Supplementary Tables

Supplementary Table 1

*Ventral Attention Network Model (n = 8973)*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | Estimate | *SE* | β | *df* | *t* | *p*  | 95% CI |
| Intercept | 0.213 | 0.004 |  | 32.222 | 56.84 | <.001 | 0.205, 0.220 |
|  |  |  |  |  |  |  |  |
| Main effects |  |  |  |  |  |  |  |
| CU score | -0.001 | 0.001 | -0.011 | 8829.975 | -1.13 | .260 | -0.002, 0.001 |
|  |  |  |  |  |  |  |  |
| Covariates |  |  |  |  |  |  |  |
| Mean Motion | -0.067 | 0.004 | -0.183 | 8687.954 | -18.47 | <.001 | -0.074, -0.060 |
| Centered Age | -0.001 | 0.001 | -0.014 | 8866.107 | -1.44 | .151 | -0.003, 0.000 |
| Gender |  |  |  |  |  |  |  |
| Female | referent |  |  |  |  |  |  |
| Male | 0.003 | 0.006 | .003 | 8750.292 | 0.31 | .755 | -0.003, 0.004 |
| Household Income  |  |  |  |  |  |  |  |
| <$50k | referent  |  |  |  |  |  |  |
| $50k-$100k | 0.004 | 0.002 | 0.021 | 7082.707 | 1.79 | .073 | -0.000, 0.008 |
| >$100k | 0.009 | 0.002 | 0.054 | 5480.498 | 4.42 | <.001 | 0.005, 0.013 |
| Scanner |  |  |  |  |  |  |  |
| GE | referent |  |  |  |  |  |  |
| Philips | -0.069 | 0.006 | -0.278 | 19.758 | -12.46 | <.001 | -0.079, -0.058 |
| Siemens | 0.022 | 0.004 | 0.131 | 19.741 | 5.68 | <.001 | 0.015, 0.030 |
| *Estimate* unstandardized beta, *SE* standard error, β standardized beta, *df* Satterthwaite approximate degrees of freedom |

Supplementary Table 2

*Salience Network Model (n = 8768)*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | Estimate | *SE* | β | *df* | *t* | *p*  | 95% CI |
| Intercept | 0.354 | 0.010 |  | 30.178 | 37.01 | <.001 | 0.335, 0.373 |
|  |  |  |  |  |  |  |  |
| Main effects |  |  |  |  |  |  |  |
| CU score | -0.001 | 0.001 | 0.003 | 8829.975 | 0.28 | .777 | -0.003, 0.004 |
|  |  |  |  |  |  |  |  |
| Covariates |  |  |  |  |  |  |  |
| Mean Motion | -0.085 | 0.009 | -0.108 | 8666.268 | -9.98 | <.001 | -0.102, -0.068 |
| Centered Age | -0.003 | 0.002 | -0.020 | 8721.683 | -1.86 | .064 | -0.006, 0.000 |
| Gender |  |  |  |  |  |  |  |
| Female | referent |  |  |  |  |  |  |
| Male | 0.005 | 0.003 | 0.014 | 8191.473 | 1.35 | .178 | -0.002, 0.011 |
| Household Income  |  |  |  |  |  |  |  |
| <$50k | referent  |  |  |  |  |  |  |
| $50k-$100k | 0.005 | 0.005 | 0.013 | 7047.439 | 1.03 | .302 | -0.004, 0.014 |
| >$100k | 0.014 | 0.004 | 0.043 | 6260.033 | 3.27 | .001 | 0.006, 0.023 |
| Scanner  |  |  |  |  |  |  |  |
| GE | referent |  |  |  |  |  |  |
| Philips | -0.017 | 0.015 | -0.034 | 20.629 | -1.18 | .253 | -0.047, 0.012 |
| Siemens | 0.033 | 0.010 | 0.096 | 20.898 | 3.17 | .005 | 0.013, 0.053 |
| *Estimate* unstandardized beta, *SE* standard error, β standardized beta, *df* Satterthwaite approximate degrees of freedom |

