

Supplemental Table 1

Descriptive statistics for the measures of parental discipline, inhibitory control, and covariates

Construct	N	M	SD	Range
Harsh discipline T1 (composite score)	118	1.69	0.41	1.00 – 3.69
Harsh discipline T2 (composite score)	90	1.63	0.35	1.00 – 2.62
Inductive discipline T1 (composite score)	118	4.21	0.51	2.429 – 5.00
Inductive discipline T2 (composite score)	90	4.22	0.53	2.57 – 5.00
IC composite score T1	118	-0.03	0.77	-1.96 – 1.29
IC composite score T2	91	-0.01	0.73	-2.53 – 1.05
<i>Go/No-Go</i> T1 (d')	110	3.05	0.69	1.38 – 3.77
<i>Simon</i> T1 (accuracy)	111	0.85	0.13	0.40 – 1.00
<i>Flanker</i> T1 (accuracy)	115	0.76	0.24	0.17 – 1.00
<i>Global-Local</i> T1 (accuracy)	117	0.68	0.19	0.31 – 1.00
<i>Go/No-Go</i> T2 (d')	90	3.23	0.52	1.83 – 3.77
<i>Simon</i> T2 (accuracy)	88	0.87	0.12	0.45 – 1.00
<i>Flanker</i> T2 (accuracy)	90	0.90	0.13	0.42 – 1.00
<i>Global-Local</i> T2 (accuracy)	91	0.78	313.15	0.25 – 1.00
Child age (years)	118	5.49	0.86	4.27 – 6.65
Child sex (% male)	118	53%		0 – 1
Child ethnicity (% European Canadian)	118	39%		0 – 1
Parental education (years)	118	16.90	2.38	10 – 20
Financial stress	118	1.69	0.97	1.00 – 5.00

Note. IC = Inhibitory control. T1 = time 1. T2 = time 2.

Supplemental Table 2

Correlations between measures of parental discipline, inhibitory control, and covariates

Measures	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
1. Harsh discipline T1	.81**	-.12	-.16	.00	-.15	.03	-.18 ⁺	.07	.02	-.07	-.12	-.15	-.08	.06	.10	.18 ⁺	-.05	.13
2. Harsh discipline T2	—	-.39**	-.37**	-.02	-.13	-.05	-.21*	.01	.01	-.07	-.08	-.18 ⁺	-.06	-.10	.04	.07	-.03	.07
3. Inductive discipline T1		—	.77**	.07	-.06	.19*	.10	.03	.12	.08	.22*	.11	.20 ⁺	.05	-.14	.05	.15	.03
4. Inductive discipline T2			—	.04	-.01	.12	.16	.04	.07	.01	.21 ⁺	.13	.14	.03	.00	.08	.11	.04
5. Go/No-Go T1				—	.34**	.44**	.34**	.38**	.10	.39**	.47**	.50**	.44**	.32**	.06	-.02	.14	-.05
6. Simon T1					—	.20*	.33**	.15	.36**	.25*	.30**	.71**	.45**	.29**	.01	.05	.07	.02
7. Flanker T1						—	.38**	.21*	.09	.45**	.44**	.73**	.47**	.59**	.06	.01	.13	-.10
8. Global-Local T1							—	.13	-.01	.40**	.41**	.79**	.38**	.38**	-.03	-.09	.198*	-.15
9. Go/No-Go T2								—	.09	.15	.33**	.23*	.24*	.11	.06	-.04	.04	-.03
1. Simon T2									—	.07	.23*	.19 ⁺	.64**	.17	-.09	.02	-.03	.15
11. Flanker T2										—	.41**	.51**	.72**	.50**	.10	.11	.12	-.09
12. Global-Local T2											—	.53**	.78**	.45**	-.07	-.11	-.04	.02
13. IC composite T1												—	.56**	.56**	.01	-.05	.17 ⁺	-.09
14. IC composite T2													—	.52**	-.02	.01	.02	.03
15. Age														—	.08	.06	-.07	-.08
16. Sex															—	-.08	-.05	.15
17. Ethnicity																—	.12	.01
18. Parental education																	—	-.11
19. Financial stress																		—

Note. T1 = time 1. T2 = time 2. IC = Inhibitory control. ⁺ $p < .10$; * $p < .05$; ** $p < .01$.

