

Supplementary Materials 1. Supporting Families Programme Eligibility Criteria (“On Family List” Classification)

- 1.1: An adult or child who has committed a proven offence in the previous 12 months
- 1.2: An adult or child who has received an anti-social behaviour intervention in the previous 12 months
- 1.3: An individual in the household is known to the Anti-Social Behaviour Team for incidents of anti-social behaviour but has not received a formal intervention

- 2.1: A child whose school attendance is <90% across the last 3 terms excluding authorised absences
- 2.2: A child with at least 3 fixed term exclusions in the last 3 terms
- 2.3: A child who has been permanently excluded in the last 3 school terms
- 2.4: A child who is in an alternative education provision to improve their behaviour (not SEN pupils)
- 2.5: A child who is known to the Education Welfare Service as a ‘Child Not In School’ (CNIS)
- 2.6: A child identified as having a score below threshold in communication skills in the 2-2.5-year-old health check or Primary School assessment (school readiness).

- 3.1: A child with a ‘Common Assessment Framework’ or ‘Early Help Plan’ in the previous 12 months
- 3.2: A ‘Child In Need’ under section 17 of The Children Act 1989 in the previous 12 months
- 3.3: A child which has been listed as missing from home in the previous 12 months
- 3.4: A child is identified as at risk of sexual exploitation
- 3.5: A young person aged under 19 became a parent in the past 12 months
- 3.6: A child who is a young carer

- 4.1: An adult in receipt of out-of-work benefits (or Universal Credit, if relevant), except those claiming carers allowance only, where worklessness is not considered a problem for the family
- 4.2: A young person aged 16 – 19 who is not in employment, education, or training
- 4.3: The family have problematic or unmanageable levels of debt
- 4.4: The family are homeless
- 4.5: The family are threatened with or at risk of homelessness

- 5.1: An individual who has experienced or is currently experiencing domestic abuse and has been engaged with specialist services in the past 12 months
- 5.2: An individual in the household discloses domestic abuse to a key worker or other professional and is not engaged with specialist services

- 6.1: An individual currently undergoing or who has undergone treatment for problem use of alcohol and/or other drugs in the last 12 months
- 6.2: An individual in the household discloses problem use of alcohol and/or other drugs to a key worker or other professional and is not engaged with specialist services
- 6.3: There is unmanaged physical or mental illness or disability within the household
- 6.4: A child on Universal Plus High or Universal Partnership Plus pathways

Supplementary Materials 2. Additional information on measurement invariance analysis

One method for assessing measurement invariance across groups is to specify a multiple group confirmatory factor analysis. Using this method, measurement invariance is assessed through the estimation of a series of models, specified sequentially. Model comparison is carried out to assess the extent to which different parameters of a measurement model are judged to be sufficiently invariant, or equivalent, across groups. First, a configural model is specified to test for invariance in the general configuration of items to factors. Second, a metric (or 'weak' invariance) model is specified to test for invariance in the factor loadings. Third, a scalar (or 'strong' invariance) model is specified to test for invariance in the item thresholds (for ordered categorical data, or item intercepts for continuous data), in addition to the factor loadings. A unique factor (or 'strict' invariance) model can be specified to test for invariance in the item-specific residual variances, though this level of invariance is not typically assessed

Supplementary Materials 3. *Mplus* script for final multiple group structural equation model

TITLE: Conditional multiple group model

VARIABLE:

USEVARIABLES =

item3 item8

item13 item16

item24

ACES

cohort1

cohort2;

CATEGORICAL =

item3 item8

item13 item16

item24;

GROUPING =

IS_profile

(0 = 0 1 = 1

2 = 2 3 = 3

4 = 4 5 = 5

6 = 6 7 = 7);

ANALYSIS:

ESTIMATOR = WLSMV;

MODEL:

!! MEASUREMENT MODEL

!! Specify factors as single-item indicators for each item

!! Factor loadings fixed to 1 in all groups

y1 BY item3@1;

y2 BY item8@1;

y3 BY item13@1;

y4 BY item16@1;

y5 BY item24@1;

!! Intercepts fixed to 0 in all groups

[y1-y5@0];

!! Residual variances fixed to 0 in all groups

y1-y5@0;

!! Specify single-item indicators as indicators of latent depression and anxiety factor

!! Loadings constrained to equality across groups

DEPANX BY

y1-y5* (L1-L5);

!! Thresholds constrained to equality across groups

[item3\$1 item3\$2] (T1-T2);

[item8\$1 item8\$2] (T3-T4);

[item13\$1 item13\$2] (T5-T6);

[item16\$1 item16\$2] (T7-T8);

[item24\$1 item24\$2] (T9-T10);

!! STRUCTURAL MODEL

!! Effect of ACES on DEPANX, and cohort effects constrained to equality across groups

DEPANX ON

ACES

cohort1 (cohort1)

cohort2 (cohort2);

MODEL 0:

!! Factor scales for items fixed to 1 in first group

{item3@1};

