Table S.1: Distributions of key variables in the overall sample

|  |  |  |
| --- | --- | --- |
| Characteristic | Overall | % Missing |
| n | 227 |  |
| Age, years, mean(SD) | 11.47 (0.48) | 0 |
| Female biological sex, n(%) | 110 (48.5) | 0 |
| Chronicity of poverty, early childhood, mean(SD) | 0.92 (1.40) | 7.5 |
| Ever poverty, early childhood, n(%) | 80 (38.1) | 7.5 |
| Maternal depression, early childhood, mean(SD) | 23.94 (7.55) | 0 |
| Threat, mean(SD) | 0.01 (0.77) | 0 |
| Deprivation, mean(SD) | 0.01 (0.71) | 0 |
| AB: Attention bias threat, reaction time difference in milliseconds, mean(SD) | -4.91 (35.02) | 5.3 |
| IER: Adaptation to emotional conflict, reaction time difference in milliseconds, mean(SD) | 8.07 (126.39) | 6.6 |
| IER: Stroop - fear, reaction time difference in milliseconds, mean(SD) | -7.40 (88.52) | 6.6 |
| IER: Stroop - happy, reaction time difference in milliseconds, mean(SD) | -5.31 (85.37) | 6.6 |
| ToM: Accuracy on affective trials, mean(SD) | 0.91 (0.10) | 10.6 |
| ToM: Accuracy on cognitive trials, mean(SD) | 0.79 (0.10) | 10.6 |
| FC: SCR to CS+ vs CS-, UNITS, mean(SD) | 0.18 (0.19) | 15.4 |
| PT: Tanner stage, mean(SD) | 2.21 (0.85) | 15 |
| LA: Language ability, t-score, mean(SD) | 60.06 (8.98) | 0 |
| RA: Reasoning ability, t-score, mean(SD) | 55.56 (9.27) | 0 |
| IC: Reaction time (milliseconds) on inhibit trials, mean(SD) | 5.02 (4.17) | 18.9 |
| IC: Reaction time (milliseconds) on switch trials, mean(SD) | 26.64 (8.89) | 18.9 |
| IC: Accuracy on Stroop task, mean(SD) | 0.33 (0.09) | 10.6 |
| RS: Reaction time (milliseconds) on no- vs high-reward trials, mean(SD) | -28.98 (56.85) | 7.5 |
| RS: Total stars, mean(SD) | 59.82 (14.47) | 7.5 |
| Internalizing symptoms, mean(SD) | 0.00 (1.19) | 6.6 |
| Externalizing symptoms, mean(SD) | 0.04 (2.14) | 6.6 |

% Missing out of 227 with baseline data

Table S.2: HIMA results with outcome and mediator models mutually adjusted for threat and deprivation.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Adversity Exposure | Mediator | Adversity-Psychopathology a | Adversity-Mediator a | Mediator-Psychopathology b | BH-corrected  p-value |
| Standardized β (95% CI) | Standardized β (95% CI) | Standardized β (95% CI) |
| Internalizing | Threat | PT: Tanner stage | 0.16(0.03,0.29)\* | 0.02(-0.11,0.15) | 0.19(0.06,0.32)\*\* | 0.8144 |
| Threat | RS: Reaction time on no- vs high-reward trials | 0.16(0.03,0.29)\* | -0.18(-0.32,-0.04)\* | -0.15(-0.27,-0.03)\* | 0.0212 |
| Deprivation | PT: Tanner stage | 0.30(0.16,0.44)\*\*\* | -0.13(-0.27,0.01) | 0.19(0.06,0.32)\*\* | 0.1373 |
| Deprivation | RS: Reaction time on no- vs high-reward trials | 0.30(0.16,0.44)\*\*\* | -0.08(-0.23,0.07) | -0.15(-0.27,-0.03)\* | 0.3115 |
| Externalizing | Threat | PT: Tanner stage | 0.27(0.14,0.40)\*\*\* | 0.02(-0.11,0.15) | 0.20(0.07,0.33)\*\* | 0.8721 |
| Threat | RS: Total stars | 0.27(0.14,0.40)\*\*\* | -0.18(-0.32,-0.04)\* | -0.05(-0.17,0.07) | 0.8721 |
| Deprivation | PT: Tanner stage | 0.21(0.07,0.35)\*\* | -0.13(-0.27,0.01) | 0.20(0.07,0.33)\*\* | 0.1373 |
| Deprivation | RS: Total stars | 0.21(0.07,0.35)\*\* | -0.08(-0.23,0.07) | -0.05(-0.17,0.07) | 0.6590 |
| p-value \*\*\*<0.001, \*\*<0.01, \*<0.05 | | |  |  |  |  |
| a Adjusted for the other adversity exposure, age, biological sex, early life poverty chronicity, and maternal depression | | | | | |  |
| b Adjusted for threat, deprivation, age, biological sex, early life poverty chronicity, and maternal depression | | | | | |  |
| Standardized beta coefficients represent the change in the outcome associated with a 1-SD change in the predicting variable | | | | | |  |
| BH=Benjamini-Hochberg, preserving false discovery rate at 0.05 | | | |  |  |  |

