

APPENDIX: ONLINE SUPPLEMENT

Table 1. Outcomes Comprising Index Items

Scale Items	Original Anchors	Recoded Anchors	Mean (SD)
<i>Adolescents' depressive symptoms ($\alpha = 0.76$)</i>			
Thinking about the past four weeks, do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with this?	1 = strongly agree 2 = somewhat agree 3 = somewhat disagree 4 = strongly disagree	3 = 'strongly agree' 2 = 'somewhat agree' 1 = 'somewhat disagree' 0 = 'strongly disagree'	1.15 (1.07)
I feel I cannot shake off the blues, even with help from my family and my friends.			0.65 (0.90)
I feel sad.			0.40 (0.64)
I feel happy ^a .			0.24 (0.63)
I feel life is not worth living.			0.51 (0.86)
I feel depressed.			
<i>Adolescents' anxiety ($\alpha = 0.76$)</i>			
Thinking about the past four weeks, do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with this?	1 = strongly agree 2 = somewhat agree 3 = somewhat disagree 4 = strongly disagree	3 = 'strongly agree' 2 = 'somewhat agree' 1 = 'somewhat disagree' 0 = 'strongly disagree'	0.70 (0.94)
I have spells of terror or panic.			1.18 (0.98)
I feel tense or keyed up.			0.62 (0.94)
I get suddenly scared for no reason.			0.74 (0.94)
I feel nervous or shaky inside.			0.74 (0.99)
I feel fearful.			0.89 (1.02)
I feel so restless I can't sit still.			

Note. ^aValues were reverse coded. SD = standard deviation. Means and standard deviations are unweighted.

Table 2. Items Comprising ACE Measures

Indicator	Items/Questions	Original Anchors	Exposure Definition
Physical abuse	<u>How many times have you done this to your child in the past year?</u>	1 = once	Midpoint of each category of each item was created and summed. Defined when the sum was at top 10 th percentile or above.
	1. Spanked him/her on the bottom with your bare hand	2 = twice	
	2. Hit him/her on the bottom with something like a belt, hairbrush, a stick or some other hard object	3 = 3–5 times	
	3. Slapped him/her on the hand, arm or leg	4 = 6–10 times	
	4. Pinched him/her	5 = 11–20 times	
Psychological abuse	5. Shook him/her	6 = more than 20 times	Defined when the sum was at top 10 th percentile or above.
	1. Shouted, yelled, or screamed at him/her	7 = has never happened	
	2. Threatened to spank or hit him/her but did not actually do it	8 = has not happened in the past year, but it happened before	
	3. Swore or cursed at him/her		
	4. Called him/her dumb or lazy or some other name like that		
Neglect	5. Said you would send him/her away or kick him/her out of the house		Defined when the sum was at top 10 th percentile or above.
	1. Had to leave your child home alone, even when you thought some adult should be with him/her		
	2. Were so caught up with your own problems that you were not able to show or tell your child that you loved him/her		
	3. Were not able to make sure your child got the food he/she needed		
	4. Were not able to make sure your child got to a doctor or hospital when he/she needed it		
Parental separation or divorce	5. Were so drunk or high that you had a problem taking care of your child		Defined when a mother did not report ‘married or cohabiting, or living together’
	What is your relationship with the child’s biological father now?	1 = Married	
		2 = Separated	
		3 = Divorced	
		4 = Cohabiting, or living together	
		5 = Romantically involved but living apart	
		6 = Just friends	
	7 = Not in any kind of relationship		

