|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Supplementary Table 2 | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Correlates of Neuropsychological Performance and Effective Use of Cognitive Strategy (r, p ((i/m)Q))* | | | | | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Group |  | Digit Span Forward | Digit Span Backwards | D-KEFS Color Naming Time | D-KEFS Color Naming Uncorrected Errors | D-KEFS Color Naming Self-Corrected Errors | D-KEFS Word Reading Completion Time | D-KEFS Word Reading Uncorrected Errors | D-KEFS Word Reading Self-Corrected Errors | D-KEFS Color Inhibition Competion Time | D-KEFS Color Inhibition Uncorrected Errors | D-KEFS Color Inhibition Self-Corrected Errors | D-KEFS Switching Completion Time | D-KEFS Switching Uncorrected Errors | D-KEFS Switching Self-Corrected Errors | RBANS Digit Symbol Coding | D-KEFS Verbal Fluency: Category Fluency Switching Accuracy | D-KEFS Verbal Fluency: Category Fluency Switching Total Correct | D-KEFS Verbal Fluency: Category Fluency Set Loss Errors | D-KEFS Verbal Fluency: Category Fluency Repetition Errors | D-KEFS Sorting Test: Free Sort Number of Correct Sorts | D-KEFS Sorting Test: Free Sort Description Score | D-KEFS Sorting Test: Recognition Sort Description Score | D-KEFS Twenty Questions: Total Achievement Score | D-KEFS Twenty Questions: Abstraction Score | D-KEFS Twenty Questions: Total Number of Questions | |
| OC |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Conservative | Gist Memory | r=-0.096, 0.723 (0.957) | r=-0.117, 0.665 (0.957) | r=0.077, 0.777 (0.957) | r=0.084, 0.757 (0.957) | r=-0.45, 0.080 (0.957) | r=-0.038, 0.887 (0.957) | r=0.206, 0.445 (0.957) | NA | r=0.095, 0.727 (0.957) | r=0.171, 0.527 (0.957) | r=-0.324, 0.220 (0.957) | r=0.042, 0.878 (0.957) | r=0.24, 0.370 (0.957) | r=0.447, 0.082 (0.957) | r=-0.067, 0.806 (0.957) | r=0.326, 0.218 (0.957) | r=0.209, 0.438 (0.957) | r=-0.343, 0.193 (0.957) | r=-0.136, 0.616 (0.957) | r=0.015, 0.957 (0.957) | r=0.024, 0.929 (0.957) | r=-0.174, 0.519 (0.957) | r=-0.049, 0.857 (0.957) | r=-0.154, 0.570 (0.957) | r=0.034, 0.900 (0.957) | |
|  | Item-Specific Recollection | r=-0.117, 0.665 (0.845) | r=-0.366, 0.163 (0.713) | r=0.13, 0.631 (0.845) | r=0.354, 0.178 (0.713) | r=-0.532, 0.034 (0.713) | r=0.067, 0.804 (0.877) | r=0.165, 0.543 (0.845) | NA | r=0.187, 0.488 (0.845) | r=0.136, 0.615 (0.845) | r=-0.424, 0.102 (0.713) | r=0.257, 0.336 (0.845) | r=0.396, 0.128 (0.713) | r=0.054, 0.842 (0.879) | r=-0.095, 0.726 (0.845) | r=0.16, 0.554 (0.845) | r=0.108, 0.690 (0.845) | r=-0.184, 0.495 (0.845) | r=-0.102, 0.707 (0.845) | r=-0.09, 0.739 (0.845) | r=-0.149, 0.582 (0.845) | r=-0.243, 0.365 (0.845) | r=-0.183, 0.498 (0.845) | r=-0.361, 0.169 (0.713) | r=-0.01, 0.971 (0.971) | |
