

Supplementary online materials for the article

Parents' nonstandard work schedules and parents' perception of adolescent social and emotional wellbeing

Jianghong Li, Hannah Kenyon Lair, Jakob Schäfer, & Garth Kendall

Published in: Journal of Family Research, <https://doi.org/10.20377/jfr-776>

Table S1. Descriptive Statistics for Adolescent-reported CBCL Scores

	n	%	Mean (SD)	Min	Max
Adolescent-reported CBCL Scores					
Total Score	548		39.26 (29.28)	0	137
Externalizing Behavior Score	548		11.55 (6.93)	0	42
Internalizing Behavior Score	548		10.51 (8.05)	0	47
Anxiety Depression Score	548		4.69 (4.80)	0	28

Table S2. Multivariate linear regression analysis of CBCL scores (parent-reported), controlling for family income (decile) N = 594

	Total score b (SE) ¹	Externalizing score b (SE)	Internalizing score b (SE)	Anxiety/depression score b (SE)
Parent work schedules (dichotomous) ²				
Both parents – standard	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
One or both parents – nonstandard	0.157* (0.078)	0.130** (0.065)	0.091 (0.074)	0.123* (0.064)
Parent work schedules (multi-categorical)				
Both parents – standard	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Both parents – nonstandard	0.133 (0.134)	0.145 (0.111)	0.133 (0.128)	0.201* (0.110)
Father – nonstandard / Mother – standard	0.279** (0.108)	0.229** (0.090)	0.116 (0.103)	0.110 (0.089)
Mother – nonstandard / Father – standard	0.070 (0.100)	0.045 (0.083)	0.051 (0.096)	0.099 (0.083)
Fathers' work hours	-0.004 (0.003)	-0.001 (0.003)	-0.004 (0.003)	-0.002 (0.003)
Mothers' work hours	0.005* (0.003)	0.005** (0.002)	-.003 (0.003)	0.001 (0.002)
Gender (boy)	0.002 (0.079)	0.087 (0.065)	-0.234*** (0.075)	-0.229*** (0.065)
Adolescent birthweight	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Drug use in the home	0.332** (0.130)	0.329*** (0.108)	0.149 (0.124)	0.190* (0.107)
Family income (decile)	-0.028 (0.025)	-0.035* (0.021)	-0.011 (0.024)	-0.004 (0.020)
Mother's age at 18 weeks pregnancy				
14 – 24 (ref.)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
25 – 29	-0.053 (0.120)	-0.066 (0.010)	-0.101 (0.115)	-0.07 (0.099)
30 – 34	-0.195 (0.121)	-0.220** (0.100)	-0.191* (0.115)	-0.126 (0.099)
35 or over	-0.172 (0.135)	-0.226** (0.112)	-0.098 (0.129)	-0.105 (0.111)
Mother's race	0.088 (0.147)	0.067 (0.122)	-0.044 (0.140)	0.018 (0.121)
Mother's education				
Primary education	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Secondary	-0.126 (0.113)	-0.113 (0.094)	-0.010 (0.108)	-0.049 (0.093)
Tertiary	-0.134 (0.137)	-0.148 (0.113)	-0.115 (0.130)	-0.05 (0.112)
Mother's occupation				
Manager or professional	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Paraprofessional, clerical, or sales	0.034 (0.098)	-0.013 (0.082)	0.067 (0.094)	0.054 (0.081)
Trade, plant operator, or labourer	-0.301* (0.174)	-0.243* (0.144)	-0.209 (0.166)	-0.168 (0.143)
Father's occupation				
Manager	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

Professional	0.015 (0.120)	-.067 (0.010)	-0.079 (0.115)	-0.036 (0.099)
Paraprofessional, clerical, or sales	-0.024 (0.128)	-0.085 (0.106)	0.022 (0.122)	0.019 (0.105)
Trade	-0.086 (0.140)	0.043 (0.116)	-0.176 (0.134)	-0.119 (0.115)
Plant operator or labourer	0.114 (0.156)	0.212 (0.129)	-0.019 (0.148)	-0.030 (0.128)
Constant	-0.375 (0.440)	-0.409 (0.365)	-0.06 (0.419)	-0.169 (0.361)
R ²	0.060	0.090	0.052	0.053

* p<0.10, ** p<0.05, *** p<0.01

¹ Logged, standardized coefficients with standard errors in parentheses.

². Dichotomous indicator of parental work schedules was tested in separate models using the same set of control variables.

