**Figure 1.** Slope-Slope associations derived from random-effects meta-regression across domains of functioning separated by sex and by paired association.

**Panel A:** Pulmonary function and Gait speed

|  |  |  |  |
| --- | --- | --- | --- |
| Sample | Sex |  | R, (95% C.I.) |
| EAS | F |  | -0.55, (-0.64, -0.45) |
| ELSA | F |  | 0.40, (0.38, 0.42) |
| HRS | F |  | 0.58, (0.50, 0.65) |
| ILSE | F |  | - |
| LASA | F |  | 0.25, (0.22, 0.28) |
| MAP | F |  | -0.03, (-0.08, 0.02) |
| NuAge | F |  | - |
| OCTO | F |  | 0.58, (0.50, 0.66) |
| SATSA | F |  | 0.35, (0.26, 0.44) |
|  |  |  |  |
| Female Average | F |  | 0.25, (0.12, 0.37) |
|  |  |  |  |
| EAS | M |  | -0.53, (-0.67, -0.35) |
| ELSA | M |  | 0.34, (0.32, 0.36) |
| HRS | M |  | 0.85, (0.81, 0.88) |
| ILSE | M |  | - |
| LASA | M |  | 0.40, (0.38, 0.42) |
| MAP | M |  | -0.46, (-0.54, -0.38) |
| NuAge | M |  | - |
| OCTO | M |  | 0.79, (0.76, 0.82) |
| SATSA | M |  | 0.55, (0.47, 0.62) |
|  |  |  |  |
| Male Average | M |  | 0.37, (0.14, 0.56) |
|  |  |  |  |
| Overall Average |  |  | 0.27, (-0.01, 0.52) |
|  |  |  |  |

**Panel B:** Pulmonary Function and Grip Strength

|  |  |  |  |
| --- | --- | --- | --- |
| Sample | Sex |  | R, (95% C.I.) |
| EAS | F |  | 0.03, (-0.11, 0.17) |
| ELSA | F |  | 0.63, (0.61, 0.64) |
| HRS | F |  | -0.52, (-0.6, -0.43) |
| ILSE | F |  | - |
| LASA | F |  | 0.03, (-0.01, 0.07) |
| MAP | F |  | 0.02, (-0.03, 0.07) |
| NuAge | F |  | - |
| OCTO | F |  | 0.34, (0.23, 0.44) |
| SATSA | F |  | 0.03, (-0.07, 0.13) |
|  |  |  |  |
| Female Average | F |  | 0.09, (-0.12, 0.29) |
|  |  |  |  |
| EAS | M |  | 0.20, (-0.02, 0.40) |
| ELSA | M |  | 0.42, (0.40, 0.44) |
| HRS | M |  | -0.16, (-0.28, -0.04) |
| ILSE | M |  | - |
| LASA | M |  | 0.57, (0.54, 0.58) |
| MAP | M |  | -0.03, (-0.12, 0.07) |
| NuAge | M |  | - |
| OCTO | M |  | 0.10, (0.01, 0.19) |
| SATSA | M |  | 0.67, (0.61, 0.72) |
|  |  |  |  |
| Male Average | M |  | 0.29, (0.18, 0.39) |
|  |  |  |  |
| Overall Average |  |  | 0.25, (0.12, 0.37) |
|  |  |  |  |

**Panel C:** Grip Strength and Gait Speed

|  |  |  |  |
| --- | --- | --- | --- |
| Sample | Sex |  | R, (95% C.I.) |
| EAS | F |  | 0.38, (0.26, 0.49) |
| ELSA | F |  | 0.50, (0.48, 0.52) |
| HRS | F |  | 0.13, (0.02, 0.24) |
| ILSE\* | F |  | -0.49, (-0.56, -0.41) |
| LASA | F |  | 0.69, (0.67, 0.71) |
| MAP | F |  | -0.47, (-0.51, -0.43) |
| NuAge\* | F |  | 0.26, (0.20, 0.31) |
| OCTO | F |  | 0.04, (-0.08, 0.16) |
| SATSA | F |  | -0.01, (-0.11, 0.09) |
|  |  |  |  |
| Female Average | F |  | 0.13, (-0.08, 0.33) |
|  |  |  |  |
| EAS | M |  | 0.24, (0.02, 0.43) |
| ELSA | M |  | 0.55, (0.53, 0.57) |
| HRS | M |  | 0.10, (-0.03, 0.22) |
| ILSE\* | M |  | -0.83, (-0.84, -0.82) |
| LASA | M |  | 0.76, (0.75, 0.77) |
| MAP | M |  | 0.35, (0.26, 0.43) |
| NuAge\* | M |  | 0.24, (0.18, 0.30) |
| OCTO | M |  | 0.70, (0.65, 0.74) |
| SATSA | M |  | 0.35, (0.25, 0.44) |
|  |  |  |  |
| Male Average | M |  | 0.28, (-0.06, 0.56) |
|  |  |  |  |
| Overall Average |  |  | 0.17, (-0.21, 0.52) |
|  |  |  |  |

**Notes**: Labels are shown for all samples, irrespective of availability of result. Analyses are sex-stratified; M refers to male-specific analyses, while F refers to female-specific analyses. Individual studies are represented by squares, diamonds represent averages derived from fixed-effects meta-analysis. The size of the square represents the weight of the estimate. R indicates correlation coefficient. 95% CI references the 95% Confidence Interval around the estimate and is shown visually on the graph using uncapped error bars. -No estimates available for this sample in this category. \*NuAge and ILSE rely on timed up and go (TUG) to estimate walking speed.