| Deep Encoding | Gist Memory | r=-0.033, 0.904 (0.936) | r=-0.073, 0.789 (0.936) | r=0.275, 0.303 (0.890) | r=-0.171, 0.527 (0.890) | r=-0.091, 0.737 (0.931) | r=-0.091, 0.736 (0.931) | r=-0.172, 0.523 (0.890) | NA | r=-0.193, 0.473 (0.890) | r=-0.153, 0.572 (0.890) | r=-0.226, 0.399 (0.890) | r=-0.202, 0.454 (0.890) | r=-0.558, 0.025 (0.593) | r=0.21, 0.434 (0.890) | r=0.315, 0.235 (0.890) | r=0.204, 0.448 (0.890) | r=0.157, 0.560 (0.890) | r=0.144, 0.593 (0.890) | r=0.193, 0.473 (0.890) | r=0.057, 0.833 (0.936) | r=0.036, 0.896 (0.936) | r=0.116, 0.668 (0.931) | r=-0.381, 0.145 (0.890) | r=0.022, 0.936 (0.936) | r=0.25, 0.350 (0.890) | |
|  | Item-Specific Recollection | r=0.081, 0.765 (0.978) | r=-0.153, 0.572 (0.978) | r=0.267, 0.317 (0.978) | r=0.151, 0.577 (0.978) | r=-0.051, 0.850 (0.978) | r=0.247, 0.357 (0.978) | r=0.244, 0.362 (0.978) | NA | r=0.012, 0.966 (0.978) | r=-0.262, 0.327 (0.978) | r=-0.394, 0.131 (0.978) | r=-0.007, 0.978 (0.978) | r=-0.157, 0.562 (0.978) | r=-0.227, 0.399 (0.978) | r=0.068, 0.803 (0.978) | r=0.13, 0.630 (0.978) | r=0.09, 0.739 (0.978) | r=0.02, 0.943 (0.978) | r=0.172, 0.524 (0.978) | r=-0.012, 0.966 (0.978) | r=-0.061, 0.822 (0.978) | r=-0.169, 0.531 (0.978) | r=-0.39, 0.135 (0.978) | r=-0.236, 0.379 (0.978) | r=0.351, 0.183 (0.978) | |
| Combined | Gist Memory | r=-0.118, 0.663 (0.861) | r=0.188, 0.485 (0.861) | r=0.104, 0.701 (0.861) | r=-0.036, 0.896 (0.896) | r=-0.052, 0.848 (0.884) | r=-0.159, 0.557 (0.861) | r=-0.151, 0.577 (0.861) | NA | r=-0.128, 0.636 (0.861) | r=-0.126, 0.642 (0.861) | r=-0.19, 0.481 (0.861) | r=-0.105, 0.699 (0.861) | r=-0.423, 0.103 (0.861) | r=0.159, 0.557 (0.861) | r=0.325, 0.220 (0.861) | r=-0.272, 0.308 (0.861) | r=-0.341, 0.196 (0.861) | r=0.069, 0.799 (0.884) | r=0.19, 0.480 (0.861) | r=-0.362, 0.168 (0.861) | r=-0.349, 0.186 (0.861) | r=-0.098, 0.718 (0.861) | r=-0.117, 0.667 (0.861) | r=-0.127, 0.639 (0.861) | r=0.059, 0.827 (0.884) | |
|  | Item-Specific Recollection | r=0.151, 0.577 (0.915) | r=0.021, 0.937 (0.970) | r=-0.02, 0.942 (0.970) | r=0.531, 0.034 (0.249) | r=0.017, 0.950 (0.970) | r=-0.165, 0.542 (0.915) | r=0.248, 0.354 (0.915) | NA | r=-0.385, 0.140 (0.646) | r=-0.31, 0.242 (0.830) | r=-0.204, 0.449 (0.915) | r=-0.521, 0.039 (0.249) | r=-0.532, 0.034 (0.249) | r=-0.367, 0.162 (0.646) | r=0.514, 0.042 (0.249) | r=0.03, 0.912 (0.970) | r=-0.01, 0.970 (0.970) | r=-0.114, 0.675 (0.953) | r=0.207, 0.441 (0.915) | r=-0.145, 0.591 (0.915) | r=-0.157, 0.562 (0.915) | r=-0.212, 0.431 (0.915) | r=-0.055, 0.841 (0.97) | r=0.038, 0.890 (0.970) | r=0.138, 0.610 (0.915) | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MCI |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Conservative | Gist Memory | r=-0.323, 0.222 (0.490) | r=-0.197, 0.465 (0.602) | r=0.477, 0.072 (0.446) | NA | r=0.086, 0.760 (0.760) | r=0.465, 0.081 (0.446) | NA | NA | r=0.237, 0.396 (0.581) | r=0.407, 0.132 (0.490) | r=0.488, 0.065 (0.446) | r=0.277, 0.317 (0.498) | r=0.331, 0.228 (0.490) | r=0.306, 0.267 (0.490) | r=-0.201, 0.456 (0.602) | r=-0.279, 0.295 (0.498) | r=-0.295, 0.267 (0.490) | r=0.14, 0.604 (0.664) | r=0.388, 0.138 (0.490) | r=-0.155, 0.567 (0.664) | r=-0.146, 0.591 (0.664) | r=-0.113, 0.676 (0.708) | r=-0.49, 0.054 (0.446) | r=-0.357, 0.174 (0.490) | r=0.328, 0.215 (0.490) | |
|  | Item-Specific Recollection | r=-0.256, 0.339 (0.758) | r=-0.141, 0.603 (0.886) | r=0.32, 0.245 (0.680) | NA | r=0.404, 0.135 (0.680) | r=0.151, 0.590 (0.886) | NA | NA | r=0.025, 0.931 (0.931) | r=0.364, 0.182 (0.680) | r=0.318, 0.247 (0.680) | r=0.113, 0.688 (0.886) | r=0.148, 0.598 (0.886) | r=0.263, 0.344 (0.758) | r=0.066, 0.807 (0.886) | r=0.096, 0.723 (0.886) | r=-0.053, 0.846 (0.886) | r=0.33, 0.212 (0.680) | r=0.499, 0.049 (0.541) | r=0.058, 0.830 (0.886) | r=0.086, 0.751 (0.886) | r=-0.121, 0.654 (0.886) | r=-0.506, 0.046 (0.541) | r=-0.181, 0.502 (0.886) | r=0.377, 0.150 (0.680) | |
| Deep Encoding | Gist Memory | r=-0.14, 0.606 (0.911) | r=0.24, 0.372 (0.855) | r=0.067, 0.812 (0.911) | NA | r=-0.315, 0.252 (0.782) | r=0.133, 0.637 (0.911) | NA | NA | r=-0.047, 0.868 (0.911) | r=-0.21, 0.452 (0.904) | r=0.327, 0.235 (0.782) | r=0.041, 0.885 (0.911) | r=-0.05, 0.859 (0.911) | r=-0.314, 0.254 (0.782) | r=0.231, 0.389 (0.855) | r=0.116, 0.670 (0.911) | r=-0.031, 0.911 (0.911) | r=-0.442, 0.086 (0.782) | r=0.148, 0.584 (0.911) | r=0.302, 0.255 (0.782) | r=0.31, 0.243 (0.782) | r=0.285, 0.284 (0.782) | r=0.041, 0.881 (0.911) | r=0.331, 0.211 (0.782) | r=-0.084, 0.758 (0.911) | |
|  | Item-Specific Recollection | r=0.02, 0.940 (0.940) | r=0.465, 0.070 (0.669) | r=-0.107, 0.705 (0.862) | NA | r=0.151, 0.592 (0.819) | r=-0.275, 0.321 (0.669) | NA | NA | r=-0.26, 0.349 (0.669) | r=0.3, 0.277 (0.669) | r=0.319, 0.246 (0.669) | r=-0.137, 0.626 (0.819) | r=-0.134, 0.633 (0.819) | r=0.277, 0.318 (0.669) | r=0.444, 0.085 (0.669) | r=0.243, 0.365 (0.669) | r=0.061, 0.822 (0.936) | r=0.191, 0.478 (0.759) | r=0.37, 0.159 (0.669) | r=0.189, 0.483 (0.759) | r=0.283, 0.288 (0.669) | r=-0.037, 0.893 (0.936) | r=-0.299, 0.261 (0.669) | r=0.04, 0.884 (0.936) | r=0.379, 0.147 (0.669) | |