Domestic violence	Have you been seriously hurt in a fight with father/current partner in the last four years / since last interview? Did father/current partner hurt you in front of the child?	0 = No 1 = Yes	Defined when a mother indicated 'yes' to any question.
Parental depression (liberal version) ^a	<u>Screening questions:</u> At least a <i>two-week period</i> for at least half the day and for most days of the week, in the past year: either "felt sad, blue or depressed" (i.e., dysphoria) or "loss of interest in hobbies or work" (i.e., anhedonia) <u>Additional symptoms:</u> 1. Had lower energy than normal 2. Experienced a weight change +/- 10 pounds 3. Had trouble falling asleep 4. Had sleep or concentration problems 5. Felt down on yourself 6. Had thoughts of death	0 = No 1 = Yes	Defined when a parent endorsed either dysphoria or anhedonia and at least 3 additional symptoms. Endorsement by either parent was coded as an exposure (FFCWS constructed variable).
Parental substance use ^b	<u>Problem drinking:</u> In the past twelve months, how often did you have four or more drinks in one day?	1 = Every day or almost every day 2 = A few times a week 3 = A few times a month 4 = About once a month 5 = Less than once a month	Defined when either parent endorsed <i>problem drinking</i> (responses of 1 to 3 on the problem drinking item) or any <i>street drug use or prescription medication misuse</i> .
		Recoded responses '1-3' as <i>problem drinking</i> .	
	<u>Street drugs use or misuse of prescription medications:</u> The next questions are about your use of drugs on your own. By "on your own," we mean either without a doctor's prescription, in larger amounts than prescribed, or for a longer period than prescribed. With this definition in mind, did you use any of these drugs on your own during the past twelve months? During the past twelve months did you use... 1. Sedatives, including either barbiturates or sleeping pills on your own?	0 = No 1 = Yes	Endorsement of any item was coded as parental drug use.

2. Tranquilizers or "nerve pills" on your own?
3. Amphetamines or other stimulants on your own?
4. Analgesics or other prescription painkillers on you own? (NOTE: This does not include normal use of aspirin, Tylenol without codeine)
5. Inhalants that you sniff or breathe to get high or to feel good?
6. Marijuana or hashish?
7. Cocaine or crack or free base?
8. LSD (lysergic acid diethylamide) or other hallucinogens?
9. Heroin?

Economic hardship	Official poverty thresholds estimated by the U.S. Census Bureau (FFCWS constructed variable).	0 = 0-49% 1 = 50-99% 2 = 100-199% 3 = 200-299% 4 = 300% +	Defined when responses were '0', '1' or '2'.
Maternal low education	Mother's education at child's age 9	1 = Less than high school 2 = High school or equivalent 3 = some college or technical training 4 = college or graduate degree	Low education defined as when a mother has less than high school or completed high school or equivalent training.
Paternal incarceration	Mother's report of the child's biological father has spent time in jail since year 9 follow-up wave (FFCWS constructed variable).	0 = No 1 = Yes	

^a FFCWS provides two versions of scorings (liberal vs conservative) for classifying parents as having a probable case of major depression (MD). The liberal scoring requires the respondent report two-week depressive symptoms over at least half the day and includes the first stem question in the MD score, while the conservative one requires symptoms be present most of the day and omits the first stem question when calculating the MD score (BCRCW, 2018, p.41-p.43). We run sensitivity test using the conservative scale and found results were almost identical (results are available upon requested). Bendheim-Thoman Center for Research on Child Wellbeing [BCRCW]. (2018). *User's guide for the Fragile Families and Child Wellbeing Study Public Data, Year 9*. Princeton: Office of Population Research, Princeton University. https://fragilefamilies.princeton.edu/sites/fragilefamilies/files/year_9_guide.pdf.

^b There may be concerns that the drug use items include marijuana, a comparatively less risky drug that is legal in some states. Thus, we conducted alternate analysis that coded those who used only marijuana and no other drug and had no problem drinking as 0 for substance use. We found no substantive differences in the results (results are available upon request).

Table 3. Weighted Descriptive Statistics for the Full Analytic Sample and by Race/Ethnicity