Supplementary Table 3

*Cingulo-opercular Network Model (n = 8950)*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | Estimate | *SE* | β | *df* | *t* | *p*  | 95% CI |
| Intercept | 0.267 | 0.006 |  | 26.614 | 42.82 | <.001 | 0.255, 0.279 |
|  |  |  |  |  |  |  |  |
| Main effects |  |  |  |  |  |  |  |
| CU score | 0.000 | 0.001 | 0.002 | 8900.366 | 0.23 | .818 | -0.001, 0.002 |
|  |  |  |  |  |  |  |  |
| Covariates |  |  |  |  |  |  |  |
| Mean Motion | -0.084 | 0.004 | -0.209 | 8934.239 | -20.80 | <.001 | -0.092, -0.076 |
| Centered Age | 0.001 | 0.001 | .014 | 8902.218 | 1.38 | .167 | -0.001, 0.003 |
| Gender |  |  |  |  |  |  |  |
| Female | referent |  |  |  |  |  |  |
| Male | -0.014 | 0.002 | -0.083 | 8649.124 | -8.31 | .084 | -0.018, -0.011 |
| Household Income  |  |  |  |  |  |  |  |
| <$50k | referent  |  |  |  |  |  |  |
| $50k-$100k | 0.012 | 0.002 | .063 | 7625.200 | 5.21 | <.001 | 0.008, 0.017 |
| >$100k | 0.018 | 0.002 | 0.104 | 7326.518 | 8.26 | <.001 | 0.014, 0.023 |
| Scanner  |  |  |  |  |  |  |  |
| GE | referent |  |  |  |  |  |  |
| Philips | -0.018 | 0.010 | -0.068 | 20.844 | -1.82 | .084 | -0.038, 0.002 |
| Siemens | 0.033 | 0.007 | 0.179 | 21.329 | 4.63 | <.001 | 0.019, 0.047 |
| *Estimate* unstandardized beta, *SE* standard error, β standardized beta, *df* Satterthwaite approximate degrees of freedom |

Supplementary Table 4

*Fronto-parietal Network Model (n = 8904)*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | Estimate | *SE* | β | *df* | *t* | *p*  | 95% CI |
| Intercept | 0.206 | 0.003 |  | 29.910 | 62.48 | <.001 | 0.199, 0.212 |
|  |  |  |  |  |  |  |  |
| Main effects |  |  |  |  |  |  |  |
| CU score | -0.001 | 0.001 | -0.010 | 8819.337 | 1.01 | .310 | -0.002, 0.001 |
|  |  |  |  |  |  |  |  |
| Covariates |  |  |  |  |  |  |  |
| Mean Motion | -0.074 | 0.003 | -0.234 | 8597.846 | -22.53 | <.001 | -0.081, -0.068 |
| Centered Age | 0.001 | 0.001 | 0.014 | 8761.510 | 1.33 | .184 | -0.000, 0.002 |
| Gender |  |  |  |  |  |  |  |
| Female | referent |  |  |  |  |  |  |
| Male | -0.008 | 0.001 | -0.056 | 8472.452 | -5.45 | <.001 | -0.010, -0.005 |
| Household Income  |  |  |  |  |  |  |  |
| <$50k | referent  |  |  |  |  |  |  |
| $50k-$100k | 0.002 | 0.002 | 0.011 | 6931.367 | 0.91 | .365 | -0.002, 0.005 |
| >$100k | 0.002 | 0.002 | 0.017 | 5202.180 | 1.32 | .185 | -0.001, 0.006 |
| Scanner |  |  |  |  |  |  |  |
| GE | referent |  |  |  |  |  |  |
| Philips | -0.022 | 0.005 | -0.107 | 18.194 | -4.64 | <.001 | -0.032, -0.013 |
| Siemens | 0.017 | 0.003 | 0.119 | 18.039 | 5.02 | <.001 | 0.011, 0.024 |
| *Estimate* unstandardized beta, *SE* standard error, β standardized beta, *df* Satterthwaite approximate degrees of freedom |

