

## Early origins of autism comorbidity: Neuropsychiatric traits correlated in childhood are independent in infancy, *Journal of Abnormal Child Psychology*

**Online Resource 11** Longitudinal predictions of internalizing traits, externalizing traits, and QATs at 36 months from *Behavior Problem, Competence, and SCI* indices at 18 months

	1. Internalizing at 36 months			2. Externalizing at 36 months			3. QATs at 36 months			4. QATs at 36 months (post-hoc)		
	Step 1: Problems	Step 2: Problems + Competence	Step 3: Problems + SCI + Competence	Step 1: Problems	Step 2: Problems + Competence	Step 3: Problems + SCI + Competence	Step 1: SCI	Step 2: SCI + Competence	Step 3: Problems + SCI + Competence	Step 1: RSB	Step 2: RSB + Competence	Step 3: Problems + RSB + Competence
Problems												
<i>Estimate</i>	0.37***	0.37***	0.34***	0.30***	0.30***	0.30***	NA	NA	0.15**	NA	NA	0.11
<i>SE</i>	(.07)	(.07)	(.07)	(.07)	(.07)	(.07)	NA	NA	(.06)	NA	NA	(.06)
Competence												
<i>Estimate</i>	NA	-0.07	0.01	NA	0.00	-0.01	NA	-.22**	-.24**	NA	-.17*	-.19*
<i>SE</i>	NA	(.07)	(.09)	NA	(.07)	(.09)	NA	(.08)	(.08)	NA	(.08)	(.08)
SCI/ RSB												
<i>Estimate</i>	NA	NA	0.14	NA	NA	-0.02	0.55***	0.41***	0.35***	0.59***	0.49***	0.44***
<i>SE</i>	NA	NA	(.09)	NA	NA	(.09)	(.06)	(.08)	(.08)	(.06)	(.07)	(.08)
AIC	475.98	477.05	476.52	486.69	488.69	490.62	541.26	536.23	532.30	524.58	521.52	520.41
BIC	488.86	493.15	495.84	499.57	504.79	509.95	554.83	553.19	552.67	538.15	538.49	540.77
Log Likelihood	-233.99	-233.52	-232.26	-239.34	-239.34	-239.31	-266.6	-263.11	-260.15	-258.3	-255.76	-254.21
Num. obs	185	185	185	185	185	185	220	220	220	220	220	220
Num. groups:	96	96	96	96	96	96	111	111	111	111	111	111
Twin pairs (Intercept)												
Var:	0.33	0.35	0.34	0.40	0.40	0.40	0.37	0.37	0.30	0.30	0.31	0.27
Residual	0.47	0.36	0.46	0.47	0.47	0.47	0.38	0.37	0.39	0.38	0.36	0.38
Marginal R <sup>2</sup>	0.15	0.15	0.16	0.09	0.09	0.09	0.26	0.29	0.32	0.31	0.33	0.35
Model comparisons	Step 1 > Step 2	Step 2 > Step 3		Step 1 > Step 2	Step 2 > Step 3		Step 2 > Step 1	Step 3 > Step 2		Step 2 > Step 1	Step 2 > Step 3	
	$\chi^2 = 0.9331$	$\chi^2 = 2.5267$		$\chi^2 = 0.0000$	$\chi^2 = 0.0626$		$\chi^2 = 7.0289^{**}$	$\chi^2 = 5.9229^*$		$\chi^2 = 5.0554^*$	$\chi^2 = 3.1113$	

\*\*\* p < 0.001, \*\* p < 0.01, \* p < 0.05;  $\chi^2$  = chi-squared; marginal R<sup>2</sup> = variance accounted for by fixed factors (i.e., Problems, Competence, RSB)