Table B1

Measures of Fit from the Bi-factor, One-, Two- and Three-factor Confirmatory Factor Analyses Based on Unweighted Data for the Centers

	Bi-factor	One Factor	Two Factors (Original)	Two Factors (Modified) [a]	Three factors
Number of Items	26	26	26	26	26
Scaled Chi-Square	2599.785	13239.152	8607.103	6612.250	7932.148
d.f. for Chi-square	273	299	298	298	296
P-value	<.001	<.001	<.001	<.001	<.001
Scaling Correction Factor	0.369	0.475	0.468	0.466	0.455
Comparative Fit Index (CFI)	**0.991**	0.949	0.967	0.975	0.970
Non-normed Fit Index (NNFI)	**0.989**	0.944	0.964	0.973	0.967
Root Mean Square Error Of Approximation (RMSEA)	**0.08**	0.180	0.145	0.126	0.139
Weighted Root Mean Square Residual (WRMR)	**1.543**	3.949	3.160	2.764	2.993

Note. The results based on unweighted data. Factor structures based on conceptual layout of items in Table 1 of the original manuscript. The three-factor combines Permissiveness and Harshness in one factor, the two-factor combines Permissiveness and Harshness for the first factor and Sensitivity and Detachment for the second factor. The four-factor structure shown in Table 1 failed to converge, and thus no results are shown for it.

[a]Item 18 and 24 placed on the Sensitivity/Detachment combined factor.

Table B2

Measures of Fit from the Bi-factor, One-, Two- and Three-factor Confirmatory Factor Analyses Based on Weighted Data for the Centers

	Bi-factor	One Factor	Two Factors (Original)	Two Factors (Modified) [a]	Three factors
Number of Items	26	26	26	26	26
Scaled Chi-Square	1055.634	4331.542	2849.498	2215.570	2656.706
d.f. for Chi-square	273	299	298	298	296
P-value	<.001	<.001	<.001	<.001	<.001
Scaling Correction Factor	0.424	0.520	0.516	0.514	0.507
Comparative Fit Index (CFI)	**0.992**	0.957	0.973	0.979	0.975
Non-normed Fit Index (NNFI)	**0.990**	0.953	0.970	0.978	0.972
Root Mean Square Error Of Approximation (RMSEA)	**0.046**	0.101	0.080	0.070	0.077
Weighted Root Mean Square Residual (WRMR)	**1.054**	2.364	1.909	1.681	1.829

Note. The results based on weighted data. Factor structures based on conceptual layout of items in Table 1 of the original manuscript. The three-factor combines Permissiveness and Harshness in one factor, the two-factor combines Permissiveness and Harshness for the first factor and Sensitivity and Detachment for the second factor. The four-factor structure shown in Table 1 failed to converge, and thus no results are shown for it.

[a]Item 18 and 24 placed on the Sensitivity/Detachment combined factor.

Table B3

Measures of Fit from the Bi-factor, One-, Two- and Three-factor Confirmatory Factor Analyses Based on Unweighted Data for the Homes

	Bi-factor	One Factor	Two Factors (Original)	Two Factors (Modified) [a]	Three factors
Number of Items	26	26	26	26	26
Scaled Chi-Square	1486.171	7616.072	5134.164	3879.274	4590.086
d.f. for Chi-square	273	299	298	298	296
P-value	<.001	<.001	<.001	<.001	<.001
Scaling Correction Factor	0.442	0.561	0.559	0.552	0.548
Comparative Fit Index (CFI)	**0.988**	0.926	0.951	0.964	0.956
Non-normed Fit Index (NNFI)	**0.985**	0.919	0.946	0.960	0.952
Root Mean Square Error Of Approximation (RMSEA)	**0.078**	0.182	0.148	0.128	0.140
Weighted Root Mean Square Residual (WRMR)	**1.277**	3.255	2.669	2.306	2.498

Note. The results based on unweighted data. Factor structures based on conceptual layout of items in Table 1 of the original manuscript. The three-factor combines Permissiveness and Harshness in one factor, the two-factor combines Permissiveness and Harshness for the first factor and Sensitivity and Detachment for the second factor. The four-factor structure shown in Table 1 failed to converge, and thus no results are shown for it.

[a]Item 18 and 24 placed on the Sensitivity/Detachment combined factor.