| Combined | Gist Memory | r=-0.143, 0.597 (0.848) | r=0.295, 0.267 (0.848) | r=0.21, 0.453 (0.848) | NA | r=-0.183, 0.513 (0.848) | r=0.252, 0.366 (0.848) | NA | NA | r=-0.058, 0.838 (0.848) | r=-0.183, 0.515 (0.848) | r=0.149, 0.595 (0.848) | r=-0.089, 0.751 (0.848) | r=-0.447, 0.095 (0.848) | r=0.071, 0.802 (0.848) | r=0.052, 0.848 (0.848) | r=-0.111, 0.683 (0.848) | r=-0.126, 0.641 (0.848) | r=-0.31, 0.243 (0.848) | r=-0.156, 0.563 (0.848) | r=-0.205, 0.447 (0.848) | r=-0.168, 0.534 (0.848) | r=0.104, 0.700 (0.848) | r=0.265, 0.321 (0.848) | r=0.144, 0.596 (0.848) | r=-0.244, 0.361 (0.848) | |
|  | Item-Specific Recollection | r=0.139, 0.609 (0.961) | r=0.273, 0.306 (0.961) | r=0.018, 0.949 (0.961) | NA | r=0.181, 0.519 (0.961) | r=-0.055, 0.846 (0.961) | NA | NA | r=-0.323, 0.240 (0.961) | r=-0.019, 0.947 (0.961) | r=-0.066, 0.815 (0.961) | r=-0.294, 0.287 (0.961) | r=-0.589, 0.021 (0.457) | r=0.314, 0.254 (0.961) | r=0.279, 0.295 (0.961) | r=0.104, 0.701 (0.961) | r=-0.069, 0.799 (0.961) | r=-0.157, 0.561 (0.961) | r=-0.037, 0.893 (0.961) | r=0.23, 0.391 (0.961) | r=0.304, 0.252 (0.961) | r=0.065, 0.812 (0.961) | r=-0.077, 0.777 (0.961) | r=-0.013, 0.961 (0.961) | r=0.21, 0.434 (0.961) | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Conservative | Gist Memory | r=0.209, 0.437 (0.955) | r=0.053, 0.845 (0.955) | r=0.262, 0.326 (0.955) | r=0.351, 0.182 (0.873) | r=-0.169, 0.531 (0.955) | r=0.463, 0.071 (0.567) | NA | r=0.08, 0.768 (0.955) | r=-0.023, 0.933 (0.955) | r=-0.495, 0.051 (0.567) | r=0.309, 0.244 (0.955) | r=0.171, 0.576 (0.955) | r=0.017, 0.955 (0.955) | r=0.475, 0.101 (0.603) | r=-0.116, 0.67 (0.955) | r=-0.02, 0.942 (0.955) | r=0.063, 0.817 (0.955) | r=-0.125, 0.645 (0.955) | r=-0.121, 0.655 (0.955) | r=-0.083, 0.761 (0.955) | r=-0.208, 0.438 (0.955) | r=0.533, 0.034 (0.567) | r=0.048, 0.861 (0.955) | r=0.257, 0.337 (0.955) | r=-0.197, 0.465 (0.955) | |
|  | Item-Specific Recollection | r=0.544, 0.029 (0.366) | r=0.275, 0.303 (0.560) | r=0.242, 0.367 (0.586) | r=0.013, 0.961 (0.961) | r=-0.32, 0.227 (0.530) | r=0.32, 0.226 (0.530) | NA | r=-0.308, 0.246 (0.530) | r=0.296, 0.265 (0.530) | r=-0.056, 0.837 (0.913) | r=0.316, 0.233 (0.530) | r=0.399, 0.177 (0.530) | r=-0.144, 0.639 (0.852) | r=0.042, 0.893 (0.931) | r=-0.357, 0.174 (0.530) | r=0.315, 0.235 (0.530) | r=0.307, 0.247 (0.530) | r=-0.112, 0.680 (0.858) | r=0.248, 0.354 (0.586) | r=0.228, 0.396 (0.594) | r=0.089, 0.744 (0.893) | r=0.541, 0.030 (0.366) | r=0.06, 0.825 (0.913) | r=0.361, 0.169 (0.530) | r=-0.211, 0.433 (0.611) | |
| Deep Encoding | Gist Memory | r=0.184, 0.495 (0.980) | r=-0.081, 0.765 (0.980) | r=0.163, 0.547 (0.980) | r=0.483, 0.058 (0.698) | r=-0.039, 0.886 (0.980) | r=0.173, 0.522 (0.980) | NA | r=0.057, 0.833 (0.980) | r=0.181, 0.502 (0.980) | r=-0.262, 0.326 (0.980) | r=0.489, 0.054 (0.698) | r=0.092, 0.766 (0.980) | r=-0.216, 0.479 (0.980) | r=0.462, 0.112 (0.892) | r=-0.073, 0.787 (0.980) | r=-0.142, 0.600 (0.980) | r=-0.112, 0.679 (0.980) | r=0.011, 0.968 (0.999) | r=0.304, 0.253 (0.980) | r=0, 0.999 (0.999) | r=0.035, 0.898 (0.980) | r=0.268, 0.315 (0.980) | r=-0.099, 0.714 (0.980) | r=0.259, 0.334 (0.980) | r=-0.052, 0.849 (0.980) | |
