**Supplemental Materials**

*Table 1. Bivariate correlations and descriptive statistics of study variables*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1. Wave 1 ΔRewP | \_\_\_ |  |  |  |  |  |  |  |
| 2. Wave 2 ΔRewP | .34\*\* | \_\_\_ |  |  |  |  |  |  |
| 3. Wave 3 ΔRewP | .14 | .24\*\* | \_\_\_ |  |  |  |  |  |
| 4. Wave 1 Age | .20\*\* | .04 | -.19\*\* | \_\_\_ |  |  |  |  |
| 5. Wave 2 Age | .19\*\* | .04 | -.20\*\* | .98\*\* | \_\_\_ |  |  |  |
| 6. Wave 3 Age | .19\*\* | -.03 | -.18\* | .93\*\* | .92\*\* | \_\_\_ |  |  |
| 7. ALEQ Total | .07 | -.04 | .21 | .35\*\* | .39\*\* | .32\*\* | \_\_\_ |  |
| 8. CDI Anhedonia | .10 | .01 | .02 | .17\*\* | .20\*\* | .17\* | .58\*\* | \_\_\_ |
| *M* | 3.93 | 4.61 | 4.44 | 12.45 | 14.38 | 17.85 | 33.53 | 2.26 |
| *SD* | 6.39 | 5.78 | 5.48 | 1.80 | 1.87 | 1.96 | 23.82 | 2.37 |
| Min | -16.34 | -17.88 | -11.81 | 8.01 | 9.89 | 13.25 | 0 | 0 |
| Max | 21.24 | 22.46 | 34.08 | 15.05 | 20.90 | 22.77 | 131 | 11 |
| N | 313 | 257 | 189 | 313 | 257 | 189 | 246 | 315 |

*Note.* ALEQ = Adolescent Life Events Questionnaires; Children’s Depression Inventory; *M =* mean; *SD* = standard deviation; RewP = reward positivity. \**p* < .05 \*\**p* <.01.

*Table 2. Conditional multilevel growth models of CDI total predicting the ΔRewP across adolescence.*

|  |  |  |
| --- | --- | --- |
|  | Effect Estimate (SE) | Variance of Random Effect |
| Intercept | **4.23(0.3)** | **13.75** |
| Time (Slope) | 0.07(0.1) | **0.14** |
| Age at Wave 1 | -0.02(0.2) | -- |
| CDI Total | 0.06(0.1) | -- |
| CDI Total x Time  | -0.02(0.0) | -- |

*Note*. Time is coded as years since age 12 and significant effects arebolded**.** CDI = Children’s Depression Inventory; RewP = reward positivity; SE = standard error.

*Table 3. Conditional multilevel growth models of CDI anhedonia and ALEQ total predicting the ΔRewP across adolescence.*

|  |  |  |
| --- | --- | --- |
|  | Effect Estimate (SE) | Variance of Random Effect |
| Intercept | **4.29(0.4)** | **12.79** |
| Time (Slope) | 0.13(0.1) | **0.16** |
| Age at Wave 1 | -0.05(0.2) | -- |
| CDI Anhedonia | 0.09(0.2) | -- |
| ALEQ Total | 0.01(0.0) | -- |
| CDI Anhedonia x Time  | -0.06(0.0) | -- |
| ALEQ Total x Time | -0.00(0.0)  | -- |

*Note.* Time is coded as years since age 12 and significant effects arebolded. ALEQ = Adolescent Life Events Questionnaire; CDI = Children’s Depression Inventory; RewP = reward positivity; SE = standard error.

*Table 4. Conditional multilevel growth models of anhedonia and sum of other CDI subscales predicting the ΔRewP across adolescence.*

|  |  |
| --- | --- |
|  | Depression |
|  | Effect Estimate (SE) | Variance of Random Effect |
| Intercept | **4.21(0.3)** | **13.66** |
| Time (Slope) | 0.07(0.1) | **0.14** |
| Age at Wave 1 | 0.01(0.2) | -- |
| Anhedonia | 0.38(0.2) | -- |
| CDI subscales | -0.09(0.1) | -- |
| Anhedonia x Time  | **-0.09(0.0)+** | -- |
| CDI subscales x Time | 0.01(0.0)  | -- |

Note: SE = standard error; CDI subscales = all CDI subscales except the anhedonia subscale; Time is coded as years since age 12; Significant effects are **bolded; +** indicates a trend toward significance(*p* = .0598).

*Table 5. Conditional multilevel growth models of CDI anhedonia predicting the brain activity following* ***gain*** *across adolescence.*

|  |  |  |
| --- | --- | --- |
|  | Effect Estimate (SE) | Variance of Random Effect |
| Intercept | **14.07(0.5)** | **44.40** |
| Time (Slope) | **0.60(0.1)** | **0.43** |
| Age at Wave 1 | **0.73(0.3)** | -- |
| CDI Anhedonia | -0.15(0.2) | -- |
| CDI Anhedonia x Time  | -0.05(0.0) | -- |

*Note.* Time is coded as years since age 12 and significant effects arebolded.; CDI = Children’s Depression Inventory; SE = standard error.

*Table 6. Conditional multilevel growth models of CDI anhedonia predicting the brain activity following* ***loss*** *across adolescence.*

|  |  |  |
| --- | --- | --- |
|  | Effect Estimate (SE) | Variance of Random Effect |
| Intercept | **9.80(0.4)** | **37.71** |
| Time (Slope) | **0.55(0.1)** | **0.26** |
| Age at Wave 1 | **0.59(0.2)** | -- |
| CDI Anhedonia | -0.35(0.2) | -- |
| CDI Anhedonia x Time  | 0.02(0.0) | -- |

*Note.* Time is coded as years since age 12 and significant effects arebolded.; CDI = Children’s Depression Inventory; SE = standard error.

*Table 7. Conditional multilevel growth models of ALEQ predicting the brain activity following* ***gain*** *across adolescence.*

|  |  |  |
| --- | --- | --- |
|  | Effect Estimate (SE) | Variance of Random Effect |
| Intercept | **13.84(0.5)** | **42.12** |
| Time (Slope) | **0.66(0.1)** | **0.19** |
| Age at Wave 1 | **0.73(0.3)** | -- |
| ALEQ total | -0.03(0.0) | -- |
| ALEQ total x Time  | 0.00(0.0) | -- |

*Note.* Time is coded as years since age 12 and significant effects arebolded.; ALEQ = Adolescent Life Events Questionnaire; SE = standard error.

*Table 8. Conditional multilevel growth models of ALEQ predicting the brain activity following* ***loss*** *across adolescence.*

|  |  |  |
| --- | --- | --- |
|  | Effect Estimate (SE) | Variance of Random Effect |
| Intercept | **9.57(0.5)** | **40.70** |
| Time (Slope) | **0.55(0.1)** | **0.29** |
| Age at Wave 1 | 0.54(0.3) | -- |
| ALEQ total | -0.04(0.0) | -- |
| ALEQ total x Time  | 0.00(0.0) | -- |

*Note.* Time is coded as years since age 12 and significant effects arebolded.; ALEQ = Adolescent Life Events Questionnaire; SE = standard error.

*Table 9. Split-half reliability of ERP response to feedback*

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Time 1** | **Time 2** | **Time 3** |
| **Gain** | .87 | .91  | .92 |
| **Loss** | .84 | .90  | .94 |
| **ΔRewP** | .45 | .53 | .60 |

*Note.*The Spearman-Brown prophecy formula was applied to calculate the split-half reliability for the ERP response to gain and loss feedback. The Furr and Bacharach formula was applied to calculate the reliability of ΔRewP. RewP = reward positivity.