Supplemental Table S1

*Bivariate Correlations Among All Study Variables*

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. |
| 1. Sex | -- |  |  |  |  |  |  |  |  |  |  |
| 2. Social class | -.02 | -- |  |  |  |  |  |  |  |  |  |
| 3. Education | -.04\* | .28\*\* | -- |  |  |  |  |  |  |  |  |
| 4. Neuroticism (S) | .05\*\* | -.02 | -.03 | -- |  |  |  |  |  |  |  |
| 5. Extraversion (S) | .04\* | .00 | -.02 | -.35\*\* | -- |  |  |  |  |  |  |
| 6. Openness (S) | -.06\* | .12\*\* | .19\*\* | -.05\*\* | .14\*\* | -- |  |  |  |  |  |
| 7. Agreeableness (S) | .17\*\* | -.06\*\* | -.01 | -.06\*\* | .22\*\* | .26\*\* | -- |  |  |  |  |
| 8. Conscientiousness (S) | .04\* | .03\* | .18\*\* | -.11\*\* | .00 | .37\*\* | .40\*\* | -- |  |  |  |
| 9. Neuroticism (M) | .08\*\* | -.12\*\* | -.15\*\* | .16\*\* | .02 | -.08\*\* | -.02 | -.14\*\* | -- |  |  |
| 10. Extraversion (M) | -.02 | .08\*\* | .03 | -.24\*\* | .20\*\* | .06\*\* | .05\*\* | .02 | -.45\*\* | -- |  |
| 11. Agreeableness (M) | .04\* | .10\*\* | .13\*\* | -.07\*\* | -.09\*\* | .05\*\* | .01 | .13\*\* | -.54\*\* | .32\*\* | -- |
| 12. Conscientiousness (M) | .08\*\* | .10\*\* | .22\*\* | -.10\*\* | -.06\*\* | .12\*\* | .02 | .18\*\* | -.47\*\* | .28\*\* | .46\*\* |
| 13. Vocabulary (16) | .01 | .26\*\* | .35\*\* | -.03 | -.06\*\* | .20\*\* | -.03 | .13\*\* | -.14\*\* | .03\* | .16\*\* |
| 14. Reading (16) | .02 | .31\*\* | .43\*\* | -.04 | .00 | .26\*\* | -.03 | .19\*\* | -.16\*\* | .10\*\* | .23\*\* |
| 15. Spelling (16) | .16\*\* | .15\*\* | .20\*\* | -.03 | -.04\*\* | .13\*\* | .03 | .15\*\* | -.09\*\* | .03 | .16\*\* |
| 16. Math (16) | -.03 | .27\*\* | .37\*\* | -.06\*\* | -.02 | .23\*\* | -.05\* | .20\*\* | -.15\*\* | .12\*\* | .18\*\* |
| 17. Matrices (16) | .04 | .17\*\* | .25\*\* | .01 | .00 | .15\*\* | -.03 | .09\*\* | -.07\*\* | .06\*\* | .11\*\* |
| 18. Memory (46) | .03 | .16\*\* | .26\*\* | -.02 | .02 | .13\*\* | .01 | .08\*\* | -.07\*\* | .08\*\* | .10\*\* |
| 19. Fluency (46) | .02 | .17\*\* | .22\*\* | -.03 | .07\*\* | .12\*\* | .01 | .06\*\* | -.05\*\* | .07\*\* | .09\*\* |
| 20. Speed (46) | .10\*\* | .06\*\* | .06\*\* | -.02 | .05\*\* | .09\*\* | .02 | .06\*\* | -.01 | .03 | .03 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 12. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. |
| 12. Conscientiousness (M) | -- |  |  |  |  |  |  |  |  |
| 13. Vocabulary (16) | .24\*\* | -- |  |  |  |  |  |  |  |
| 14. Reading (16) | .26\*\* | .76\*\* | -- |  |  |  |  |  |  |
| 15. Spelling (16) | .22\*\* | .44\*\* | .56\*\* | -- |  |  |  |  |  |
| 16. Math (16) | .29\*\* | .62\*\* | .69\*\* | .51\*\* | -- |  |  |  |  |
| 17. Matrices (16) | .16\*\* | .38\*\* | .48\*\* | .32\*\* | .47\*\* | -- |  |  |  |
| 18. Memory (46) | .16\*\* | .28\*\* | .34\*\* | .19\*\* | .28\*\* | .19\*\* | -- |  |  |
| 19. Fluency (46) | .12\*\* | .25\*\* | .32\*\* | .17\*\* | .26\*\* | .21\*\* | .28\*\* | -- |  |
| 20. Speed (46) | .05\* | .07\*\* | .09\*\* | .08\*\* | .10\*\* | .07\*\* | .08\*\* | .16\*\* | -- |

 Note. S=self-reported personality. M=mother-rated personality. 16=cognitive tasks at age 16. 46=cognitive tasks at age 46.