Supplementary Table 5

*Retrosplenial-Temporal Network Model (n = 8964)*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | Estimate | *SE* | β | *df* | *t* | *p*  | 95% CI |
| Intercept | 0.563 | 0.011 |  | 27.917 | 51.73 | <.001 | 0.542, 0.584 |
|  |  |  |  |  |  |  |  |
| Main effects |  |  |  |  |  |  |  |
| CU score | -0.001 | 0.002 | -0.008 | 8891.780 | -0.84 | .402 | -0.005, 0.002 |
|  |  |  |  |  |  |  |  |
| Covariates |  |  |  |  |  |  |  |
| Mean Motion | -0.185 | 0.008 | -0.235 | 8929.099 | -22.95 | <.001 | -0.200, -0.169 |
| Centered Age | -0.004 | 0.002 | -0.025 | 8928.950 | -2.51 | .012 | -0.008, -0.001 |
| Gender |  |  |  |  |  |  |  |
| Female | referent |  |  |  |  |  |  |
| Male | -0.019 | 0.003 | -0.056 | 8588.553 | -5.57 | <.001 | -0.026, -0.012 |
| Household Income  |  |  |  |  |  |  |  |
| <$50k | referent  |  |  |  |  |  |  |
| $50k-$100k | 0.012 | 0.005 | 0.033 | 7485.196 | 2.64 | .008 | 0.003, 0.021 |
| >$100k | 0.020 | 0.004 | 0.057 | 6989.439 | 4.49 | <.001 | 0.011, 0.028 |
| Scanner  |  |  |  |  |  |  |  |
| GE | referent |  |  |  |  |  |  |
| Philips | -0.111 | 0.017 | -0.215 | 20.681 | -6.50 | <.001 | -0.144, -0.078 |
| Siemens | -0.030 | 0.012 | -0.085 | 21.069 | -2.48 | .022 | -0.058, -0.006 |
| *Estimate* unstandardized beta, *SE* standard error, β standardized beta, *df* Satterthwaite approximate degrees of freedom |

Supplementary Table 6

*Dorsal Attention Network Model with Externalizing Behavior Covariate (n = 8992)*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | Estimate | *SE* | β | *df* | *t* | *p* | 95% CI |
|  |  |  |  |  |  |  |  |
| Intercept | 0.248 | 0.004 |  | 36.083 | 56.92 | <.001 | 0.239, 0.256 |
|  |  |  |  |  |  |  |  |
| Main effect |  |  |  |  |  |  |  |
| CU score | -0.001 | 0.001 | -0.012 | 8938.083 | -1.08 | 0.282 | -0.003, 0.001 |
|  |  |  |  |  |  |  |  |
| Covariates |  |  |  |  |  |  |  |
| Mean Motion | -0.080 | 0.004 | -0.209 | 8818.958 | -20.10 | <.001 | -0.088, -0.072 |
| Centered Age | 0.002 | 0.001 | 0.022 | 8890.695 | 2.12 | .034 | 0.000, 0.004 |
| Gender |  |  |  |  |  |  |  |
| Female | referent |  |  |  |  |  |  |
| Male | -0.006 | 0.0018 | -0.035 | 8692.845 | -3.42 | <.001 | -0.009, -0.003 |
| Household Income  |  |  |  |  |  |  |  |
| <$50k | referent |  |  |  |  |  |  |
| $50k-$100k | 0.005 | 0.002 | 0.026 | 7382.695 | 2.10 | .036 | 0.000, 0.009 |
| >$100k | 0.010 | 0.002 | 0.057 | 6113.734 | 4.34 | <.001 | 0.005, 0.014 |
| Scanner  |  |  |  |  |  |  |  |
| GE | referent |  |  |  |  |  |  |
| Philips | -0.034 | 0.006 | -0.132 | 21.322 | -5.35 | <.001 | -0.046, -0.022 |
| Siemens | 0.011 | 0.005 | 0.063 | 21.284 | 2.46 | .023 | 0.002, 0.020 |
| **Externalizing Behavior** | **-0.001** | **0.000** | **-0.035** | **8830.852** | **-3.03** | **.002** | **-0.001, -0.000** |
| *Estimate* unstandardized beta, *SE* standard error, β standardized beta, *df* Satterthwaite approximate degrees of freedom |