Variables	Full Sample N=2849 ^a	NH White N=630 ^a	NH Black N=1478 ^a	Hispanic N=741 ^a	<i>p</i>
Adolescent depressive symptoms	3.83 (2.69) [0 – 14]	3.58 (2.58) [0 – 13]	4.39 (2.88) [0 – 14]	3.70 (2.59) [0 – 14]	<.001
Adolescent anxiety	4.51 (3.86) [0 – 18]	4.17 (3.82) [0 – 18]	5.04 (4.16) [0 – 18]	4.53 (3.61) [0 – 18]	<.001
<i>ACEs</i>					
Parental separation or divorce	49.5%	37.7%	74.0%	44.8%	<.001
Economic hardship	54.6%	31.6%	77.9%	64.3%	<.001
Maternal low education	39.5%	20.8%	40.7%	61.4%	<.001
Physical abuse	20.9%	17.7%	34.6%	14.0%	<.001
Psychological abuse	18.2%	21.5%	22.0%	11.2%	<.001
Parental depression	16.8%	18.0%	17.3%	14.9%	<.001
Neglect	8.2%	6.1%	13.0%	7.1%	<.001
Domestic violence	5.9%	4.5%	4.4%	8.9%	<.001
Parental substance use	24.9%	25.1%	26.8%	23.0%	<.001
Paternal incarceration	32.3%	17.7%	51.5%	35.1%	<.001
ACE count	2.71 (1.87)	2.01 (1.75)	3.62 (1.74)	2.85 (1.77)	<.001
0	14.2%	21.8%	3.4%	13.3%	
1	15.6%	25.0%	8.1%	10.1%	
2	17.2%	19.6%	12.2%	18.2%	
3	19.8%	15.4%	24.0%	21.8%	
4	15.5%	7.4%	25.6%	17.5%	
5	10.9%	5.9%	13.9%	14.6%	
6+	6.8%	4.8%	12.8%	4.5%	
<i>Mother's Characteristics</i>					
Mother's age (baseline)	27.16 (6.17) [15–43]	28.89 (5.67) [15–43]	24.95 (6.39) [15–43]	26.77 (5.96) [15–43]	<.001
Number of children under 18	2.61 (1.11) [1–8]	2.44 (0.87) [1–7]	2.77 (1.27) [1–8]	2.70 (1.20) [1–7]	<.001
<i>Child Characteristics</i>					
Sex					<.001
Female	43.5%	45.5%	42.0%	42.4%	
Male	56.5%	54.5%	58.0%	57.6%	

Note. ^a Unweighted N. Table reports weighted percentages or means (standard deviations) and [range]; *p* values are based on one-way ANOVA for continuous variables and chi-square tests for binary and categorical variables.

Table 4. Odds Ratios for Covariates by Race/Ethnicity and ACE Class Membership

Race/ Ethnicity	ACE Class	Covariates		
		Odds Ratio [95% Confidence Interval]		
		Mother's age	Number of children	Adolescent sex: female
Non-Hispanic White	Low Adversity	REF		
	High Global Adversity	0.81 [0.74,0.89]	1.14 [0.77,1.66]	1.05 [0.47,2.36]
	High Socioeconomic Adversity & Paternal Incarceration	0.78 [0.73,0.84]	1.13 [0.88,1.45]	1.30 [0.78,2.17]
	Parental Abuse	0.96 [0.90,1.03]	1.02 [0.71,1.47]	0.92 [0.40,2.12]
Non-Hispanic Black	Low Adversity	REF		
	High Global Adversity	0.85 [0.81,0.89]	1.21 [1.01,1.44]	0.69 [0.43,1.11]
	High Socioeconomic Adversity & Paternal Incarceration	0.88 [0.85,0.91]	1.33 [1.15,1.54]	1.22 [0.82,1.80]
Hispanic	Low Adversity	REF		
	High Global Adversity	0.60 [0.31,1.13]	0.90 [0.85,0.96]	1.64 [1.24,2.18]
	High Socioeconomic Adversity & Paternal Incarceration	1.54 [1.20,1.99]	0.90 [0.85,0.95]	1.54 [1.20,1.99]
	High Socioeconomic Adversity	0.67 [0.36,1.22]	1.00 [0.95,1.05]	1.54 [1.19,2.01]

Note. Boldface indicates significant at $p < .05$. Low Adversity is the reference class for all three racial/ethnic groups.