\*p<.05. \*\*p<.01.

Supplemental Table S2

*Self-reported and Mother-rated Personality and Cognition at Age 16 Excluding Participants without Cognition at Age 46*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Trait |  | Self |  | Mother |
|  |  | β | *p* |  | β | *p* |
|  |  | Vocabulary |
| Model 1 |  |  |  |  |  |  |
| Neuroticism |  | -.02 | .331 |  | -.09 | .000 |
| Extraversion |  | -.05 | .014 |  | .00 | .904 |
| Openness |  | .16 | .000 |  | -- | -- |
| Agreeableness |  | .01 | .698 |  | .11 | .000 |
| Conscientiousness |  | .12 | .000 |  | .19 | .000 |
| Model 2 |  |  |  |  |  |  |
| Neuroticism |  | .00 | .849 |  | -.09 | .000 |
| Extraversion |  | -.05 | .011 |  | .01 | .520 |
| Agreeableness |  | .01 | .755 |  | .11 | .000 |
| Conscientiousness |  | .09 | .000 |  | .17 | .000 |
|  |  | Reading |
| Model 1 |  |  |  |  |  |  |
| Neuroticism |  | -.02 | .446 |  | -.13 | .000 |
| Extraversion |  | .00 | .898 |  | .08 | .004 |
| Openness |  | .25 | .000 |  | -- | -- |
| Agreeableness |  | -.01 | .694 |  | .22 | .000 |
| Conscientiousness |  | .19 | .000 |  | .25 | .000 |
| Model 2 |  |  |  |  |  |  |
| Neuroticism |  | .00 | .978 |  | -.13 | .000 |
| Extraversion |  | -.02 | .575 |  | .08 | .003 |
| Agreeableness |  | -.01 | .617 |  | .22 | .000 |
| Conscientiousness |  | .15 | .000 |  | .22 | .000 |
|  |  | Spelling |
| Model 1 |  |  |  |  |  |  |
| Neuroticism |  | -.03 | .162 |  | -.07 | .000 |
| Extraversion |  | -.05 | .007 |  | -.01 | .426 |
| Openness |  | .11 | .000 |  | -- | -- |
| Agreeableness |  | .00 | .785 |  | .12 | .000 |
| Conscientiousness |  | .14 | .000 |  | .17 | .000 |
| Model 2 |  |  |  |  |  |  |
| Neuroticism |  | -.02 | .452 |  | -.07 | .000 |
| Extraversion |  | -.05 | .010 |  | .00 | .809 |
| Agreeableness |  | .00 | .844 |  | .12 | .000 |
| Conscientiousness |  | .11 | .000 |  | .16 | .000 |
|  |  | Math |
| Model 1 |  |  |  |  |  |  |
| Neuroticism |  | -.03 | .157 |  | -.11 | .000 |
| Extraversion |  | -.02 | .394 |  | .10 | .000 |
| Openness |  | .20 | .000 |  | -- | -- |
| Agreeableness |  | -.04 | .151 |  | .15 | .000 |
| Conscientiousness |  | .17 | .000 |  | .26 | .000 |
| Model 2 |  |  |  |  |  |  |
| Neuroticism |  | -.02 | .428 |  | -.12 | .000 |
| Extraversion |  | -.04 | .073 |  | .10 | .000 |
| Agreeableness |  | -.04 | .141 |  | .15 | .000 |
| Conscientiousness |  | .14 | .000 |  | .23 | .000 |
|  |  | Matrices |
| Model 1 |  |  |  |  |  |  |
| Neuroticism |  | .01 | .661 |  | -.06 | .018 |
| Extraversion |  | .01 | .821 |  | .07 | .007 |
| Openness |  | .17 | .000 |  | -- | -- |
| Agreeableness |  | -.01 | .597 |  | .12 | .000 |
| Conscientiousness |  | .08 | .003 |  | .18 | .000 |
| Model 2 |  |  |  |  |  |  |
| Neuroticism |  | .02 | .417 |  | -.07 | .014 |
| Extraversion |  | -.01 | .682 |  | .08 | .007 |
| Agreeableness |  | -.02 | .572 |  | .12 | .000 |
| Conscientiousness |  | .05 | .053 |  | .17 | .000 |
|  |  | Composite Cognition |
| Model 1 |  |  |  |  |  |  |
| Neuroticism |  | .01 | .643 |  | -.12 | .000 |
| Extraversion |  | -.03 | .217 |  | .07 | .007 |
| Openness |  | .26 | .000 |  | -- | -- |
| Agreeableness |  | .02 | .571 |  | .21 | .000 |
| Conscientiousness |  | .20 | .000 |  | .29 | .000 |
| Model 2 |  |  |  |  |  |  |
| Neuroticism |  | .03 | .222 |  | -.12 | .000 |
| Extraversion |  | -.05 | .054 |  | .08 | .002 |
| Agreeableness |  | .01 | .649 |  | .21 | .000 |
| Conscientiousness |  | .16 | .000 |  | .26 | .000 |