Supplementary Table 7

*Default Mode Network Model with Cognition Covariate (n = 8257)*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | Estimate | *SE* | β | *df* | *t* | *p* | 95% CI |
|  |  |  |  |  |  |  |  |
| Intercept | 0.228 | 0.006 |  | 66.167 | 38.890 | <.001 | 0.216, 0.239 |
|  |  |  |  |  |  |  |  |
| Main effect |  |  |  |  |  |  |  |
| CU score | -0.002 | 0.001 | -0.023 | 8190.526 | -2.246 | 0.025 | -0.003, -0.000 |
|  |  |  |  |  |  |  |  |
| Covariates |  |  |  |  |  |  |  |
| Mean Motion | -0.077 | 0.004 | -0.215 | 8211.304 | -20.754 | <.001 | -0.085, -0.069 |
| Centered Age | 0.002 | 0.001 | 0.025 | 3214.172 | 2.482 | .013 | 0.000, 0.004 |
| Gender |  |  |  |  |  |  |  |
| Female | Referent |  |  |  |  |  |  |
| Male | -0.015 | 0.002 | -0.098 | 7948.439 | -9.678 | <.001 | -0.018, -0.012 |
| Household Income  |  |  |  |  |  |  |  |
| <$50k | Referent |  |  |  |  |  |  |
| $50k-$100k | 0.009 | 0.002 | 0.052 | 6905.515 | 4.130 | <.001 | 0.005, 0.013 |
| >$100k | 0.011 | 0.002 | 0.070 | 6423.428 | 5.444 | <.001 | 0.007, 0.015 |
| Scanner  |  |  |  |  |  |  |  |
| GE | Referent |  |  |  |  |  |  |
| Philips | -0.034 | 0.007 | -0.141 | 20.975 | -4.682 | <.001 | -0.049, -0.020 |
| Siemens | 0.035 | 0.005 | 0.215 | 20.957 | 6.726 | <.001 | 0.025, 0.045 |
| **NIH Total Cognition** | **0.000** | **0.000** | **0.009** | **8088.074** | **0.831** | **.406** | **-0.001, 0.000** |
| *Estimate* unstandardized beta, *SE* standard error, β standardized beta, *df* Satterthwaite approximate degrees of freedom |