Supplemental Table 3

Age group differences in harsh discipline, inductive discipline, and inhibitory control at time 1 and time 2

Construct	<u>4-year-olds</u>			<u>5-year-olds</u>			<u>6-year-olds</u>			F	<i>p</i>
	N	M	SD	N	M	SD	N	M	SD		
Harsh discipline T1	39	1.66	.29	30	1.70	.48	49	1.71	.44	.14	.87
Harsh discipline T2	29	1.69	.27	23	1.56	.41	38	1.61	.37	.99	.38
Inductive discipline T1	39	4.14	.46	30	4.35	.49	49	4.18	.55	1.60	.21
Inductive discipline T2	29	4.22	.39	23	4.22	.58	38	4.22	.59	.00	1.00
IC composite T1	39	-.66	.63	30	.16	.67	49	.35	.60	29.58	<.001
IC composite T2	29	-.58	.73	24	.17	.68	38	.31	.47	18.36	<.001

Note. T1 = time 1. T2 = time 2. IC = Inhibitory control. T1 df = 2, 115. T2 df = 2, 87. Post hoc comparisons using a Bonferroni correction indicated 4-year-olds had significantly lower IC scores at T1 and T2 than 5-year-olds ($ps < .001$) and 6-year-olds ($ps < .001$). IC scores for 5- and 6-year-olds did not significantly differ at either T1 ($p = .62$) or T2 ($p = 1.00$).

Supplemental Table 4

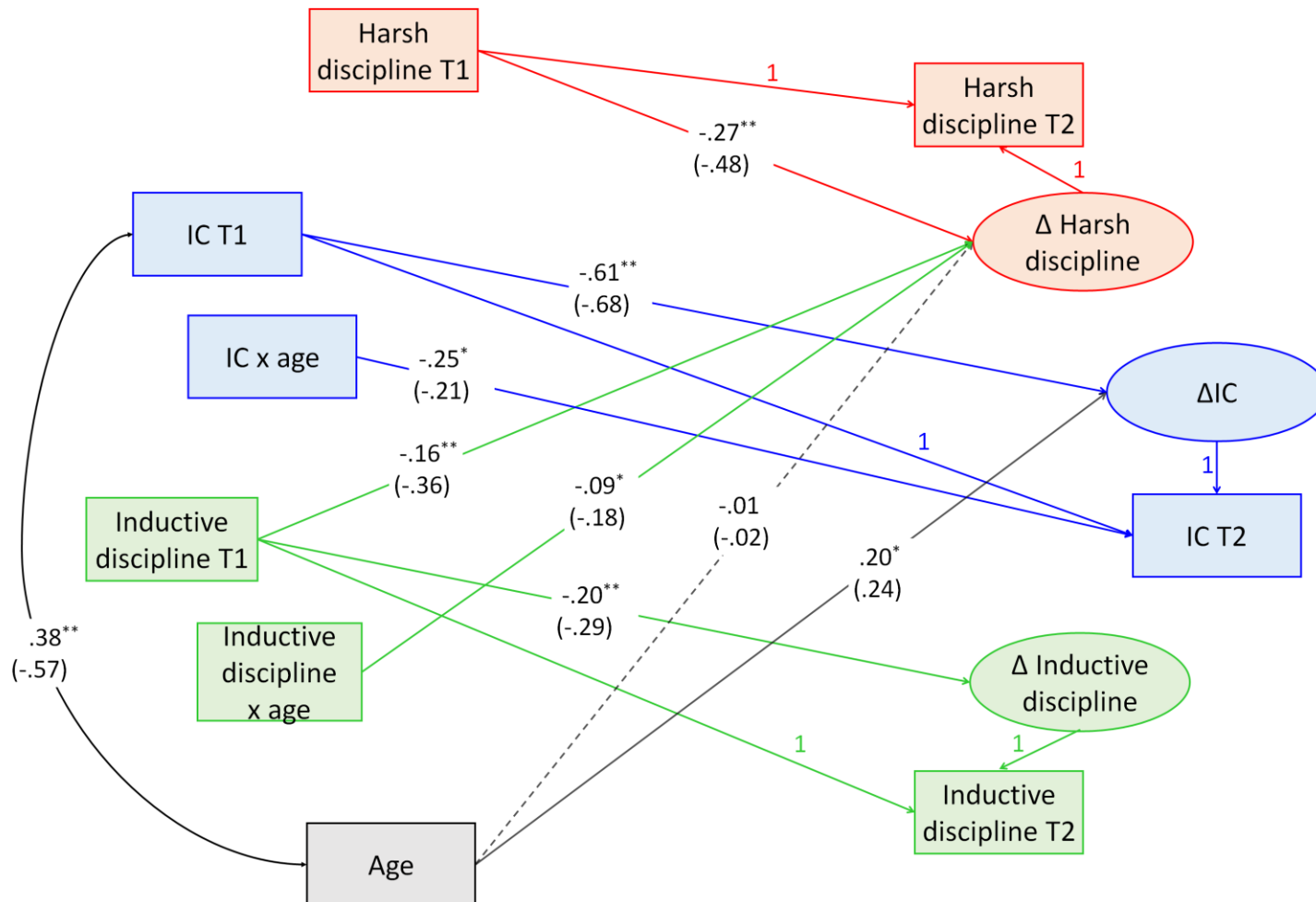
Model fit indices for longitudinal measurement invariance models for harsh discipline, inductive discipline, and inhibitory control

