

Path Analysis

Models Info

Estimation Method	DWLS
Number of observations	106
Free parameters	30
Converged	TRUE
Loglikelihood unrestricted model	
Model	<code>`relationship violence` ~ `executive function` + `maternal education` + `adolescent substance use` + `maternal race` + `childhood maltreatment` + birthweight + `prenatal cocaine exposure status`</code> <code>`childhood maltreatment` ~ `maternal race` + `maternal education` + birthweight + `prenatal cocaine exposure status`</code> <code>`executive function` ~ `adolescent substance use` + `childhood maltreatment` + `maternal education` + birthweight + `maternal race` + `prenatal cocaine exposure status`</code> <code>`adolescent substance use` ~ `maternal race` + `childhood maltreatment` + birthweight + `prenatal cocaine exposure status` + `maternal education`</code>

Note. lavaan WARNING: only 989 bootstrap draws were successful

Overall Tests

Model Tests			
Label	X ²	df	p
User Model	0.241	4	0.993
Baseline Model	62.633	26	< .001

Fit Indices				
SRMR	RMSEA	RMSEA 95% CI		RMSEA p
		Lower	Upper	
0.007	0.000	0.000	0.000	0.996

Fit Indices					
CFI	TLI	RNI	GFI	adj. GFI	pars. GFI
1.000	1.667	1.103	1.000	0.999	0.074

Estimates

R-squared

Variable	R ²	95% Confidence Intervals		Wald X ²	df	p
		Lower	Upper			
relationship violence	0.1630	0.053	0.305	30.69	8	< .001
childhood maltreatment	0.0106	0.008	0.083	1.56	5	0.906
executive function	0.1317	0.034	0.268	17.77	7	0.013
adolescent substance use	0.0880	0.013	0.213	25.12	6	< .001

Parameter Estimates

Dep	Pred	Estimate	SE	95% Confidence Intervals		β	z	p
				Lower	Upper			
relationship violence	executive function	0.2964	0.1170	0.0520	0.5194	0.29637	2.5329	0.011
relationship violence	maternal education1	0.2164	0.2187	-0.2266	0.6284	0.10151	0.9896	0.322
relationship violence	adolescent substance use	0.0430	0.1042	-0.1527	0.2465	0.04301	0.4130	0.680
relationship violence	maternal race1	0.5367	0.5373	-0.3362	1.7328	0.11433	0.9990	0.318
relationship violence	maternal race2	-0.4325	0.2376	-0.9277	0.0126	-0.15147	-1.8204	0.069
relationship violence	childhood maltreatment	0.0150	0.0957	-0.1685	0.2099	0.01498	0.1565	0.876
relationship violence	birthweight	-7.68e-6	7.06e-5	-1.34e-4	1.37e-4	-0.00475	-0.1088	0.913
relationship violence	prenatal cocaine exposure status	-0.0455	0.1188	-0.2869	0.1775	-0.03847	-0.3829	0.702
childhood maltreatment	maternal race1	-0.0330	0.3419	-0.6996	0.6650	-0.00703	-0.0965	0.923
childhood maltreatment	maternal race2	-0.0487	0.2888	-0.5888	0.5719	-0.01705	-0.1685	0.866
childhood maltreatment	maternal education1	0.1995	0.1847	-0.1686	0.5633	0.09358	1.0802	0.280
childhood maltreatment	birthweight	-5.80e-5	6.32e-5	-1.71e-4	7.85e-5	-0.03589	-0.9179	0.359
childhood maltreatment	prenatal cocaine exposure status	0.0143	0.1134	-0.2165	0.2343	0.01211	0.1263	0.899
executive function	adolescent substance use	0.3212	0.0913	0.1545	0.5066	0.32125	3.5173	< .001
executive function	childhood maltreatment	0.0596	0.1056	-0.1247	0.2795	0.05958	0.5641	0.573
executive function	maternal education1	0.2223	0.2062	-0.2084	0.6020	0.10424	1.0780	0.281
executive function	birthweight	-2.03e-5	6.83e-5	-1.50e-4	1.12e-4	-0.01254	-0.2970	0.766
executive function	maternal race1	0.2638	0.4268	-0.5663	1.0700	0.05619	0.6180	0.537
executive function	maternal race2	-0.4846	0.2835	-1.0623	0.0381	-0.16969	-1.7093	0.087
executive function	prenatal cocaine exposure status	-0.0820	0.1177	-0.3025	0.1365	-0.06930	-0.6965	0.486
adolescent substance use	maternal race1	0.2980	0.2519	-0.1302	0.8453	0.06348	1.1831	0.237
adolescent substance use	maternal race2	0.0874	0.3333	-0.6112	0.7314	0.03059	0.2621	0.793
adolescent substance use	childhood maltreatment	0.0146	0.1187	-0.2079	0.2580	0.01465	0.1234	0.902
adolescent substance use	birthweight	5.42e-5	6.68e-5	-8.45e-5	1.86e-4	0.03351	0.8109	0.417
adolescent substance use	prenatal cocaine exposure status	0.1805	0.1312	-0.0720	0.4456	0.15261	1.3752	0.169
adolescent substance use	maternal education1	-0.4286	0.1696	-0.7638	-0.1284	-0.20100	-2.5269	0.012