|  | Item-Specific Recollection | r=0.638, 0.008 (0.187) | r=0.433, 0.094 (0.565) | r=0.218, 0.417 (0.789) | r=0.053, 0.846 (0.953) | r=-0.14, 0.605 (0.883) | r=0.095, 0.727 (0.890) | NA | r=-0.248, 0.355 (0.775) | r=0.328, 0.215 (0.714) | r=-0.089, 0.742 (0.890) | r=0.278, 0.297 (0.714) | r=0.435, 0.137 (0.659) | r=-0.379, 0.202 (0.714) | r=0.018, 0.953 (0.953) | r=-0.305, 0.251 (0.714) | r=0.02, 0.940 (0.953) | r=0.028, 0.918 (0.953) | r=-0.129, 0.635 (0.883) | r=0.547, 0.028 (0.338) | r=0.214, 0.427 (0.789) | r=0.281, 0.292 (0.714) | r=0.118, 0.662 (0.883) | r=0.135, 0.618 (0.883) | r=0.435, 0.092 (0.565) | r=-0.146, 0.590 (0.883) | |
| Combined | Gist Memory | r=-0.136, 0.615 (0.738) | r=-0.329, 0.214 (0.442) | r=0.42, 0.105 (0.442) | r=0.301, 0.258 (0.442) | r=0.031, 0.908 (0.924) | r=0.331, 0.210 (0.442) | NA | r=0.14, 0.605 (0.738) | r=0.574, 0.020 (0.442) | r=-0.026, 0.924 (0.924) | r=0.435, 0.092 (0.442) | r=0.4, 0.175 (0.442) | r=0.134, 0.663 (0.757) | r=0.343, 0.251 (0.442) | r=-0.432, 0.095 (0.442) | r=-0.226, 0.401 (0.601) | r=-0.324, 0.220 (0.442) | r=0.191, 0.478 (0.675) | r=0.351, 0.182 (0.442) | r=0.314, 0.236 (0.442) | r=0.244, 0.362 (0.580) | r=0.324, 0.221 (0.442) | r=-0.31, 0.243 (0.442) | r=0.044, 0.872 (0.924) | r=0.16, 0.553 (0.738) | |
|  | Item-Specific Recollection | r=-0.292, 0.273 (0.768) | r=-0.403, 0.121 (0.768) | r=0.304, 0.252 (0.768) | r=0.033, 0.902 (0.941) | r=0.048, 0.860 (0.941) | r=0.18, 0.505 (0.823) | NA | r=0.183, 0.496 (0.823) | r=0.419, 0.107 (0.768) | r=0.092, 0.735 (0.941) | r=0.322, 0.224 (0.768) | r=0.42, 0.153 (0.768) | r=0.3, 0.320 (0.768) | r=-0.048, 0.876 (0.941) | r=-0.241, 0.368 (0.802) | r=0.038, 0.889 (0.941) | r=-0.038, 0.890 (0.941) | r=-0.009, 0.972 (0.972) | r=0.169, 0.530 (0.823) | r=0.308, 0.247 (0.768) | r=0.174, 0.519 (0.823) | r=0.344, 0.192 (0.768) | r=-0.28, 0.293 (0.768) | r=-0.034, 0.901 (0.941) | r=0.162, 0.549 (0.823) | |

Note: NA denotes insufficient variability in the data for analysis. OC = Healthy age matched control group; MCI = Mild cognitive impairment due to Alzheimer’s’ disease group; AD = mild Alzheimer’s disease dementia group; D-KEFS = Delis-Kaplan Executive Function System; RBANS = Repeatable Battery for the Assessment of Neuropsychological Status

Data reported as : r= Pearson correlation, *p*= significance, Benjamini-Hochberg correction ((i/m)Q) = the false discovery rate for multiple comparisons