{item8@1};

{item13@1};

{item16@1};

{item24@1};

!! Factor intercept fixed to 0 in first group

[DEPANX @0];

!! Factor residual variance fixed to 1 in first group

DEPANX @1;

!! Effect of ACES on DEPANX freely estimated

DEPANX ON

ACES;

MODEL 1:

!! Factor scales for items freely estimated

{item3};

{item8};

{item13};

{item16};

{item24};

!! Factor intercept freely estimated

[DEPANX];

!! Factor residual variance freely estimated

DEPANX;

!! Effect of ACES on DEPANX freely estimated

DEPANX ON

ACES;

!! Repeat MODEL 1 syntax for MODELS 2-7 (i.e., for the third to eighth groups), if labels are required. Otherwise, MODEL 1 will be estimated for each of the additional groups separately

Supplementary Table 1. Comparison of Youth Adversity and Measured Depression/Anxiety Symptoms by Individual Characteristics

Individual characteristic	Youth adversity		Measured depression and anxiety symptoms	
	Yes <i>N</i> (%)	No <i>N</i> (%)	<i>M</i> (<i>SD</i>)	<i>N</i> (<i>N</i> without data)
Gender				
Female	2,050 (35.38%)	3,744 (64.62%)	5.15 (2.60)	5,838 (96)
Male	2,203 (37.23%)	3,714 (62.77%)	3.18 (2.39)	5,982 (130)
	Phi = .019 [.001, .037]		Cohen's <i>d</i> = 0.79 [0.75, 0.83]	
SES				
Lower	947 (65.26%)	504 (34.74%)	4.71 (2.75)	1,469 (38)
Higher	3,320 (32.30%)	6,960 (67.70%)	4.07 (2.67)	10,371 (188)
	Phi = .226 [.204, .247]		Cohen's <i>d</i> = 0.24 [0.18, 0.29]	
Hyperactivity/inattention				
High	1,489 (46.47%)	1,715 (53.53%)	5.05 (2.77)	3,229 (0)
Low	2,777 (32.57%)	5,748 (67.43%)	3.82 (2.58)	8,590 (0)
	Phi = .129 [.110, .147]		Cohen's <i>d</i> = 0.47 [0.43, 0.51]	

Note. *N*: number of individuals. SES: socio-economic status. Phi coefficient of the strength of association between the variables. 95% CI in square brackets. Cohen's *d* of the mean difference using pooled, weighted *SD*. Effect sizes with non-zero CI shown in bold typeset

Supplementary Table 2. Youth Adversity and Measured Depression/Anxiety Symptoms by Intersectionality Profiles

Intersectionality profile	N in intersectionality profile (% ^a)	N with youth adversity (% ^b [95% CI])	Measured depression/anxiety symptoms	
			<i>M, SD</i>	Median (IQR)
Males, Higher SES, Low Hyperactivity/inattention	3,857 (32.69%)	1,170 (30.33% [28.89, 31.81])	2.84 (2.26)	2 (1-4)
Females, Higher SES, Low Hyperactivity/inattention	3,787 (32.10%)	1,031 (27.22% [25.81, 28.67])	4.70 (2.52)	5 (3-7)
Males, Lower SES, Low Hyperactivity/inattention	458 (3.88%)	296 (64.63% [60.06, 69.01])	3.22 (2.30)	3 (1-5)
Females, Lower SES, Low Hyperactivity/inattention	473 (4.01%)	271 (57.29% [52.70, 61.80])	5.27 (2.54)	5 (3-7)
Males, Higher SES, High Hyperactivity/inattention	1,408 (11.94%)	565 (40.13% [37.55, 42.74])	3.89 (2.54)	4 (2-6)
Females, Higher SES, High Hyperactivity/inattention	1,286 (10.90%)	543 (42.22% [39.51, 44.98])	6.13 (2.49)	6 (5-8)
Males, Lower SES, High Hyperactivity/inattention	243 (2.06%)	171 (70.37% [64.20, 76.04])	4.30 (2.50)	4 (2-6)
Females, Lower SES, High Hyperactivity/inattention	285 (2.42%)	205 (71.93% [66.33, 77.07])	6.59 (2.55)	7 (5-9)

Note. SES: socio-economic status. IQR: interquartile range

^a % of total sample with intersectionality profile data (*N* = 11,797)

^b % of intersectionality profile with experiences of youth adversity

Supplementary Table 3. Confirmatory Factor Analysis of Depression/Anxiety as a Common Factor Model