in this model, adolescent SU is a direct predictor of dating violence, as is mdrug path form mdrug ->

Variable 1	Variable 2	Estimate	SE	95% Confidence Intervals		β	z	p	Method	Type
				Lower	Upper					
relationship violence	relationship violence	0.83702	0.110	0.55785	1.00494	0.83702	7.61	< .001	Estim	Residuals
childhood maltreatment	childhood maltreatment	0.98943	0.202	0.60346	1.37737	0.98943	4.90	< .001	Estim	Residuals
executive function	executive function	0.86826	0.104	0.62079	1.02993	0.86826	8.36	< .001	Estim	Residuals
adolescent substance use	adolescent substance use	0.91197	0.140	0.56547	1.11966	0.91197	6.51	< .001	Estim	Residuals
maternal education1	maternal education1	0.21995	0.000	0.21995	0.21995	1.00000			Sample	Variables
maternal education1	maternal race1	-0.02282	0.000	-0.02282	-0.02282	-0.22845			Sample	Variables
maternal education1	maternal race2	-0.00180	0.000	-0.00180	-0.00180	-0.01094			Sample	Variables
maternal education1	birthweight	7.58688	0.000	7.58688	7.58688	0.02616			Sample	Variables
maternal education1	prenatal cocaine exposure status	-0.13046	0.000	-0.13046	-0.13046	-0.32899			Sample	Variables
maternal race1	maternal race1	0.04537	0.000	0.04537	0.04537	1.00000			Sample	Variables
maternal race1	maternal race2	-0.00674	0.000	-0.00674	-0.00674	-0.09033			Sample	Variables
maternal race1	birthweight	0.67700	0.000	0.67700	0.67700	0.00514			Sample	Variables
maternal race1	prenatal cocaine exposure status	-0.00350	0.000	-0.00350	-0.00350	-0.01946			Sample	Variables
maternal race2	maternal race2	0.12264	0.000	0.12264	0.12264	1.00000			Sample	Variables
maternal race2	birthweight	36.60243	0.000	36.60243	36.60243	0.16902			Sample	Variables
maternal race2	prenatal cocaine exposure status	-0.10575	0.000	-0.10575	-0.10575	-0.35714			Sample	Variables
birthweight	birthweight	382391.84771	0.000	382391.84771	382391.84771	1.00000			Sample	Variables
birthweight	prenatal cocaine exposure status	-174.56864	0.000	-174.56864	-174.56864	-0.33388			Sample	Variables
prenatal cocaine exposure status	prenatal cocaine exposure status	0.71491	0.000	0.71491	0.71491	1.00000			Sample	Variables