Supplementary Table 8

*Dorsal Attention Network Model with Cognition Covariate (n = 8269)*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | Estimate | *SE* | β | *df* | *t* | *p* | 95% CI |
|  |  |  |  |  |  |  |  |
| Intercept | 0.240 | 0.006 |  | 115.019 | 41.370 | <.001 | 0.230, 0.251 |
|  |  |  |  |  |  |  |  |
| Main effect |  |  |  |  |  |  |  |
| CU score | -0.002 | 0.001 | -0.023 | 8222.356 | -2.217 | 0.027 | -0.004, -0.000 |
|  |  |  |  |  |  |  |  |
| Covariates |  |  |  |  |  |  |  |
| Mean Motion | -0.080 | 0.004 | -0.215 | 8101.218 | -19.079 | <.001 | -0.089, -0.072 |
| Centered Age | 0.002 | 0.001 | 0.025 | 8174.974 | 1.744 | .081 | -0.000, 0.003 |
| Gender |  |  |  |  |  |  |  |
| Female | Referent |  |  |  |  |  |  |
| Male | -0.006 | 0.002 | -0.098 | 8023.116 | -3.494 | <.001 | -0.010, -0.003 |
| Household Income  |  |  |  |  |  |  |  |
| <$50k | Referent |  |  |  |  |  |  |
| $50k-$100k | 0.005 | 0.002 | 0.052 | 6787.480 | 2.030 | .042 | 0.000, 0.010 |
| >$100k | 0.010 | 0.002 | 0.070 | 5553.335 | 4.189 | <.001 | 0.005, 0.014 |
| Scanner  |  |  |  |  |  |  |  |
| GE | Referent |  |  |  |  |  |  |
| Philips | -0.034 | 0.006 | -0.141 | 22.573 | -5.317 | <.001 | -0.046, -0.022 |
| Siemens | 0.011 | 0.005 | 0.215 | 21.709 | 2.352 | .028 | 0.001, 0.019 |
| **NIH Total Cognition** | **0.000** | **0.000** | **0.009** | **8112.902** | **1.525** | **.127** | **-0.000, 0.000** |
| *Estimate* unstandardized beta, *SE* standard error, β standardized beta, *df* Satterthwaite approximate degrees of freedom |

Supplementary Table 9

*Default Mode Network Model with Gender x CU Interaction (n = 8984)*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | Estimate | *SE* | β | *df* | *t* | *p* | 95% CI |
| Intercept | 0.231 | 0.005 |  | 27.756 | 48.48 | <.001 | 0.222, 0.240 |
|  |  |  |  |  |  |  |  |
| Main effect |  |  |  |  |  |  |  |
| CU score | -0.002 | 0.001 | -0.026 | 8948.388 | -1.72 | 0.086 | -0.004, 0.000 |
|  |  |  |  |  |  |  |  |
| Covariates |  |  |  |  |  |  |  |
| Mean Motion | -0.075 | 0.004 | -0.209 | 8936.562 | -21.24 | <.001 | -0.082, -0.068 |
| Centered Age | 0.002 | 0.001 | 0.032 | 8945.887 | 3.28 | .001 | 0.001, 0.004 |
| Gender |  |  |  |  |  |  |  |
| Female | referent |  |  |  |  |  |  |
| Male | -0.015 | 0.002 | -0.096 | 8599.693 | -9.89 | <.001 | -0.018, -0.012 |
| Household Income  |  |  |  |  |  |  |  |
| <$50k | referent |  |  |  |  |  |  |
| $50k-$100k | 0.008 | 0.002 | 0.045 | 7432.017 | 3.80 | <.001 | 0.004, 0.012 |
| >$100k | 0.010 | 0.002 | 0.065 | 6914.972 | 5.28 | <.001 | 0.006, 0.014 |
| Scanner  |  |  |  |  |  |  |  |
| GE | referent |  |  |  |  |  |  |
| Philips | -0.036 | 0.007 | -0.152 | 20.378 | -4.82 | <.001 | -0.051, -0.021 |
| Siemens | 0.035 | 0.005 | 0.214 | 20.787 | 6.63 | <.001 | 0.025, 0.045 |
| **Gender X CU** | **-0.000** | **.002** | **-0.002** | **8958.571** | **-0.12** | **.901** | **-0.003, 0.003** |
| *Estimate* unstandardized beta, *SE* standard error, β standardized beta, *df* Satterthwaite approximate degrees of freedom |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Estimate | *SE* | β | *df* | *t* | *p* | 95% CI |
| Intercept | 0.231 | 0.005 |  | 27.743 | 48.59 | <.001 | 0.222, 0.240 |
|  |  |  |  |  |  |  |  |
| Main effect |  |  |  |  |  |  |  |
| CU score | -0.002 | 0.001 | -0.028 | 8904.607 | -2.85 | 0.004 | -0.004, 0.000 |
|  |  |  |  |  |  |  |  |
| Covariates |  |  |  |  |  |  |  |
| Mean Motion | -0.075 | 0.004 | -0.210 | 8935.582 | -21.26 | <.001 | -0.082, -0.068 |
| Centered Age | 0.002 | 0.001 | 0.032 | 8945.957 | 3.28 | .001 | 0.001, 0.004 |
| Gender |  |  |  |  |  |  |  |
| Female | referent |  |  |  |  |  |  |
| Male | -0.015 | 0.002 | -0.096 | 8589.571 | -9.90 | <.001 | -0.018, -0.012 |
| Household Income  |  |  |  |  |  |  |  |
| <$50k | referent |  |  |  |  |  |  |
| $50k-$100k | 0.008 | 0.002 | 0.045 | 7431.953 | 3.79 | <.001 | 0.004, 0.012 |
| >$100k | 0.010 | 0.002 | 0.064 | 6911.124 | 5.23 | <.001 | 0.006, 0.014 |
| Scanner  |  |  |  |  |  |  |  |
| GE | referent |  |  |  |  |  |  |
| Philips | -0.036 | 0.007 | -0.152 | 20.383 | -4.83 | <.001 | -0.051, -0.021 |
| Siemens | 0.035 | 0.005 | 0.214 | 20.791 | 6.64 | <.001 | 0.025, 0.045 |
| **Age X CU** | **-0.001** | **.001** | **-0.012** | **8931.890** | **-1.22** | **0.230** | **-0.002, 0.001** |
| *Estimate* unstandardized beta, *SE* standard error, β standardized beta, *df* Satterthwaite approximate degrees of freedom |