Figure S1. Distributions of parent- and adolescent-reported CBCL scores – Total morbidity and Externalizing behavior

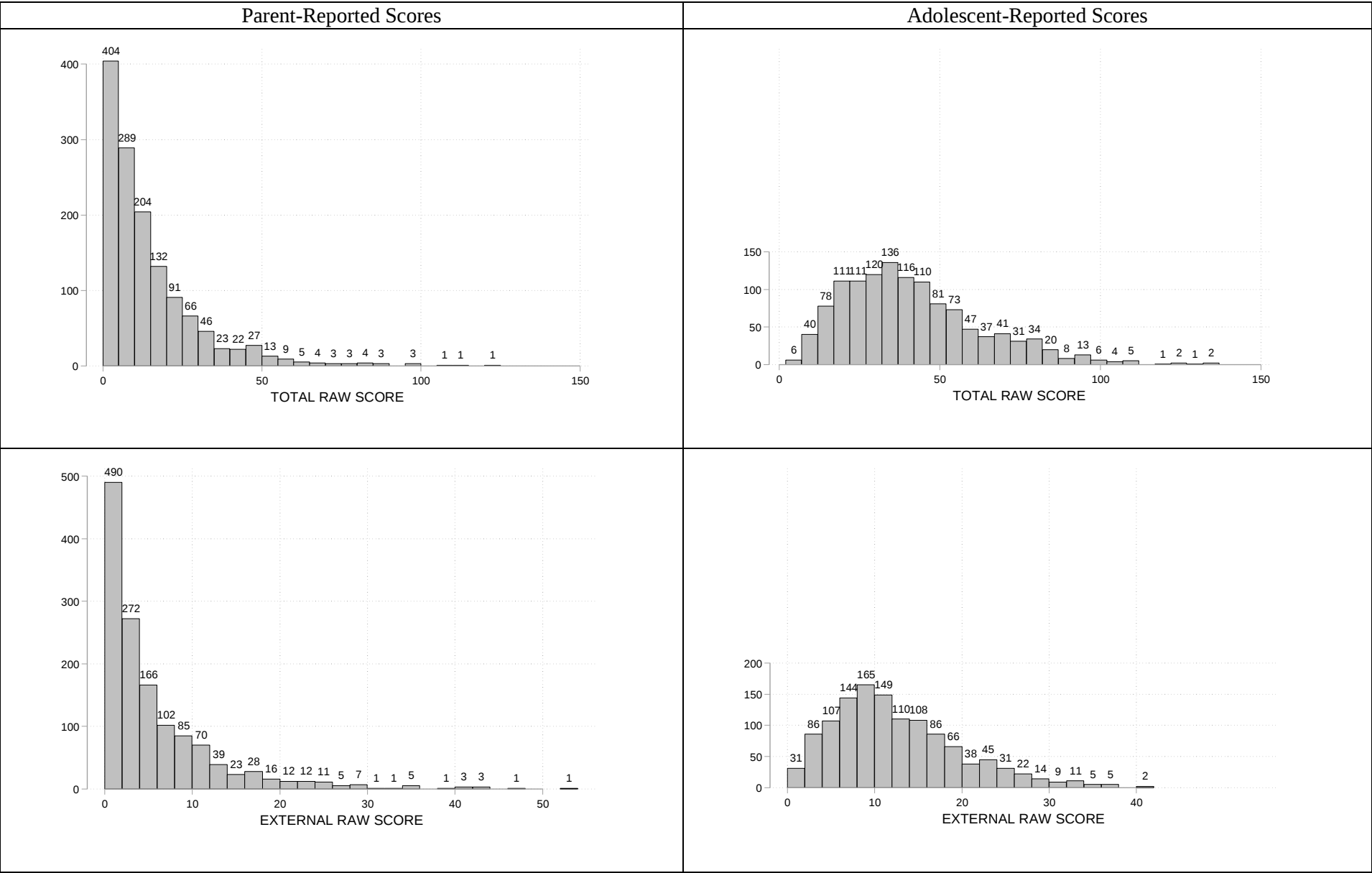


Figure S2. Distributions of parent- and adolescent-reported CBCL scores – Internalizing behavior and Anxiety-Depression