Defined Parameters

Label	Description	Parameter	Estimate	SE	95% Confidence Intervals		β	z	p
					Lower	Upper			
IE1	maternal education1 \Rightarrow childhood maltreatment \Rightarrow relationship violence	p11*p6	0.003	0.024	-0.040	0.065	0.001	0.125	0.900
IE2	maternal education1 \Rightarrow childhood maltreatment \Rightarrow executive function \Rightarrow relationship violence	p11*p15*p1	0.004	0.009	-0.013	0.024	0.002	0.403	0.687
IE3	maternal education1 \Rightarrow childhood maltreatment \Rightarrow adolescent substance use \Rightarrow relationship violence	p11*p23*p3	0.000	0.004	-0.009	0.006	0.000	0.032	0.974
IE4	maternal education1 \Rightarrow childhood maltreatment \Rightarrow adolescent substance use \Rightarrow executive function \Rightarrow relationship violence	p11*p23*p14*p1	0.000	0.003	-0.007	0.007	0.000	0.088	0.930
IE5	maternal education1 \Rightarrow executive function \Rightarrow relationship violence	p16*p1	0.066	0.072	-0.047	0.240	0.031	0.917	0.359
IE6	maternal education1 \Rightarrow adolescent substance use \Rightarrow relationship violence	p26*p3	-0.018	0.049	-0.132	0.062	-0.009	-0.374	0.709
IE7	maternal education1 \Rightarrow adolescent substance use \Rightarrow executive function \Rightarrow relationship violence	p26*p14*p1	-0.041	0.024	-0.098	-0.003	-0.019	-1.666	0.096
IE8	adolescent substance use \Rightarrow executive function \Rightarrow relationship violence	p14*p1	0.095	0.048	0.017	0.209	0.095	1.976	0.048
IE9	maternal race1 \Rightarrow childhood maltreatment \Rightarrow relationship violence	p9*p6	-0.000	0.035	-0.071	0.088	-0.000	-0.014	0.989
IE10	maternal race1 \Rightarrow childhood maltreatment \Rightarrow executive function \Rightarrow relationship violence	p9*p15*p1	-0.001	0.013	-0.028	0.031	-0.000	-0.044	0.965
IE11	maternal race1 \Rightarrow childhood maltreatment \Rightarrow adolescent substance use \Rightarrow relationship violence	p9*p23*p3	-0.000	0.004	-0.008	0.011	-0.000	-0.005	0.996
IE12	maternal race1 \Rightarrow childhood maltreatment \Rightarrow adolescent substance use \Rightarrow executive function \Rightarrow relationship violence	p9*p23*p14*p1	-0.000	0.004	-0.009	0.010	-0.000	-0.011	0.991
IE13	maternal race1 \Rightarrow executive function \Rightarrow relationship violence	p18*p1	0.078	0.136	-0.160	0.389	0.017	0.576	0.565
IE14	maternal race1 \Rightarrow adolescent substance use \Rightarrow relationship violence	p21*p3	0.013	0.041	-0.073	0.094	0.003	0.314	0.754
IE15	maternal race1 \Rightarrow adolescent substance use \Rightarrow executive function \Rightarrow relationship violence	p21*p14*p1	0.028	0.030	-0.009	0.111	0.006	0.954	0.340
IE16	maternal race2 \Rightarrow childhood maltreatment \Rightarrow relationship violence	p10*p6	-0.001	0.029	-0.064	0.064	-0.000	-0.025	0.980
IE17	maternal race2 \Rightarrow childhood maltreatment \Rightarrow executive function \Rightarrow relationship violence	p10*p15*p1	-0.001	0.012	-0.022	0.025	-0.000	-0.073	0.942
IE18	maternal race2 \Rightarrow childhood maltreatment \Rightarrow adolescent substance use \Rightarrow relationship violence	p10*p23*p3	-0.000	0.004	-0.006	0.008	-0.000	-0.008	0.993
IE19	maternal race2 \Rightarrow childhood maltreatment \Rightarrow adolescent substance use \Rightarrow executive function \Rightarrow relationship violence	p10*p23*p14*p1	-0.000	0.003	-0.008	0.007	-0.000	-0.020	0.984
IE20	maternal race2 \Rightarrow executive function \Rightarrow relationship violence	p19*p1	-0.144	0.102	-0.390	0.012	-0.050	-1.406	0.160
IE21	maternal race2 \Rightarrow adolescent substance use \Rightarrow relationship violence	p22*p3	0.004	0.039	-0.081	0.073	0.001	0.096	0.924
IE22	maternal race2 \Rightarrow adolescent substance use \Rightarrow executive function \Rightarrow relationship violence	p22*p14*p1	0.008	0.036	-0.054	0.104	0.003	0.234	0.815
IE23	childhood maltreatment \Rightarrow executive function \Rightarrow relationship violence	p15*p1	0.018	0.034	-0.037	0.105	0.018	0.513	0.608