Intersectionality profile	<i>N</i>	Test statistic (<i>df</i>)	CFI	RMSEA [90% CI]	SRMR	Omega [95% CI]
Males, Higher SES, Low Hyperactivity/inattention	3,857	51.103 (5), $p < .001$	0.991	0.049 [0.037, 0.061]	0.020	0.800 [0.786, 0.813]
Females, Higher SES, Low Hyperactivity/inattention	3,787	151.333 (5), $p < .001$	0.978	0.088 [0.076, 0.100]	0.031	0.808 [0.797, 0.819]
Males, Lower SES, Low Hyperactivity/inattention	458	32.154 (5), $p < .001$	0.958	0.109 [0.075, 0.146]	0.046	0.797 [0.750, 0.834]
Females, Lower SES, Low Hyperactivity/inattention	473	19.663 (5), $p = .001$	0.978	0.105 [0.066, 0.148]	0.049	0.820 [0.783, 0.847]
Males, Higher SES, High Hyperactivity/inattention	1,408	17.843 (5), $p = .003$	0.994	0.043 [0.022, 0.065]	0.020	0.792 [0.766, 0.810]
Females, Higher SES, High Hyperactivity/inattention	1,286	34.979 (5), $p < .001$	0.984	0.068 [0.048, 0.090]	0.028	0.798 [0.774, 0.818]
Males, Lower SES, High Hyperactivity/inattention	243	2.983 (5), $p = .703$	1.000	0.000 [0.000, 0.067]	0.019	0.787 [0.728, 0.834]
Females, Lower SES, High Hyperactivity/inattention	285	15.601 (5), $p = .008$	0.985	0.086 [0.040, 0.136]	0.035	0.831 [0.787, 0.864]

Note. *N*: number of individuals. *N* = 11,797 with intersectionality profile data. SES: socio-economic status. Number of estimated parameters = 15. Omega estimates with bias-corrected bootstrapped CI from 1,000 draws. CFI: comparative fit index. RMSEA: root mean square error of approximation. SRMR: standardised root mean square residual. Diagonally weighted least squares (DWLS) estimation with mean and variance adjustment (WLSMV), using pairwise present data

Supplementary Table 4. Measurement Invariance Analysis of Depression/Anxiety as a Common Factor Model across Intersectionality Profiles

Model		Model fit				Chi-square difference test	Change values		
	Par.	Test statistic (<i>df</i>)	CFI	RMSEA [90% CI]	SRMR	Test statistic (difference <i>df</i>)	CFI	RMSEA	SRMR
Configural	120	320.267 (40), $p < .001$	0.985	0.069 [0.062, 0.076]	0.027	-	-	-	-
Constrained thresholds (metric)	120	320.312 (40), $p < .001$	0.985	0.069 [0.062, 0.076]	0.027	-	-	-	-
Constrained thresholds and loadings (scalar)	92	396.014 (68), $p < .001$	0.982	0.057 [0.052, 0.063]	0.031	112.048 (28), $p < .001$	0.003	0.012	-0.004

Note: $N = 11,797$ with intersectionality profile data. Par: Number of parameters. CFI: comparative fit index. RMSEA: root mean square error of approximation. SRMR: standardised root mean square residual. CFI: comparative fit index. RMSEA: root mean square error of approximation. SRMR: standardised root mean square residual. Diagonally weighted least squares (DWLS) estimation with mean and variance adjustment (WLSMV), using pairwise present data. The configural model, and the constrained thresholds model, are equivalent in terms of scaling, number of parameters, and equality constraints, hence they have identical test statistics

Supplementary Table 5. Parameter Estimates of Constrained Measurement Model of Depression/Anxiety across Intersectionality Profiles

