**S2 Table: Results of 95% confidence intervals of mediation (5000x Bootstrapping).**Confidence intervals excluding 0 are highlighted in bold. Abbreviations: PWV = pulse wave velocity, SF = semantic fluency, VL=verbal learning FA = fractional anisotropy, RD = radial diffusivity, X = predictor variable, Y = outcome variable, M = mediator variable.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   | X | M | Y | ModelR2 | Modeldf1/df2 | BPWV† | BM† | Direct effect (X->Y) | Indirect effect(X->M->Y) |
| Model\* 1a | PWV |   | FA\*\* | 0.246 | 10/530 | -0.002;0.0001 |   |   |   |
|   | PWV | **FA** | **SF** | 0.139 | 11/529 | **-0.739;****-0.155** | -0.918;52.718 | **-0.733;****-0.158** | -0.069;0.004 |
| Model\* 1b | PWV |   | RD\*\* | 0.283 | 10/530 | -0.001;0.029 |   |  |   |
|   | PWV | **RD** | **SF** | 0.137 | 11/529 | **-0.752;****-0.160** | -31.00;4.04 | **-0.737;****-0.162** | -0.060;0.007 |
| Model\* 2a | PWV |   | FA\*\* | 0.246 | 10/530 | -0.002;0.0001 |   |  |   |
|   | PWV | **FA** | **VL** | 0.141 | 11/529 | **-0.601;****-0.142** | -1.492;45.208 | **-0.613;****-0.130** | -0.060;0.005 |
| Model\* 2b | PWV |   | RD\*\* | 0.283 | 10/530 | -0.001;0.003 |   |  |   |
|   | PWV | **RD** | **VL** | 0.139 | 11/529 | **-0.616;****-0.144** | -27.89;3.15 | **-0.616;****-0.133** | -0.054;0.006 |

 \*All models are adjusted for age, mean arterial pressure, treatment with antihypertensives, and BMI during phase 9 and sex, education, socio-economic stratum, scanner model, and years from phase 9 to date of scan.

\*\* The first line in each model describes for comparison the regression of the mediator variable (FA, RD) on the independent variable (pulse wave velocity); the second line describes the fully mediated model (pulse wave velocity -> FA, RD -> cognitive function (VL/SF)).

†B describes the 95%-confidence intervals of non-standardised regression coefficients, BPWV for pulse wave velocity, BM for the mediator variable (FA, Drad) on the dependent (Y)-variable.