Defined Parameters

Label	Description	Parameter	Estimate	SE	95% Confidence Intervals		β	z	p
					Lower	Upper			
IE24	childhood maltreatment \Rightarrow adolescent substance use \Rightarrow relationship violence	p23*p3	0.001	0.013	-0.031	0.023	0.001	0.049	0.961
IE25	childhood maltreatment \Rightarrow adolescent substance use \Rightarrow executive function \Rightarrow relationship violence	p23*p14*p1	0.001	0.012	-0.025	0.026	0.001	0.113	0.910
IE26	birthweight \Rightarrow childhood maltreatment \Rightarrow relationship violence	p12*p6	-0.000	0.000	-0.000	0.000	-0.001	-0.113	0.910
IE27	birthweight \Rightarrow childhood maltreatment \Rightarrow executive function \Rightarrow relationship violence	p12*p15*p1	-0.000	0.000	-0.000	0.000	-0.001	-0.350	0.726
IE28	birthweight \Rightarrow childhood maltreatment \Rightarrow adolescent substance use \Rightarrow relationship violence	p12*p23*p3	-0.000	0.000	-0.000	0.000	-0.000	-0.033	0.974
IE29	birthweight \Rightarrow childhood maltreatment \Rightarrow adolescent substance use \Rightarrow executive function \Rightarrow relationship violence	p12*p23*p14*p1	-0.000	0.000	-0.000	0.000	-0.000	-0.084	0.933
IE30	birthweight \Rightarrow executive function \Rightarrow relationship violence	p17*p1	-0.000	0.000	-0.000	0.000	-0.004	-0.288	0.773
IE31	birthweight \Rightarrow adolescent substance use \Rightarrow relationship violence	p24*p3	0.000	0.000	-0.000	0.000	0.001	0.226	0.821
IE32	birthweight \Rightarrow adolescent substance use \Rightarrow executive function \Rightarrow relationship violence	p24*p14*p1	0.000	0.000	-0.000	0.000	0.003	0.753	0.451
IE33	prenatal cocaine exposure status \Rightarrow childhood maltreatment \Rightarrow relationship violence	p13*p6	0.000	0.011	-0.019	0.030	0.000	0.020	0.984
IE34	prenatal cocaine exposure status \Rightarrow childhood maltreatment \Rightarrow executive function \Rightarrow relationship violence	p13*p15*p1	0.000	0.004	-0.011	0.009	0.000	0.057	0.954
IE35	prenatal cocaine exposure status \Rightarrow childhood maltreatment \Rightarrow adolescent substance use \Rightarrow relationship violence	p13*p23*p3	0.000	0.001	-0.003	0.003	0.000	0.007	0.995
IE36	prenatal cocaine exposure status \Rightarrow childhood maltreatment \Rightarrow adolescent substance use \Rightarrow executive function \Rightarrow relationship violence	p13*p23*p14*p1	0.000	0.001	-0.003	0.003	0.000	0.015	0.988
IE37	prenatal cocaine exposure status \Rightarrow executive function \Rightarrow relationship violence	p20*p1	-0.024	0.037	-0.113	0.045	-0.021	-0.653	0.513
IE38	prenatal cocaine exposure status \Rightarrow adolescent substance use \Rightarrow relationship violence	p25*p3	0.008	0.024	-0.045	0.057	0.007	0.328	0.743
IE39	prenatal cocaine exposure status \Rightarrow adolescent substance use \Rightarrow executive function \Rightarrow relationship violence	p25*p14*p1	0.017	0.018	-0.006	0.063	0.015	0.966	0.334

Contrasts Definition

Name	Contrast
maternal race1	Hispanic - African American
maternal race2	Caucasian - African American
maternal education1	highschool - below highschool