Intersectionality profile and parameter descriptions	N	Latent factor (SE)	Item intercept (SE)	Item scale (SE)	Loading (SE)	1 st threshold (SE)	2 nd threshold (SE)
Males, Higher SES, Low Hyperactivity/inattention	3,857	0 ^a	-	-	-	-	-
Mean		1 ^a	-	-	-	-	-
Variance		-	0 ^a	1 ^a	0.472 (0.014) ^b	0.217 (0.021) ^b	1.327 (0.026) ^b
Item 3		-	0 ^a	1 ^a	0.789 (0.011) ^b	-0.151 (0.020) ^b	0.934 (0.023) ^b
Item 8		-	0 ^a	1 ^a	0.732 (0.013) ^b	0.436 (0.021) ^b	1.613 (0.029) ^b
Item 13		-	0 ^a	1 ^a	0.640 (0.013) ^b	-0.335 (0.020) ^b	0.860 (0.023) ^b
Item 16		-	0 ^a	1 ^a	0.672 (0.014) ^b	0.436 (0.021) ^b	1.543 (0.029) ^b
Item 24		-	0 ^a	1 ^a	-	-	-
Females, Higher SES, Low Hyperactivity/inattention	3,787	0 ^a	-	-	-	-	-
Mean		1.024 (0.057)	-	-	-	-	-
Variance		-	0.497 (0.027)	1.023 (0.030)	0.472 (0.014) ^b	0.217 (0.021) ^b	1.327 (0.026) ^b
Item 3		-	0.786 (0.028)	1.008 (0.026)	0.789 (0.011) ^b	-0.151 (0.020) ^b	0.934 (0.023) ^b
Item 8		-	0.478 (0.029)	0.953 (0.026)	0.732 (0.013) ^b	0.436 (0.021) ^b	1.613 (0.029) ^b
Item 13		-	0.585 (0.027)	1.037 (0.025)	0.640 (0.013) ^b	-0.335 (0.020) ^b	0.860 (0.023) ^b
Item 16		-	0.605 (0.028)	1.016 (0.028)	0.672 (0.014) ^b	0.436 (0.021) ^b	1.543 (0.029) ^b
Item 24		-	-	-	-	-	-
Males, Lower SES, Low Hyperactivity/inattention	458	0 ^a	-	-	-	-	-
Mean		0.890 (0.115)	-	-	-	-	-
Variance		-	0.205 (0.058)	1.067 (0.061)	0.472 (0.014) ^b	0.217 (0.021) ^b	1.327 (0.026) ^b
Item 3		-	0.096 (0.054) ^c	1.041 (0.057)	0.789 (0.011) ^b	-0.151 (0.020) ^b	0.934 (0.023) ^b
Item 8		-	0.201 (0.063) ^d	1.045 (0.060)	0.732 (0.013) ^b	0.436 (0.021) ^b	1.613 (0.029) ^b
Item 13		-	0.102 (0.054) ^c	1.017 (0.055)	0.640 (0.013) ^b	-0.335 (0.020) ^b	0.860 (0.023) ^b
Item 16		-	0.171 (0.064) ^d	1.112 (0.072)	0.672 (0.014) ^b	0.436 (0.021) ^b	1.543 (0.029) ^b
Item 24		-	-	-	-	-	-
Females, Lower SES, Low Hyperactivity/inattention	473	0 ^a	-	-	-	-	-
Mean		0.975 (0.109)	-	-	-	-	-
Variance		-	0.751 (0.052)	1.074 (0.061)	0.472 (0.014) ^b	0.217 (0.021) ^b	1.327 (0.026) ^b
Item 3		-	0.831 (0.053)	1.116 (0.057)	0.789 (0.011) ^b	-0.151 (0.020) ^b	0.934 (0.023) ^b
Item 8		-	0.720 (0.056)	1.000 (0.050)	0.732 (0.013) ^b	0.436 (0.021) ^b	1.613 (0.029) ^b
Item 13		-	0.768 (0.057)	1.052 (0.051)	0.640 (0.013) ^b	-0.335 (0.020) ^b	0.860 (0.023) ^b
Item 16		-	0.728 (0.056)	1.008 (0.057)	0.672 (0.014) ^b	0.436 (0.021) ^b	1.543 (0.029) ^b
Item 24		-	-	-	-	-	-
Males, High SES, High Hyperactivity/inattention	1,408	0 ^a	-	-	-	-	-
Mean		1.275 (0.098)	-	-	-	-	-
Variance		-	0.424 (0.042)	0.854 (0.038)	0.472 (0.014) ^b	0.217 (0.021) ^b	1.327 (0.026) ^b
Item 3	-	-	-	-	-	-	-

Item 8		-	0.301 (0.038)	0.899 (0.032)	0.789 (0.011) ^b	-0.151 (0.020) ^b	0.934 (0.023) ^b
Item 13		-	0.338 (0.045)	0.835 (0.031)	0.732 (0.013) ^b	0.436 (0.021) ^b	1.613 (0.029) ^b
Item 16		-	0.336 (0.038)	0.909 (0.031)	0.640 (0.013) ^b	-0.335 (0.020) ^b	0.860 (0.023) ^b
Item 24		-	0.112 (0.048) ^d	0.887 (0.035)	0.672 (0.014) ^b	0.436 (0.021) ^b	1.543 (0.029) ^b
Females, Higher SES, High Hyperactivity/inattention	1,286	0 ^a	-	-	-	-	-
Mean							
Variance		1.169 (0.092)	-	-	-	-	-
Item 3		-	1.055 (0.041)	0.946 (0.041)	0.472 (0.014) ^b	0.217 (0.021) ^b	1.327 (0.026) ^b
Item 8		-	1.229 (0.047)	0.948 (0.036)	0.789 (0.011) ^b	-0.151 (0.020) ^b	0.934 (0.023) ^b
Item 13		-	1.106 (0.041)	0.908 (0.033)	0.732 (0.013) ^b	0.436 (0.021) ^b	1.613 (0.029) ^b
Item 16		-	1.025 (0.046)	0.925 (0.032)	0.640 (0.013) ^b	-0.335 (0.020) ^b	0.860 (0.023) ^b
Item 24		-	0.854 (0.040)	0.915 (0.035)	0.672 (0.014) ^b	0.436 (0.021) ^b	1.543 (0.029) ^b
Males, Lower SES, High Hyperactivity/inattention	243	0 ^a	-	-	-	-	-
Mean							
Variance		1.034 (0.166)	-	-	-	-	-
Item 3		-	0.639 (0.074)	1.027 (0.077)	0.472 (0.014) ^b	0.217 (0.021) ^b	1.327 (0.026) ^b
Item 8		-	0.308 (0.075)	0.996 (0.071)	0.789 (0.011) ^b	-0.151 (0.020) ^b	0.934 (0.023) ^b
Item 13		-	0.603 (0.077)	1.024 (0.075)	0.732 (0.013) ^b	0.436 (0.021) ^b	1.613 (0.029) ^b
Item 16		-	0.546 (0.081)	0.935 (0.071)	0.640 (0.013) ^b	-0.335 (0.020) ^b	0.860 (0.023) ^b
Item 24		-	0.221 (0.104) ^d	0.853 (0.069)	0.672 (0.014) ^b	0.436 (0.021) ^b	1.543 (0.029) ^b
Females, Lower SES, High Hyperactivity/inattention	285	0 ^a	-	-	-	-	-
Mean							
Variance		1.531 (0.228)	-	-	-	-	-
Item 3		-	1.427 (0.115)	0.715 (0.080)	0.472 (0.014) ^b	0.217 (0.021) ^b	1.327 (0.026) ^b
Item 8		-	1.241 (0.089)	0.911 (0.063)	0.789 (0.011) ^b	-0.151 (0.020) ^b	0.934 (0.023) ^b
Item 13		-	1.325 (0.084)	0.840 (0.058)	0.732 (0.013) ^b	0.436 (0.021) ^b	1.613 (0.029) ^b
Item 16		-	1.157 (0.090)	0.924 (0.059)	0.640 (0.013) ^b	-0.335 (0.020) ^b	0.860 (0.023) ^b
Item 24		-	1.064 (0.080)	0.860 (0.061)	0.672 (0.014) ^b	0.436 (0.021) ^b	1.543 (0.029) ^b