*Note*. Coefficients are standardized beta coefficients from linear regression controlling for sex and social class. Model 1 tested self-reported and mother-rated personality separately. Model 2 tested self-reported and mother-rated personality simultaneously. Across all analyses, traits were entered in separately.

Supplemental Table S3

*Self-reported and Mother-rated Personality at age 16 and Cognition at Age 46 Controlling for Adult Educational Attainment*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Trait |  | Self |  | Mother |
|  |  | β | *p* |  | β | *p* |
|  |  | Memory |
| Model 1 |  |  |  |  |  |  |
| Neuroticism |  | -.03 | .158 |  | -.03 | .112 |
| Extraversion |  | .04 | .017 |  | .08 | .000 |
| Openness |  | .08 | .000 |  | -- | -- |
| Agreeableness |  | .02 | .274 |  | .06 | .002 |
| Conscientiousness |  | .04 | .058 |  | .11 | .000 |
| Model 2 |  |  |  |  |  |  |
| Neuroticism |  | -.02 | .251 |  | -.03 | .174 |
| Extraversion |  | .03 | .127 |  | .07 | .000 |
| Agreeableness |  | .02 | .296 |  | .06 | .002 |
| Conscientiousness |  | .02 | .227 |  | .10 | .000 |
|  |  | Fluency |
| Model 1 |  |  |  |  |  |  |
| Neuroticism |  | -.03 | .155 |  | -.01 | .576 |
| Extraversion |  | .08 | .000 |  | .06 | .002 |
| Openness |  | .08 | .000 |  | -- | -- |
| Agreeableness |  | .02 | .227 |  | .05 | .010 |
| Conscientiousness |  | .03 | .101 |  | .07 | .000 |
| Model 2 |  |  |  |  |  |  |
| Neuroticism |  | -.03 | .179 |  | -.01 | .755 |
| Extraversion |  | .07 | .000 |  | .04 | .012 |
| Agreeableness |  | .02 | .243 |  | .05 | .010 |
| Conscientiousness |  | .02 | .231 |  | .06 | .001 |
|  |  | Speed |
| Model 1 |  |  |  |  |  |  |
| Neuroticism |  | -.03 | .114 |  | .00 | .956 |
| Extraversion |  | .04 | .026 |  | .03 | .202 |
| Openness |  | .07 | .000 |  | -- | -- |
| Agreeableness |  | .00 | .992 |  | .02 | .392 |
| Conscientiousness |  | .05 | .015 |  | .03 | .211 |
| Model 2 |  |  |  |  |  |  |
| Neuroticism |  | -.03 | .110 |  | .00 | .816 |
| Extraversion |  | .04 | .046 |  | .02 | .412 |
| Agreeableness |  | .00 | .981 |  | .02 | .392 |
| Conscientiousness |  | .05 | .022 |  | .02 | .344 |
|  |  | Composite Cognition |
| Model 1 |  |  |  |  |  |  |
| Neuroticism |  | -.04 | .036 |  | -.02 | .348 |
| Extraversion |  | .08 | .000 |  | .08 | .000 |
| Openness |  | .12 | .000 |  | -- | -- |
| Agreeableness |  | .03 | .157 |  | .07 | .000 |
| Conscientiousness |  | .06 | .004 |  | .10 | .000 |
| Model 2 |  |  |  |  |  |  |
| Neuroticism |  | -.04 | .050 |  | -.01 | .569 |
| Extraversion |  | .07 | .000 |  | .07 | .000 |
| Agreeableness |  | .03 | .174 |  | .07 | .001 |
| Conscientiousness |  | .04 | .023 |  | .09 | .000 |

*Note*. Coefficients are standardized beta coefficients from linear regression controlling for sex, childhood social class, and adult educational attainment. Model 1 tested self-reported and mother-rated personality separately. Model 2 tested self-reported and mother-rated personality simultaneously. Across all analyses, traits were entered in separately.