Model	χ^2	<i>df</i>	<i>p</i>	<i>RMSEA</i>	<i>CFI</i>	<i>SRMR</i>	Model comparison	$\Delta\chi^2$	<i>df</i>	<i>p</i>
<u>Harsh and inductive discipline</u>										
1. Configural invariance	57.223	42	.06	.06	.98	.06				
2. Metric invariance	62.554	46	.05	.06	.98	.07	1 vs. <u>2</u>	5.33	4	.25
3. Scalar invariance	62.794	50	.11	.05	.98	.07	2 vs. <u>3</u>	.24	4	.99
<u>Inhibitory control</u>										
1. Configural invariance	12.802	5	.03	.12	.97	.05				
2. Partial metric invariance for the <i>Flanker</i> and <i>Global-Local</i> task indicators ^a	12.803	7	.08	.08	.98	.05	1 vs. <u>2</u>	.001	2	1.00
3. Partial scalar invariance for the <i>Global-Local</i> and <i>Simon</i> task indicators	12.863	8	.12	.07	.98	.05	2 vs. <u>3</u>	.02	2	.81

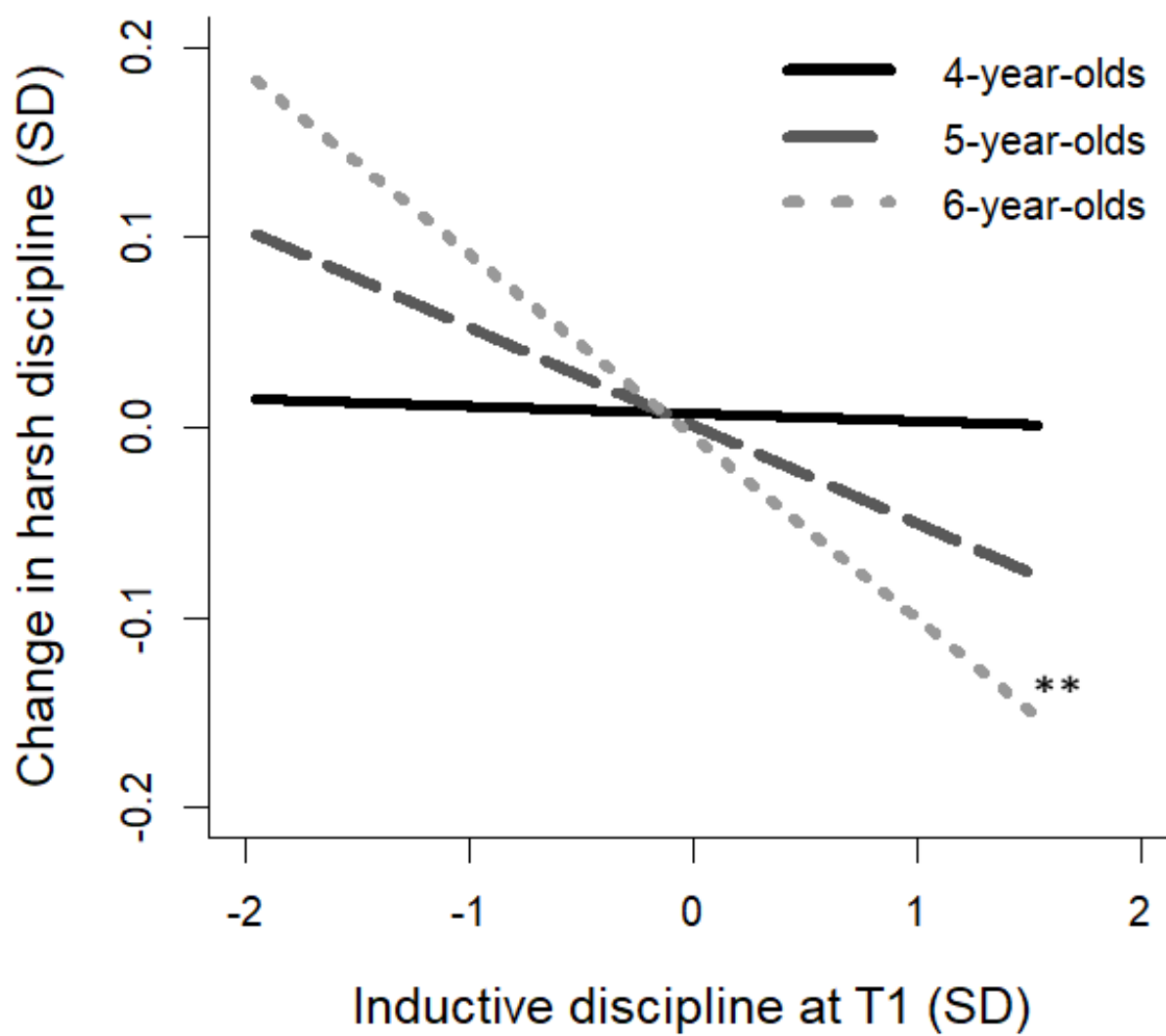
Notes. For model comparisons, the preferred model is underlined. Where two nested models showed equivalent fit to the data, the more parsimonious model was preferred.

^aTo identify the model, the residual variance for the *Flanker* indicator at Time 2 needed to be fixed to 0.

Supplemental Figure 1. Path diagram illustrating child age as a moderator of the bidirectional relations between parents' harsh discipline, inductive discipline, and children's inhibitory control, controlling for the effects of child sex, ethnicity, parental education, and financial stress. Only significant paths are depicted. Both unstandardized and standardized (in parentheses) parameters are presented; error variances and covariates are not shown. Δ = change. IC = inhibitory control. T1 = time 1. T2 = time 2. $^+p < .10$; $^*p < .05$; $^{**}p < .01$.



Supplemental Figure 2. Effect of parents' inductive discipline at time 1 on change in harsh discipline for parents of 4-, 5-, and 6-year-olds. T1 = time 1. SD = standard deviation. $**p < .01$.



Supplemental Figure 3. Effect of children's inhibitory control at time 1 on change in inhibitory control for 4-, 5-, and 6-year-olds. T1 = time 1. SD = standard deviation. ** $p < .01$.