Note. *N*: number of individuals. SES: socio-economic status. Items 3, 8, 13, 16, and 24 of the emotional problems subscale of the Strengths and Difficulties Questionnaire. Diagonally weighted least squares (DWLS) estimation with mean and variance adjustment (WLSMV), using pairwise present data. ^a values fixed for scaling. ^b parameters constrained to equality across groups. All estimates $p < .001$, except ^c ($p > .05$) and ^d ($p < .05$)

Item 3: I get a lot of headaches

Item 8: I worry a lot

Item 13: I am often unhappy

Item 16: I am nervous in new situations

Item 24: I have many fears

Supplementary Table 6. Structural Equation Model of Youth Adversity as a Predictor of Depression/Anxiety by Intersectionality Profiles

Model		Model fit				Chi-square difference test
	Par.	Test statistic (<i>df</i>)	CFI	RMSEA [90% CI]	SRMR	Test statistic (difference <i>df</i>)
Unconstrained youth adversity slopes	74	657.820 (206), $p < .001$	0.973	0.039 [0.035, 0.042]	0.038	-
Constrained youth adversity slopes	67	701.337 (213), $p < .001$	0.971	0.049 [0.036, 0.043]	0.041	38.719 (7), $p < .001$

Note. $N = 11,707$ (with intersectionality profile data and youth adversity data). Youth adversity: adverse childhood experiences. Par: Number of parameters. CFI: comparative fit index. RMSEA: root mean square error of approximation. SRMR: standardised root mean square residual. Diagonally weighted least squares (DWLS) estimation with mean and variance adjustment (WLSMV), using pairwise present data

Supplementary Table 7. Parameter Estimates of Structural Equation Model of Depression/Anxiety regressed on Youth Adversity across Intersectionality Profiles (Measurement Model Components)

