**Supplementary Materials**

**Quality Control**

From the 4524 participants who completed baseline assessment, 3847 survived quality control procedures. 2 were excluded for missing BMI and 12 were excluded for BMIz below the extreme cutoff defined by the CDC (%BMIp95 < -4). Additionally, 31 excluded for invalid screen time data (> 18 hours per day) and 66 were excluded for choosing “I don’t know” on the cash choice task. 158 were excluded for one or more missing values for the categorical demographic variables: single adult home, ethnicity, race, sex, and parents’ marital status. Of the remaining 4255, 408 were excluded for missing > 5% of the variables. The following variables had missing data imputed: income (7.2%), WISC-V matrix reasoning (4.9%), FES (parent report) (1.4%), NIH TB fluid composite (.7%), NIH Toolbox crystalized composite (.6%), Neighborhood Safety/Crime Survey (parent report) (.5%), UPPSP premeditation (.2%), NIH TB list sort (.2%), cash choice task (.1%), FES (child report) (.1%), parent education (.1%), NIH TB pattern (.1%), exercise (.1%), screen time (.03%), NIH TB flanker (.03%), NIH TB picture sequence (.03%), NIH TB reading (.03%).

The final sample was compared to the excluded sample to assess for observed differences (Table S1). In t-tests comparing continuous variables, the final sample was significantly higher %BMIp95 (*p* = .04) and lower parent education (*p* < .001) and income (*p* < .001), and not different on age (*p* = .07). In Pearson Chi-Square tests were used to compare on binary sociodemographic variables, the final sample had higher numbers of subjects who were White (*p* < .001), non-Hispanic (p < .001), and had married parents (*p* = .005), but not significantly different by sex (*p* = .09) or single adult home (*p* = .62). On the whole the missing data appears to be from a sample that is comprised of higher minority and lower socioeconomic status participants.

Table S1.Demographics of Final and Excluded Samples

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Final Sample** |  | **Excluded Sample** |
| **Characteristic** | N / M | % | N / M | %\* |
| Total N | 3847 |  | 677 |  |
| Female | 1806 | 46.9% | 335 | 49.6% |
| Age (months) | 119.9 |  | 120.5 |  |
|  | (SD: 7.18) |  |  |  |
| White race | 2773 | 72.1% | 418 | 61.7% |
| Hispanic ethnicity | 727 | 18.9% | 162 | 26.1% |
| Single adult home | 659 | 17.1% | 114 | 17.9% |
| Marital status | 2766 | 71.9% | 439 | 64.8% |
| Parental education (years) | 17.0 (IQR: 15-19) |  | 16.2(IQR: 15-18) |  |
| Income |  |  |  |  |
| <$5,000 | 92 | 2.4% | 26 | 4.4% |
| $5,000-$11,999 | 111 | 2.9% | 30 | 5.0% |
| $12,000-15,999 | 62 | 1.6% | 21 | 3.5% |
| $16,000-24,999 | 167 | 4.3% | 20 | 3.4% |
| $25,000-34,999 | 208 | 5.4% | 40 | 6.7% |
| $35,000-49,999 | 310 | 8.1% | 56 | 9.4% |
| $50,000-74,999 | 570 | 14.8% | 79 | 13.3% |
| $75,000-99,999 | 609 | 15.8% | 87 | 14.6% |
| $100,000-199,999 | 1229 | 31.9% | 159 | 26.7% |
| >$200,000 | 489 | 12.7% | 78 | 13.1% |
| %BMIp95 | 82.8 (SD: 17.5) |  | 84.4 (SD: 18.3) |  |

N = number, M = mean, IQR = interquartile range, SD = standard deviation; \* refers to the valid percent (variable/total N excluding missing values for each item). Missing values were as follows: Sex N = 1, Hispanic ethnicity N = 56, single adult home N = 41, marital status N = 17, parental education N = 1, income = 81, BMI= 14.

Table S2.Demographics of Training (70%) and Test (30%) Samples

|  |  |  |
| --- | --- | --- |
|  | **Training Sample** | **Test Sample** |
| **Characteristic** | N / M | % | N / M | % |
| Total N | 2724 |  | 1123 |  |
| Female | 1271 | 46.7% | 535 | 47.6% |
| Age (months)1 | 120.1 |  | 119.5 |  |
|  | (SD: 7.2) |  | (SD: 7.2) |  |
| Race |  |  |  |  |
| White | 1999 | 73.4% | 774 | 68.9% |
| Black | 249 | 20.0% | 135 | 24.2% |
| Asian American | 67 | 4.6% | 29 | 4.7% |
| American Indian | 12 | 0.4% | 4 | 0.3% |
| Pacific Islander | 2 | 0.1% | 3 | 0.2% |
| Mixed/other | 395 | 11.8% | 178 | 12.7% |
| Hispanic ethnicity | 518 | 19.0% | 209 | 18.6% |
| Single adult home | 464 | 17.0% | 195 | 17.4% |
| Married | 1961 | 72.0% | 805 | 71.7% |
| Parental education (years) | 17.0(IQR: 15-19) |  | 16.8 (IQR: 15-19) |  |
| Income |  |  |  |  |
| <$5,000 | 58 | 2.0% | 34 | 3.0% |
| $5,000-$11,999 | 77 | 2.8% | 34 | 3.0% |
| $12,000-15,999 | 41 | 1.7% | 21 | 1.9% |
| $16,000-24,999 | 118 | 4.6% | 49 | 4.4% |
| $25,000-34,999 | 149 | 5.6% | 59 | 5.3% |
| $35,000-49,999 | 218 | 8.0% | 92 | 8.2% |
| $50,000-74,999 | 398 | 14.6% | 172 | 15.3% |
| $75,000-99,999 | 436 | 15.7% | 173 | 15.4% |
| $100,000-199,999 | 877 | 32.4% | 352 | 31.3% |
| >$200,000 | 352 | 12.6% | 137 | 12.2% |
| %BMIp95 | 82.7 (SD: 17.1) |  | 83.0 (SD: 18.5) |  |

N = number, M = mean, IQR = interquartile range, SD = standard deviation; 1Age ranged 107-132 months in all groups.

**Fig S1.**

Linear regression in the full dataset (N = 3847). Variables are ordered by level of significance. Includes *p*-values in parentheses and standard error bars for each coefficient. Bars are all oriented in the positive direction for ease of comparison, but the sign of the coefficient is noted and indicated by the bar shading (lighter = negative; darker = positive). Bolding indicates significance at *q* < .05. BIS/BAS = Behavioral Avoidance/Inhibition Scales; CBCL = Child Behavior Checklist; FES = Family Environment Scale; NIH TB = NIH Toolbox; NSCS = Neighborhood Safety/Crime Survey; UPPSP = Urgency, Premeditation, Perseverance, Sensation Seeking, Positive Urgency, Impulsive Behavior Scale for Children-Short Form; WISC-V = Wechsler Intelligence Scale for Children-V.

**Figure S1.** Linear Regression in the Full Dataset (*N* = 3847)

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