Table B4

Measures of Fit from the Bi-factor, One-, Two- and Three-factor Confirmatory Factor Analyses Based on Weighted Data for the Homes

	Bi-factor	One Factor	Two Factors (Original)	Two Factors (Modified) [a]	Three factors
Number of Items	26	26	26	26	26
Scaled Chi-Square	1227.947	5409.930	3660.033	2860.183	3283.911
d.f. for Chi-square	273	299	298	298	296
P-value	<.001	<.001	<.001	<.001	<.001
Scaling Correction Factor	0.486	0.618	0.619	0.611	0.608
Comparative Fit Index (CFI)	**0.986**	0.927	0.952	0.963	0.957
Non-normed Fit Index (NNFI)	**0.984**	0.921	0.948	0.960	0.953
Root Mean Square Error Of Approximation (RMSEA)	**0.069**	0.152	0.124	0.108	0.117
Weighted Root Mean Square Residual (WRMR)	**1.217**	2.881	2.371	2.083	2.226

Note. The results based on unweighted data. Factor structures based on conceptual layout of items in Table 1 of the original manuscript. The three-factor combines Permissiveness and Harshness in one factor, the two-factor combines Permissiveness and Harshness for the first factor and Sensitivity and Detachment for the second factor. The four-factor structure shown in Table 1 failed to converge, and thus no results are shown for it.

[a]Item 18 and 24 placed on the Sensitivity/Detachment combined factor.

Table B5

Correlations between the Bi-Factor Measures and the Arnett CIS Raw Scores

	Bi-factor Generalized Partial Credit Model	
	Homes (2-Year Sample)	Centers (4-Year Sample)
Raw Scores		
Total Score	.90*	.90*
Sensitivity Subscale	.94*	.96*
Harshness Subscale	.43*	.62*
Detachment Subscale	.68*	.59*
Permissiveness Subscale	.46*	.64*

Note. n = 650 at 2-years. n = 1,050 at 4-years.

Table B6

Standardized Regression Coefficients for Child Outcomes Predicted by the Arnett CIS Bi-factor Measure and Total Raw Score in Home-Based Child Care (2-Year Sample).

	Arnett CIS Bi-factor IRT Measure	Arnett CIS Total Raw Score
Cognitive		
BSF-R Mental Score	.11*	.12*
Socio-Emotional		
BSF-R Social Competence	.15*	.14*
BSF-R Emotional and Behavioral Regulation	.15*	.14*
BSF-R Attention and Concentration	.14*	.14*
Child Temperament Index	-.05	-.04
Health		
Child Excellent Health [a]	-.01	.00
Summary Score: Absence of Illnesses	.00	-.04
No Injury that Required Doctor's Visit [a]	.01	.00
BSF-R Motor Score	.02	-.01

Note. n = 650 in all cases except the BSF-R measures, where n = 600. Values are standardized regression coefficients from models that adjust for the child, family, community and child care covariates listed in Appendix A. Each cell represents a separate regression, with the child outcome listed in the row and the focal predictor listed in the column. Results weighted by the ECLS-B sampling weight (W22P0). [a] For dichotomous outcomes, values are changes in predicted probabilities for a one standard deviation increase in the predictor of interest, centered at the mean, with all covariates at their means. * $p < .05$.

Table B7

Standardized Regression Coefficients for Child Outcomes Predicted by the Arnett CIS Bifactor Measure and Total Raw Score in Center-Based Child Care (4-Year Sample).

	Arnett CIS Bi-factor IRT Measure	Arnett CIS Total Raw Score
Cognitive		
Math Composite Score	-.01	-.01
Reading Composite Score	.03	.01
Socio-Emotional		
Parent Report		
Social Competence	.04	.00
Emotional and Behavioral Regulation	-.02	-.05
Attention and Concentration	-.02	-.07
Teacher Report		
Social Competence	.00	.03
Emotional and Behavioral Regulation	.04	-.01
Attention and Concentration	.05	.01
Health		
Child Excellent Health [a]	.02	.03
Summary Score: Absence of Illnesses	.02	.00
No Injury that Required Doctor's Visit [a]	.06*	.05*

Note. n = 1,000 in all cases. Values are standardized regression coefficients from models that adjust for the child, family, community and child care covariates listed in Appendix A. Each cell represents a separate regression, with the child outcome listed in the row and the focal predictor listed in the column. Results weighted by the ECLS-B sampling weight (W33P0). [a] For dichotomous outcomes, values are changes in predicted probabilities for a one standard deviation increase in the predictor of interest, centered at the mean, with all covariates at their means. * $p < .05$.