19.73 | | 49 | 96.35 ± 13.60 | |
| TTA (seconds) | F | 32 | 38.97 ± 5.23 | 0.564 | 21 | 36.86 ± 5.35 | 0.271 | 25 | 36.36 ± 5.20 | 0.605 |
| | M | 34 | 38.26 ± 4.62 | | 48 | 38.65 ± 6.47 | | 52 | 36.96 ± 4.54 | |
| TTB (seconds) | F | 30 | 82.03 ± 23.21 | 0.815 | 20 | 83.55 ± 15.97 | 0.323 | 20 | 75.70 ± 17.79 | 0.985 |
| | M | 34 | 83.32 ± 20.77 | | 47 | 89.34 ± 23.79 | | 49 | 75.80 ± 20.37 | |
| RFFT Designs | F | 32 | 19.84 ± 3.34 | 0.617 | 21 | 20.38 ± 3.01 | 0.705 | 25 | 19.72 ± 3.03 | 0.223 |
| | M | 34 | 19.44 ± 3.16 | | 48 | 19.98 ± 4.41 | | 52 | 20.73 ± 3.53 | |
| RFFT Rotations | F | 32 | 5.53 ± 2.81 | 0.204 | 21 | 7.14 ± 2.99 | 0.446 | 25 | 6.76 ± 1.96 | 0.619 |
| | M | 34 | 6.47 ± 3.12 | | 48 | 7.73 ± 2.89 | | 52 | 6.98 ± 1.74 | |
| RFFT Perseverations | F | 32 | 14.78 ± 4.91 | 0.522 | 21 | 12.10 ± 4.11 | 0.363 | 25 | 13.72 ± 4.20 | 0.162 |
| | M | 34 | 14.09 ± 3.80 | | 48 | 11.00 ± 4.75 | | 52 | 12.25 ± 4.32 | |

[Table/Fig-9b]: Agewise comparison of neurocognitive tests between male and female, F-female, M- male, LCT – Letter cancellation test, TTA - Trail making test part A, TTB – Trail making test part B, RFFT – Ruff figural fluency test, Analyzed using unpaired t test, P<0.05 is considered statistically significant

| | | TTA | TTB | RFFT Designs | RFFT Perseverations |
|--------------|----------|-------|--------|--------------|---------------------|
| LCT time | r- value | .121 | .320 | -.185 | .169 |
| | p-value | 0.014 | <0.001 | <0.001 | 0.001 |
| | N | 414 | 398 | 415 | 415 |
| TTA | r- value | | .275 | -.438 | .421 |
| | p-value | | <0.001 | <0.001 | <0.001 |
| | N | | 404 | 437 | 437 |
| TTB | r- value | | | -.352 | .296 |
| | p-value | | | <0.001 | <0.001 |
| | N | | | 405 | 405 |
| RFFT Designs | r- value | | | | -.868 |
| | p-value | | | | <0.001 |
| | N | | | | 439 |

[Table/Fig-10a]: Correlation between the neurocognitive tests, LCT – Letter cancellation test, TTA - Trail making test part A, TTB – Trail making test part B, RFFT – Ruff figural fluency test
Analyzed using Pearson's correlation, P<0.05 is considered statistically significant

| | | TTA | TTB | RFFT Designs | RFFT Perseverations |
|--------------|----------|-------|-------|--------------|---------------------|
| LCT time | r- value | -.068 | .153 | .072 | -.071 |
| | p-value | 0.189 | 0.003 | 0.161 | 0.166 |
| | df | 377 | 377 | 377 | 377 |
| TTA | r- value | | .027 | -.113 | .102 |
| | p-value | | 0.595 | 0.028 | 0.047 |
| | df | | 377 | 377 | 377 |
| TTB | r- value | | | -.038 | -.033 |
| | p-value | | | .459 | 0.522 |
| | df | | | 377 | 377 |
| RFFT Designs | r- value | | | | -.754 |
| | p-value | | | | <0.001 |
| | df | | | | 377 |

[Table/Fig-10b]: Correlation between neurocognitive test after adjusting for group, LCT – Letter cancellation test, TTA - Trail making test part A, TTB – Trail making test part B, RFFT – Ruff figural fluency test, Correlation after adjusting for age, P<0.05 is considered statistically significant