Table S.1. *MAOA* Allele and Genotype Frequencies.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Total Sample** | | **Caucasian** | | **African-American** | |
| **Allele Frequency** | n | % | n | % | n | % |
| 2R | 116 | 2.89% | 3 | 0.19% | 113 | 4.63% |
| 3R | 1693 | 42.24% | 569 | 36.38% | 1121 | 45.98% |
| 3.5R | 32 | 0.80% | 21 | 1.34% | 11 | 0.45% |
| 4R | 2139 | 53.37% | 957 | 61.19% | 1179 | 48.36% |
| 5R | 28 | 0.70% | 14 | 0.90% | 14 | 0.57% |
| **Genotype Frequency** |  |  |  |  |  |  |
| Homozygous Low-Activity (2R, 3R) | 392 | 19.56% | 95 | 12.15% | 297 | 24.36% |
| Heterozygous High-Activity | 1025 | 51.15% | 382 | 48.85% | 640 | 52.50% |
| Homozygous High-Activity (3.5R, 4R, 5R) | 587 | 29.29% | 305 | 39.00% | 282 | 23.13% |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  | Mean/% (SD) | 54%\* | 76%\* | 34%\* | 2.50 (2.11) | 2.44 (2.16) | 2.53 (2.26) | 2.42 (2.18) | 2.17\* (2.18) | 1.51 (1.82) | 2.64\*(2.23) |
| 1. Public Assistance | 19%\* |  | .02 | **.12\*\*** | .05 | .06 | .06 | .03 | **.07\*** | -.04 | .01 |
| 2. *MAOA* Genotype | 88%\* | .06 |  | -.03 | -.01 | -.04 | -.04 | -.06 | -.02 | .04 | .03 |
| 3. Maltreatment | 21%\* | **.12\*\*** | .02 |  | **.24\*\*** | **.23\*\*** | **.22\*\*** | **.17\*\*** | **.24\*\*** | **.09\*\*** | **.07\*** |
| 4. Emotional Reactivity (age 13) | 2.67 (1.91) | **.11\*\*** | .04 | **.30\*\*** |  | **.62\*\*** | **.56\*\*** | **.52\*\*** | **.48\*\*** | **.13\*\*** | **.10\*\*** |
| 5. Emotional Reactivity (age 14) | 2.62 (1.88) | **.18\*\*** | -.01 | **.29\*\*** | **.65\*\*** |  | **.65\*\*** | **.57\*\*** | **.54\*\*** | **.16\*\*** | **.12\*\*** |
| 6. Emotional Reactivity (age 15) | 2.70 (2.04) | **.13\*\*** | .05 | **.27\*\*** | **.60\*\*** | **.63\*\*** |  | **.63\*\*** | **.56\*\*** | **.20\*\*** | **.15\*\*** |
| 7. Emotional Reactivity (age 16) | 2.56 (1.88) | .04 | -.05 | **.24\*\*** | **.58\*\*** | **.59\*\*** | **.67\*\*** |  | **.58\*\*** | **.15\*\*** | **.12\*\*** |
| 8. Emotional Reactivity (age 17) | 2.46\* (1.98) | **.10\*\*** | .01 | **.21\*\*** | **.52\*\*** | **.54\*\*** | **.57\*\*** | **.62\*\*** |  | **.16\*\*** | **.16\*\*** |
| 9. ASPD symptom severity (ages 18-21) | 1.67 (1.98) | .02 | .05 | .07 | **.15\*\*** | **.17\*\*** | **.19\*\*** | **.16\*\*** | **.17\*\*** |  | **.66\*\*** |
| 10. BPD symptom severity (ages 18-21) | 2.39\* (2.21) | **.09\*** | **.08\*** | **.13\*\*** | **.20\*\*** | **.24\*\*** | **.26\*\*** | **.25\*\*** | **.21\*\*** | **.65\*\*** |  |

Table S.2. Means and correlations for all study variables by race.

Note. Means and correlations below the diagonal are specific to Caucasian girls and means and correlations above the diagonal are specific to African-American girls. ASPD=antisocial personality disorder; BPD=borderline personality disorder; *MAOA*=monoamine oxidase-A. Those means with a \* signify means that vary by race. Significant correlations are bolded.