Intersectionality profile and parameter descriptions	N	Item intercept	Item scale (SE)	Loading (SE)	1 st threshold (SE)	2 nd threshold (SE)
Males, Higher SES, Low Hyperactivity/inattention	3,823					
Item 3		0 ^a	1 ^a	0.461 (0.015) ^b	0.258 (0.029) ^b	1.420 (0.039) ^b
Item 8		0 ^a	1 ^a	0.740 (0.012) ^b	0.006 (0.035) ^{b, c}	1.117 (0.035) ^b
Item 13		0 ^a	1 ^a	0.706 (0.014) ^b	0.792 (0.035) ^b	2.071 (0.046) ^b
Item 16		0 ^a	1 ^a	0.587 (0.013) ^b	-0.229 (0.032) ^b	0.960 (0.032) ^b
Item 24		0 ^a	1 ^a	0.628 (0.015) ^b	0.744 (0.033) ^b	1.900 (0.046) ^b
Females, Higher SES, Low Hyperactivity/inattention	3,763					
Item 3		0 ^a	1.003 (0.037)	0.461 (0.015) ^b	0.258 (0.029) ^b	1.420 (0.039) ^b
Item 8		0 ^a	1.023 (0.030)	0.740 (0.012) ^b	0.006 (0.035) ^{b, c}	1.117 (0.035) ^b
Item 13		0 ^a	0.969 (0.029)	0.706 (0.014) ^b	0.792 (0.035) ^b	2.071 (0.046) ^b
Item 16		0 ^a	1.089 (0.032)	0.587 (0.013) ^b	-0.229 (0.032) ^b	0.960 (0.032) ^b
Item 24		0 ^a	0.998 (0.031)	0.628 (0.015) ^b	0.744 (0.033) ^b	1.900 (0.046) ^b
Males, Lower SES, Low Hyperactivity/inattention	454					
Item 3		0 ^a	1.001 (0.076)	0.461 (0.015) ^b	0.258 (0.029) ^b	1.420 (0.039) ^b
Item 8		0 ^a	0.935 (0.064)	0.740 (0.012) ^b	0.006 (0.035) ^{b, c}	1.117 (0.035) ^b
Item 13		0 ^a	0.979 (0.068)	0.706 (0.014) ^b	0.792 (0.035) ^b	2.071 (0.046) ^b
Item 16		0 ^a	0.936 (0.066)	0.587 (0.013) ^b	-0.229 (0.032) ^b	0.960 (0.032) ^b
Item 24		0 ^a	1.037 (0.079)	0.628 (0.015) ^b	0.744 (0.033) ^b	1.900 (0.046) ^b
Females, Lower SES, Low Hyperactivity/inattention	470					
Item 3		0 ^a	1.039 (0.079)	0.461 (0.015) ^b	0.258 (0.029) ^b	1.420 (0.039) ^b
Item 8		0 ^a	1.150 (0.067)	0.740 (0.012) ^b	0.006 (0.035) ^{b, c}	1.117 (0.035) ^b
Item 13		0 ^a	0.992 (0.059)	0.706 (0.014) ^b	0.792 (0.035) ^b	2.071 (0.046) ^b
Item 16		0 ^a	1.156 (0.066)	0.587 (0.013) ^b	-0.229 (0.032) ^b	0.960 (0.032) ^b
Item 24		0 ^a	1.043 (0.066)	0.628 (0.015) ^b	0.744 (0.033) ^b	1.900 (0.046) ^b
Males, Higher SES, High Hyperactivity/inattention	1,397					
Item 3		0 ^a	0.767 (0.046)	0.461 (0.015) ^b	0.258 (0.029) ^b	1.420 (0.039) ^b
Item 8		0 ^a	0.925 (0.040)	0.740 (0.012) ^b	0.006 (0.035) ^{b, c}	1.117 (0.035) ^b
Item 13		0 ^a	0.812 (0.035)	0.706 (0.014) ^b	0.792 (0.035) ^b	2.071 (0.046) ^b
Item 16		0 ^a	0.931 (0.041)	0.587 (0.013) ^b	-0.229 (0.032) ^b	0.960 (0.032) ^b
Item 24		0 ^a	0.936 (0.043)	0.628 (0.015) ^b	0.744 (0.033) ^b	1.900 (0.046) ^b
Females, Higher SES, High Hyperactivity/inattention	1,278					
Item 3		0 ^a	0.833 (0.050)	0.461 (0.015) ^b	0.258 (0.029) ^b	1.420 (0.039) ^b
Item 8		0 ^a	0.959 (0.042)	0.740 (0.012) ^b	0.006 (0.035) ^{b, c}	1.117 (0.035) ^b
Item 13		0 ^a	0.861 (0.038)	0.706 (0.014) ^b	0.792 (0.035) ^b	2.071 (0.046) ^b
Item 16		0 ^a	0.942 (0.041)	0.587 (0.013) ^b	-0.229 (0.032) ^b	0.960 (0.032) ^b

Item 24		0 ^a	0.908 (0.043)	0.628 (0.015) ^b	0.744 (0.033) ^b	1.900 (0.046) ^b
Males, Lower SES, High Hyperactivity/inattention	240					
Item 3		0 ^a	0.832 (0.090)	0.461 (0.015) ^b	0.258 (0.029) ^b	1.420 (0.039) ^b
Item 8		0 ^a	0.986 (0.095)	0.740 (0.012) ^b	0.006 (0.035) ^{b, c}	1.117 (0.035) ^b
Item 13		0 ^a	0.861 (0.081)	0.706 (0.014) ^b	0.792 (0.035) ^b	2.071 (0.046) ^b
Item 16		0 ^a	0.834 (0.086)	0.587 (0.013) ^b	-0.229 (0.032) ^b	0.960 (0.032) ^b
Item 24		0 ^a	0.838 (0.097)	0.628 (0.015) ^b	0.744 (0.033) ^b	1.900 (0.046) ^b
Females, Lower SES, High Hyperactivity/inattention	282					
Item 3		0 ^a	0.576 (0.100)	0.461 (0.015) ^b	0.258 (0.029) ^b	1.420 (0.039) ^b
Item 8		0 ^a	0.923 (0.075)	0.740 (0.012) ^b	0.006 (0.035) ^{b, c}	1.117 (0.035) ^b
Item 13		0 ^a	0.786 (0.064)	0.706 (0.014) ^b	0.792 (0.035) ^b	2.071 (0.046) ^b
Item 16		0 ^a	0.938 (0.077)	0.587 (0.013) ^b	-0.229 (0.032) ^b	0.960 (0.032) ^b
Item 24		0 ^a	0.847 (0.079)	0.628 (0.015) ^b	0.744 (0.033) ^b	1.900 (0.046) ^b