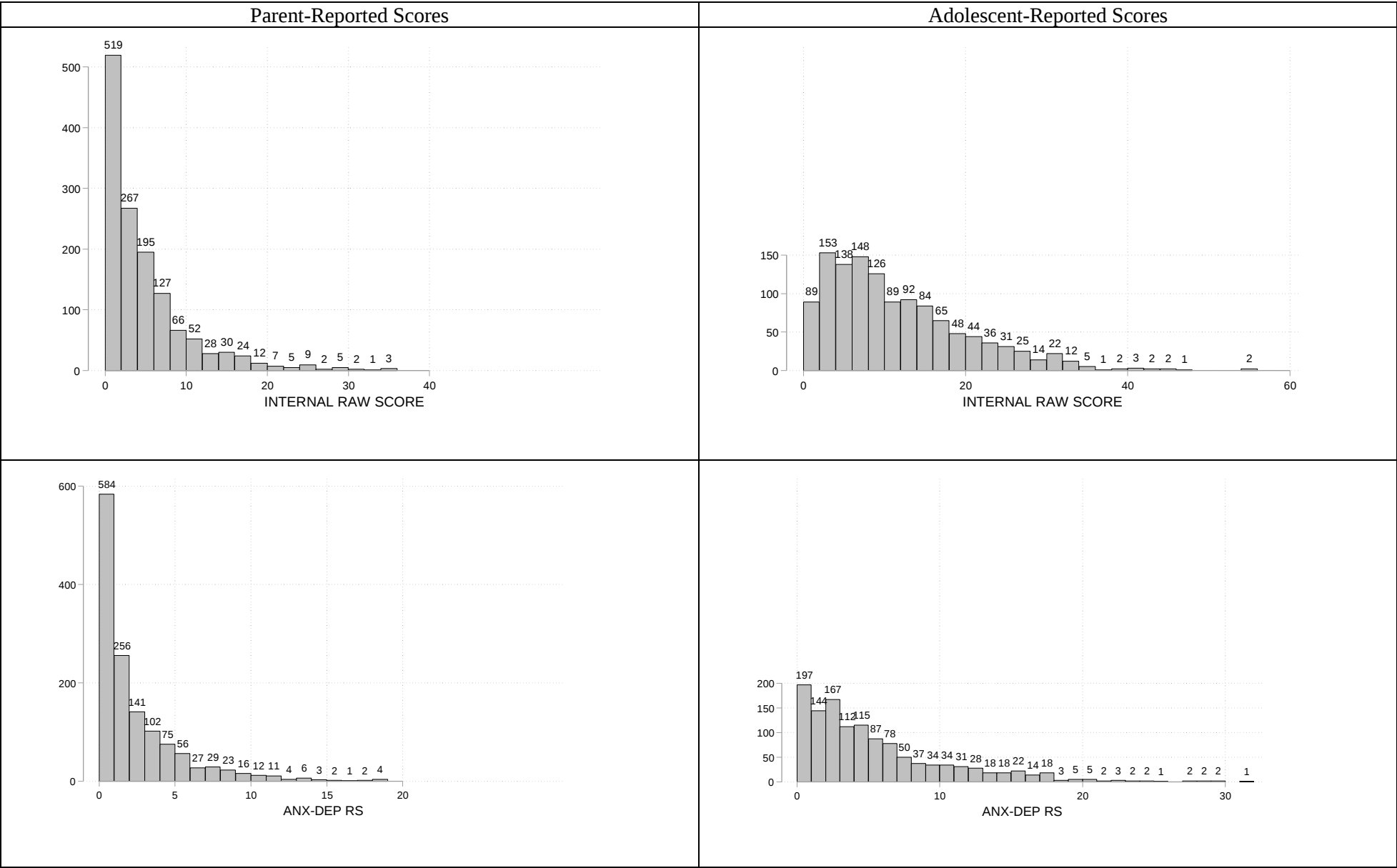


Table S3. Linear Regression Analysis of log-transformed CBCL z-scores (adolescent-reported), N = 521