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

Table S.3. Multiple-group mediation models testing monoamine oxidase A (MAOA) genotype differences in the association between childhood maltreatment and personality pathology in early adulthood via emotional reactivity in adolescence.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Overall Model Fit** | | | | **Low-Activity *MAOA*** | | | **High-Activity *MAOA*** | | | **Wald Test** | |
| **ASPD symptom severity** | χ2 | df | RMSEA | CFI | β | SE | *p* | β | SE | *p* | χ2 | *p* |
| **Caucasian** | 75.63\*\* | 33 | 0.06 | 0.98 |  |  |  |  |  |  |  |  |
| A. Maltreatment → ASPD |  |  |  |  | -0.15 | 0.10 | 0.14 | -0.29 | 0.31 | 0.34 | 0.23 | 0.63 |
| B. Maltreatment → Emotional Reactivity | |  |  |  | **0.39** | **0.10** | **0.00** | **0.67** | **0.16** | **0.00** | 1.28 | 0.26 |
| C. Emotional Reactivity → ASPD | |  |  |  | **0.46** | **0.11** | **0.00** | *0.55* | *0.33* | *0.10* | 0.04 | 0.85 |
| INDIRECT (B\*C) |  |  |  |  | **0.79** | **0.29** | **0.01** | 1.81 | 1.52 | 0.23 | -- | -- |
| **African-American** | 142.77\*\* | 33 | 0.07 | 0.96 |  |  |  |  |  |  |  |  |
| A. Maltreatment → ASPD |  |  |  |  | 0.03 | 0.06 | 0.66 | -0.01 | 0.06 | 0.84 | 0.20 | 0.66 |
| B. Maltreatment → Emotional Reactivity | |  |  |  | **0.23** | **0.06** | **0.00** | **0.41** | **0.08** | **0.00** | *3.14* | *0.08* |
| C. Emotional Reactivity → ASPD | |  |  |  | **0.30** | **0.06** | **0.00** | **0.38** | **0.19** | **0.04** | 0.33 | 0.56 |
| INDIRECT (B\*C) |  |  |  |  | **0.25** | **0.08** | **0.00** | **0.26** | **0.10** | **0.00** | -- | -- |
| **BPD symptom severity** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Caucasian** | 78.35\*\* | 33 | 0.06 | 0.98 |  |  |  |  |  |  |  |  |
| A. Maltreatment → BPD |  |  |  |  | -0.13 | 1.01 | 0.19 | -0.12 | 0.17 | 0.47 | 0.00 | 0.96 |
| B. Maltreatment → Emotional Reactivity | |  |  |  | **0.39** | **0.10** | **0.00** | **0.52** | **0.13** | **0.00** | 0.54 | 0.46 |
| C. Emotional Reactivity → BPD |  |  |  |  | **0.55** | **0.10** | **0.00** | **0.51** | **0.20** | **0.01** | 0.06 | 0.82 |
| INDIRECT (B\*C) |  |  |  |  | **0.21** | **0.07** | **0.00** | *0.27* | *0.16* | *0.10* | -- | -- |
| **African-American** | 147.06\*\* | 33 | 0.08 | 0.96 |  |  |  |  |  |  |  |  |
| A. Maltreatment → BPD |  |  |  |  | **0.04** | **0.06** | **0.00** | 0.01 | 0.05 | 0.81 | 0.09 | 0.76 |
| B. Maltreatment → Emotional Reactivity | |  |  |  | **0.23** | **0.06** | **0.00** | **0.36** | **0.08** | **0.00** | 1.60 | 0.21 |
| C. Emotional Reactivity → BPD |  |  |  |  | **0.23** | **0.06** | **0.00** | **0.23** | **0.08** | **0.00** | 0.01 | 0.94 |
| INDIRECT (B\*C) |  |  |  |  | **0.05** | **0.02** | **0.01** | *0.08* | *0.04* | *0.06* | -- | -- |

Note. ASPD=antisocial personality disorder; BPD=borderline personality disorder; *MAOA*=monoamine oxidase-A.

Significant associations are bolded. Trend level associations (*p*<.10) are italicized.

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