Note. $N = 11,707$ with intersectionality profile and youth adversity data. N : number of individuals. SES: socio-economic status. Items 3, 8, 13, 16, and 24 of the emotional problems subscale of the Strengths and Difficulties Questionnaire, listed below. Diagonally weighted least squares (DWLS) estimation with mean and variance adjustment (WLSMV), using pairwise present data. All estimates $p < .001$, except ^c ($p > .05$) and ^d ($p < .05$). Estimates are from the conditional multiple group structural equation model of emotional problems regressed on youth adversity. Results were substantively unchanged where missing item-level data and youth adversity data was imputed (10 datasets, $N = 11,797$)

^a values fixed for scaling

^b parameters constrained to equality across groups

Item 3: I get a lot of headaches

Item 8: I worry a lot

Item 13: I am often unhappy

Item 16: I am nervous in new situations

Item 24: I have many fears

Supplementary Table 8. Parameter Estimates of Structural Equation Model of Depression/Anxiety regressed on Youth Adversity across Intersectionality Profiles (Structural Model Components)

Intersectionality profile	<i>N</i>	Depression/anxiety intercept (<i>SE</i>)	Depression/anxiety residual variance (<i>SE</i>)	Youth adversity slope (<i>SE</i>)
Males, Higher SES, Low Hyperactivity/inattention	3,823	0 ^a	1 ^a	1.048 (0.046), <i>p</i> < .001
Females, Higher SES, Low Hyperactivity/inattention	3,763	1.157 (0.059), <i>p</i> < .001	1.070 (0.065), <i>p</i> < .001	0.753 (0.048), <i>p</i> < .001
Males, Lower SES, Low Hyperactivity/inattention	454	-0.041 (0.154), <i>p</i> = 0.792	1.137 (0.163), <i>p</i> < .001	0.694 (0.127), <i>p</i> < .001
Females, Lower SES, Low Hyperactivity/inattention	470	1.375 (0.118), <i>p</i> < .001	1.019 (0.124), <i>p</i> < .001	0.478 (0.110), <i>p</i> < .001
Males, Higher SES, High Hyperactivity/inattention	1,397	0.433 (0.093), <i>p</i> < .001	1.301 (0.113), <i>p</i> < .001	0.933 (0.081), <i>p</i> < .001
Females, Higher SES, High Hyperactivity/inattention	1,278	1.883 (0.089), <i>p</i> < .001	1.272 (0.114), <i>p</i> < .001	0.880 (0.081), <i>p</i> < .001
Males, Lower SES, High Hyperactivity/inattention	240	0.521 (0.208), <i>p</i> = .012	1.337 (0.255), <i>p</i> < .001	0.750 (0.198), <i>p</i> < .001
Females, Lower SES, High Hyperactivity/inattention	282	1.897 (0.200), <i>p</i> < .001	1.784 (0.311), <i>p</i> < .001	0.658 (0.204), <i>p</i> = .001

Note. *N*: number of individuals. *N* = 11,707 (with intersectionality profile data and youth adversity data). SES: socio-economic status. The effects of cohort were estimated for the 2017 cohort (-0.141, *SE* = 0.029, *p* < .001) and the 2018 cohort (-0.085, *SE* = 0.029, *p* = .004), entered as dummy variables representing a comparison with the 2019 cohort, constrained to equality across intersectionality profiles. Estimates are from the conditional multiple group structural equation model of depression/anxiety regressed on youth adversity. The intercept represents the average level of latent depression/anxiety where all predictors are zero (youth adversity, 2017 cohort, and 2018 cohort). The youth adversity slope represents the average unit change in latent depression/anxiety for youth adversity, compared to no youth adversity (also see note, below). Results were substantively unchanged where missing item-level data and youth adversity data was imputed (10 datasets, *N* = 11,797)

^a values fixed for scaling. The intercept and slope values reflect differences relative to the male, higher SES, low hyperactivity/inattention intersectionality profile. For example, in the female, higher SES, low hyperactivity/inattention profile – the average level of latent depression/anxiety (where all predictors are zero) is 1.157 units higher than the average level for the male, higher SES, low hyperactivity/inattention intersectionality profile. Youth adversity is associated with a 0.753 unit increase in latent depression/anxiety compared to no youth adversity, scaled relative to the male, higher SES, low hyperactivity/inattention intersectionality profile

Supplementary Table 9. Comparison of Unstandardised Estimates of Depression/Anxiety regressed on Youth Adversity across Intersectionality Profiles