Supplementary Table 10

*Default Mode Network Model with Age x CU Interaction (n = 8984)*

Supplementary Table 11

*Default Mode Network Model Excluding Children with Current Psychopathology (n* = 7506)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Estimate | *SE* | β | *df* | *t* | *p* | 95% CI |
| Intercept | 0.233 | 0.005 |  | 28.874 | 48.43 | <.001 | 0.223, 0.242 |
|  |  |  |  |  |  |  |  |
| Main effect |  |  |  |  |  |  |  |
| CU score | 0.001 | 0.001 | -0.015 | 7462.149 | 1.50 | 0.135 | -0.000, 0.003 |
|  |  |  |  |  |  |  |  |
| Covariates |  |  |  |  |  |  |  |
| Mean Motion | -0.079 | 0.004 | -0.211 | 7458.561 | -19.63 | <.001 | -0.086, -0.070 |
| Centered Age | 0.002 | 0.001 | 0.031 | 7482.851 | 2.95 | .003 | 0.001, 0.004 |
| Gender |  |  |  |  |  |  |  |
| Female | referent |  |  |  |  |  |  |
| Male | -0.013 | 0.002 | -0.090 | 7187.173 | -8.61 | <.001 | -0.017, -0.011 |
| Household Income  |  |  |  |  |  |  |  |
| <$50k | referent |  |  |  |  |  |  |
| $50k-$100k | 0.008 | 0.002 | 0.047 | 6320.417 | 3.62 | <.001 | 0.004, 0.012 |
| >$100k | 0.009 | 0.002 | 0.055 | 5860.684 | 4.12 | <.001 | 0.005, 0.013 |
| Scanner  |  |  |  |  |  |  |  |
| GE | referent |  |  |  |  |  |  |
| Philips | -0.037 | 0.007 | -0.159 | 20.496 | -4.98 | <.001 | -0.052, -0.022 |
| Siemens | 0.035 | 0.005 | 0.215 | 20.914 | 6.58 | <.001 | 0.025, 0.045 |
| *Note. Estimate* Unstandardized beta; *SE* standard error, *df* Satterthwaite approximate degrees of freedom |