	Total Score ¹	Externalizing Score	Internalizing Score	Anxiety/Depression Score
Parent Work Schedules				
Both parents work – standard (ref.)	0 (.)	0 (.)	0 (.)	0 (.)
1 or both parents – non-standard	.111 (.098)	.150 (.102)	.148 (.102)	.154 (.128)
Gender (Boy)	-.376*** (.099)	-.008 (.102)	-.375*** (.102)	-.615*** (.129)
Adolescent Birthweight	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Drug use in the home	.080 (.152)	.226 (.159)	.150 (.166)	.264 (.210)
Mother's age at 18 weeks pregnant				
14-24	0 (.)	0 (.)	0 (.)	0 (.)
25-29	-.114 (.151)	-.060 (.156)	-.114 (.163)	-.091 (.200)
30-34	-.070 (.148)	-.047 (.156)	.121 (.161)	.208 (.198)
35 or over	.082 (.166)	-.045 (.171)	.147 (.178)	.130 (.219)
Mother's race	-.204 (.182)	.220 (.192)	-.078 (.182)	-.467** (.231)
Mother's Education				
Primary Education	0 (.)	0 (.)	0 (.)	0 (.)
Secondary or higher	-.249* (.146)	-.170 (.155)	-.244 (.154)	-.413** (.194)
Tertiary	-.066 (.175)	-.243 (.184)	-.169 (.180)	-.318 (.231)
Mother's Occupation				
Manager or professional	0 (.)	0 (.)	0 (.)	0 (.)
Paraprofessional, clerical, or sales	.061 (.122)	.027 (.127)	-.107 (.125)	-.124 (.157)
Trade, plant operator, or labourer	-.403* (.226)	-.328 (.239)	-.243 (.245)	-.300 (.294)
Father's Occupation				
Manager	0 (.)	0 (.)	0 (.)	0 (.)
Professional	-.305** (.151)	-.144 (.157)	-.252 (.154)	-.248 (.199)
Paraprofessional, clerical, or sales	-.014 (.156)	-.109 (.163)	-.047 (.160)	-.001 (.207)
Trade	-.254 (.173)	.058 (.180)	-.0184 (.179)	-.470** (.228)
Plant operator or labourer	-.186 (.189)	.044 (.196)	.051 (.201)	-.539** (.146)
Mother's Work Hours	.006 (.004)	.010** (.004)	.004 (.004)	-.000 (.005)
Father's Work Hours	.005 (.004)	.003 (.005)	-.002 (.004)	-.006 (.005)
Constant	-.175 (.503)	-.984* (.537)	.198 (.514)	.558 (.663)
R ²	0.092	0.055	0.083	0.091

* p<0.05, ** p<0.01, *** p<0.001

¹ Standardized coefficient and standard errors in parentheses.

Table S4. Mediation effect of parental time on untransformed CBCL scores (parent-reported) using dichotomous nonstandard work schedule indicator:
(Both parents work standard schedules vs one or both parents work nonstandard schedules)

	Externalizing behavior	Anxiety / depression	Total CBCL score
Time mother spent with adolescent on weekends N = 603			
Direct effect ¹	1.46** (0.59 – 2.34)	0.50* (0.04 – 0.92)	3.86*** (1.83 – 5.90)
Indirect effect ²	-0.028 (-0.19 – 0.07)	-0.01 (-0.06 – 0.01)	0.05 (-0.32 – 0.14)
[mother's time] effect on CBCL score ³	-1.26** (-2.02 – -0.46)	-0.19 (-0.52 – 0.12)	-1.75* (-3.33 – 0.37)
Time father spent with adolescent on weekends N = 494			
Direct effect	1.43** (0.44 – 2.43)	0.41 (-0.04 – 0.84)	3.62*** (1.60 – 5.86)
Indirect effect	-0.023 (-0.22 – 0.14)	0.001 (-0.04 – 0.15)	0.04 (-0.33 – 0.20)
[father's time] effect on CBCL score	-1.46*** (-2.11 – -0.85)	-0.18 (-0.43 – 0.09)	-2.57*** (-4.03 – -1.12)

Notes: *Controls*: Adolescent gender; mother's age at 18 weeks pregnant; mother's race; mother's educational attainment; drug use in home; adolescent birthweight; mother's occupation; father's occupation; mother's work hours; father's work hours. Significance of indirect effects obtained from 95% bootstrap bias-corrected confidence intervals.

All mediation models used robust standard errors.

*p<0.05, **p<0.01, *** p<0.001

¹ Refers to direct effect of parents' nonstandard work schedules on adolescent CBCL scores.

² Refers to indirect effect of parents' nonstandard work schedules on adolescent CBCL scores via the mediation pathway. Note that direct effect and indirect effect sum to equal the total effect. However, since mediation effects were estimated in a model separate from the main models reported in Table 2, there is an infinitesimal difference between total effects as reported in Table 2 and the sum of direct and indirect effects reported in Tables 3 and 4.

³ Refers to effect of mediator on adolescent CBCL scores; the intermediate step of establishing mediation.