Table 5. Model-Adjusted Mean Depressive Symptom Scores and Differences in Mean Depressive Symptom Scores at age 15 by Race/Ethnicity and ACE Class Membership

Class membership	Depression <i>M (SE)</i>	Difference in Mean Compared to Reference Class				
		HGA <i>M (SE)</i>	HSA&PI <i>M (SE)</i>	LA <i>M (SE)</i>	Parental Abuse <i>M (SE)</i>	HSA <i>M (SE)</i>
<i>Non-Hispanic White</i>						
HGA	3.45 (.77)	REF	0.85 (.52)	-0.23 (.49)	0.86 (.72)	NA
HSA&PI	4.30 (.59)	-0.85 (.52)	REF	-1.08** (.34)	0.01 (.58)	NA
LA	3.22 (.75)	0.23 (.49)	1.08** (.34)	REF	1.09* (.55)	NA
Parental Abuse	4.31 (.87)	-0.86 (.72)	-0.01 (.58)	-1.09* (.55)	REF	NA
<i>Non-Hispanic Black</i>						
HGA	4.01 (.42)	REF	-0.19 (.24)	-0.78* (.31)	NA	NA
HSA&PI	3.82 (.40)	0.19 (.24)	REF	-0.59* (.26)	NA	NA
LA	3.23 (.51)	0.78* (.31)	0.59* (.26)	REF	NA	NA
<i>Hispanic</i>						
HGA	3.17 (.74)	REF	0.28 (.38)	-0.25 (.43)	NA	-0.55 (.44)
HSA&PI	3.44 (.76)	-0.28 (.38)	REF	-0.53 (.40)	NA	-0.82^ (.43)
LA	2.92 (.75)	0.25 (.43)	0.53 (.40)	REF	NA	-0.30 (.41)
HSA	2.62 (.78)	0.55 (.44)	0.82^ (.43)	0.30 (.41)	NA	REF

Note. Reference groups are shown in the first column. HGA=High Global Adversity, HSA&PI=High Socioeconomic Adversity and Paternal Incarceration, LA=Low Adversity, HSA=High Socioeconomic Adversity.

Adjusted means and mean differences account for mother's age, number of children under 18 in the household, and adolescent's sex. Bolded items are significant at ** $p < .01$, * $p < .05$, ^ $p = .10$

Table 6. Model-Adjusted Mean Anxiety Scores and Differences in Mean Anxiety Score at age 15 by Race/Ethnicity and ACE Class Membership.

Class membership	Anxiety <i>M (SE)</i>	Difference in Mean Compared to Reference Class				
		HGA <i>M (SE)</i>	HSA&PI <i>M (SE)</i>	LA <i>M (SE)</i>	Parental Abuse <i>M (SE)</i>	HSA <i>M (SE)</i>
<i>Non-Hispanic White</i>						
HGA	3.12 (1.08)	REF	2.14** (.68)	0.90 (.65)	2.74** (.96)	NA
HSA&PI	5.25 (.88)	-2.14** (.68)	REF	-1.20* (.52)	0.60 (.82)	NA
LA	4.06 (1.13)	-0.90 (.65)	1.20* (.52)	REF	1.80* (.80)	NA
Parental Abuse	5.85 (1.23)	-2.74** (.96)	-0.60 (.82)	-1.80* (.80)	REF	NA
<i>Non-Hispanic Black</i>						
HGA	4.27 (.60)	REF	-0.21 (.36)	-1.11* (.46)	NA	NA
HSA&PI	4.06 (.57)	0.21 (.36)	REF	-0.90* (.37)	NA	NA
LA	3.16 (.72)	1.11* (.46)	0.90* (.37)	REF	NA	NA
<i>Hispanic</i>						
HGA	4.75 (.88)	REF	-0.87 (.56)	-0.68 (.63)	NA	-1.62* (.64)
HSA&PI	3.87 (.75)	0.87 (.56)	REF	0.19 (.55)	NA	-0.75 (.60)
LA	4.07 (.94)	0.68 (.63)	-0.19 (.55)	REF	NA	-0.94 (.56)
HSA	3.13 (.1.01)	1.62* (.64)	0.75 (.60)	0.94 (.56)	NA	REF

Note. Reference groups are shown in the first column. HGA=High Global Adversity, HSA&PI=High Socioeconomic Adversity and Paternal Incarceration, LA=Low Adversity, HSA=High Socioeconomic Adversity.

Adjusted means and mean differences account for mother's age, number of children under 18 in the household, and adolescent's sex.

Bolded items are significant at ** $p < .01$, * $p < .05$.