Table S.3: HIMA results in the overall sample and by sex.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Adversity Exposure | Mediator | Sample | Adversity-Psychopathology a | Adversity- Mediator a | Mediator-Psychopathology b |
|  | Standardized β (95% CI) | Standardized β (95% CI) | Standardized β (95% CI) |
| Internalizing | Threat | Tanner Stage | All | 0.22(0.09,0.35)\*\* | -0.01(-0.13,0.11) | 0.19(0.06,0.32)\*\* |
|  | Boys | 0.17(0.00,0.34)\* | 0.11(-0.05,0.27) | 0.15(-0.04,0.34) |
|  | Girls | 0.29(0.08,0.5)\*\* | -0.17(-0.37,0.03) | 0.28(0.09,0.47)\*\* |
| Threat | Reward Sensitivity (RT contrast) | All | 0.22(0.09,0.35)\*\* | -0.20(-0.33,-0.07)\*\* | -0.15(-0.27,-0.03)\* |
|  | Boys | 0.17(0.00,0.34)\* | -0.19(-0.35,-0.03)\* | -0.11(-0.29,0.07) |
|  | Girls | 0.29(0.08,0.50)\*\* | -0.20(-0.42,0.02) | -0.17(-0.34,0.00) |
| Deprivation | Tanner Stage | All | 0.34(0.2,0.48)\*\*\* | -0.12(-0.25,0.01) | 0.19(0.06,0.32)\*\* |
|  | Boys | 0.33(0.16,0.50)\*\*\* | -0.06(-0.22,0.10) | 0.15(-0.04,0.34) |
|  | Girls | 0.32(0.08,0.56)\*\* | -0.20(-0.42,0.02) | 0.28(0.09,0.47)\*\* |
| Deprivation | Reward Sensitivity (RT contrast) | All | 0.34(0.2,0.48)\*\*\* | -0.12(-0.26,0.02) | -0.15(-0.27,-0.03)\* |
|  | Boys | 0.33(0.16,0.50)\*\*\* | -0.07(-0.24,0.1) | -0.11(-0.29,0.07) |
|  | Girls | 0.32(0.08,0.56)\*\* | -0.21(-0.46,0.04) | -0.17(-0.34,0.00) |
| Externalizing | Threat | Tanner Stage | All | 0.31(0.18,0.44)\*\*\* | -0.01(-0.13,0.11) | 0.21(0.08,0.34)\*\* |
|  | Boys | 0.24(0.07,0.41)\*\* | 0.11(-0.05,0.27) | 0.23(0.03,0.43)\* |
|  | Girls | 0.41(0.23,0.59)\*\*\* | -0.17(-0.37,0.03) | 0.25(0.08,0.42)\*\* |
| Threat | Reward Sensitivity (Total stars) | All | 0.31(0.18,0.44)\*\*\* | -0.02(-0.15,0.11) | -0.19(-0.31,-0.07)\*\* |
|  | Boys | 0.24(0.07,0.41)\*\* | -0.04(-0.23,0.15) | -0.18(-0.35,-0.01)\* |
|  | Girls | 0.41(0.23,0.59)\*\*\* | 0.00(-0.19,0.19) | -0.22(-0.39,-0.05)\* |
| Deprivation | Tanner Stage | All | 0.28(0.14,0.42)\*\*\* | -0.12(-0.25,0.01) | 0.21(0.08,0.34)\*\* |
|  | Boys | 0.27(0.09,0.45)\*\* | -0.06(-0.22,0.1) | 0.23(0.03,0.43)\* |
|  | Girls | 0.28(0.06,0.50)\* | -0.2(-0.42,0.02) | 0.25(0.08,0.42)\*\* |
| Deprivation | Reward Sensitivity (Total stars) | All | 0.28(0.14,0.42)\*\*\* | -0.04(-0.19,0.11) | -0.19(-0.31,-0.07)\*\* |
|  | Boys | 0.27(0.09,0.45)\*\* | -0.12(-0.31,0.07) | -0.18(-0.35,-0.01)\* |
|  | Girls | 0.28(0.06,0.50)\* | 0.07(-0.15,0.29) | -0.22(-0.39,-0.05)\* |
| p-value \*\*\*<0.001, \*\*<0.01, \*<0.05 | | |  |  |  |  |
| a Adjusted for age, biological sex, early life poverty chronicity, and maternal depression | | | | | |  |
| b Adjusted for threat, deprivation, age, biological sex, early life poverty chronicity, and maternal depression | | | | | | |
| Standardized beta coefficients represent the change in the outcome associated with a 1-SD change in the predicting variable | | | | | | |

Table S.4: Distributions of deprivation and threat experiences by biological sex.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Male | Female | p-value |
| N(%) | 117 (51.5) | 110 (48.5) |  |
| Overall deprivation: mean(sd) | 0.12 (0.73) | -0.11 (0.67) | 0.014 |
| **Cognitive deprivation** - reverse-coded count of cognitive stimulation items on the HOME-SF: mean(sd) | 2.64 (1.86) | 2.43 (1.67) | 0.375 |
| **Emotional deprivation** - standardized composite of the CECA and MNBS emotional neglect measures: mean(sd) | 0.18 (0.88) | -0.18 (0.80) | 0.002 |
| **Physical deprivation** - standardized composite of food insecurity and physical neglect subscales of MNBS and CTQ: mean(sd) | 2.62 (0.93) | 2.47 (0.86) | 0.200 |
| Overall threat: mean(sd) | 0.09 (0.79) | -0.08 (0.74) | 0.086 |
| **Count of distinct types** of violence experienced (physical, sexual, domestic violence, witnessing violent crime, victim of violent crime) : mean(sd) | 0.33 (0.84) | 0.22 (0.61) | 0.242 |
| **Summed frequency** ratings of witnessed and experienced violence on VEX-R: mean(sd) | 5.56 (5.92) | 3.97 (4.23) | 0.026 |
| Sum of physical and sexual abuse **severity** on CTQ: mean(sd) | 10.59 (1.36) | 10.56 (2.76) | 0.914 |