Intersectionality profile	Estimate	Intersectionality profile	Estimate	Wald statistic (p)
Males, Higher SES, Low Hyperactivity/inattention	1.048	Females, Higher SES, Low Hyperactivity/inattention	0.753	4.632 (< .001)*
Males, Lower SES, Low Hyperactivity/inattention	0.694	Females, Lower SES, Low Hyperactivity/inattention	0.478	1.297 (.194)
Males, Higher SES, High Hyperactivity/inattention	0.933	Females, Higher SES, High Hyperactivity/inattention	0.880	0.482 (.630)
Males, Lower SES, High Hyperactivity/inattention	0.750	Females, Lower SES, High Hyperactivity/inattention	0.658	0.325 (.745)
Males, Higher SES, Low Hyperactivity/inattention	1.048	Males, Lower SES, Low Hyperactivity/inattention	0.694	2.649 (.008)
Females, Higher SES, Low Hyperactivity/inattention	0.753	Females, Lower SES, Low Hyperactivity/inattention	0.478	2.313 (.021)
Males, Higher SES, High Hyperactivity/inattention	0.933	Males, Lower SES, High Hyperactivity/inattention	0.750	0.866 (.386)
Females, Higher SES, High Hyperactivity/inattention	0.880	Females, Lower SES, High Hyperactivity/inattention	0.658	1.017 (.309)
Males, Higher SES, Low Hyperactivity/inattention	1.048	Males, Higher SES, High Hyperactivity/inattention	0.933	1.276 (.202)
Females, Higher SES, Low Hyperactivity/inattention	0.753	Females, Higher SES, High Hyperactivity/inattention	0.880	1.392 (.164)
Males, Lower SES, Low Hyperactivity/inattention	0.694	Males, Lower SES, High Hyperactivity/inattention	0.750	0.016 (.987)
Females, Lower SES, Low Hyperactivity/inattention	0.478	Females, Lower SES, High Hyperactivity/inattention	0.658	0.779 (.436)
Males, Higher SES, Low Hyperactivity/inattention	1.048	Females, Lower SES, High Hyperactivity/inattention	0.658	1.873 (.061)

Note. $N = 11,707$ with intersectionality profile data and youth adversity data. SES: socio-economic status. Derived from the multiple group model of youth adversity as a predictor of depression/anxiety. Wald test ($df = 1$) of the difference between the unstandardised estimates. * Significant at false discovery rate adjusted level ($\alpha = .05, p < .004$)

Supplementary Table 10. Compound Parameter Estimates of Depression/Anxiety regressed on Youth Adversity by Intersectionality Profiles (Intercepts)

Parameter description	Intercepts			
	Unstandardised estimate (<i>SE</i>)	95% CI	Standardised estimate (<i>SE</i>)	95% CI
Weighted averages				
Males	0.120 (0.029)	0.061, 0.174	0.115 (0.028)	0.057, 0.167
Females	1.371 (0.057)	1.261, 1.489	1.281 (0.057)	1.172, 1.396
Higher SES	0.718 (0.035)	0.646, 0.789	0.684 (0.034)	0.651, 0.749
Lower SES	0.891 (0.087)	0.725, 1.056	0.794 (0.087)	0.625, 0.958
Low hyperactivity/inattention	0.585 (0.032)	0.522, 0.650	0.574 (0.032)	0.509, 0.634
High hyperactivity/inattention	1.148 (0.070)	0.997, 1.284	0.994 (0.069)	0.848, 1.124
Weighted main effects				
Gender (male - female)	-1.251 (0.054)	-1.356, -1.146	-1.182 (0.048)	-1.275, -1.084
SES (higher - lower)	-0.173 (0.079)	-0.324, -0.018	-0.163 (0.075)	-0.304, -0.010
Hyperactivity/inattention (low - high)	-0.563 (0.062)	-0.690, -0.447	-0.532 (0.059)	-0.652, -0.417
Weighted interaction effects				
Gender x SES	0.191 (0.172)	-0.148, 0.528	0.181 (0.163)	-0.142, 0.502
Gender x hyperactivity/inattention	0.254 (0.125)	0.008, 0.500	0.240 (0.118)	0.009, 0.471
SES x hyperactivity/inattention	0.034 (0.180)	-0.338, 0.403	0.032 (0.170)	-0.311, 0.379
Gender x SES x hyperactivity/inattention	0.333 (0.375)	-0.394, 1.044	0.314 (0.354)	-0.382, 0.966

Note. $N = 11,707$ (with intersectionality profile data and youth adversity data). SES: socio-economic status. Parameter estimates from weighted least squares estimation, with *SE* and bias-corrected bootstrapped CI from 1,000 draws. Weighted pooled standard deviations used for calculation of standardised estimates. Compound parameter estimates specified using the weighted least squares estimates derived from the multiple group model of the latent factor of depression/anxiety regressed on youth adversity (weighted by intersectionality sample size). Intercepts represent the average level of latent depression/anxiety where all predictors are zero (youth adversity, 2017 cohort, 2018 cohort). Results were substantively unchanged where missing item-level data and youth adversity data was imputed (10 datasets, $N = 11,797$). Estimates for main and interaction effects with non-zero CI shown in bold typeset