

## Cross-lagged Panel Model of Positive and Negative Social Exchanges

```

title: Cross-lag panel model of positive and negative exchanges;

data: file=c:\jason\mplus\semclass\long1.dat; format=4f9.6;
      listwise=on;

variable: names = pos posf neg negf;
          missing=blank;

analysis: type=general;
          estimator=mlm;

model: negf on neg pos;
       posf on neg pos;
       neg with pos;
       negf with posf;

output: stdyx;
  
```

**(output excerpts)**

Number of observations 151

TESTS OF MODEL FIT

Chi-Square Test of Model Fit

Value	0.000*
Degrees of Freedom	0
P-Value	0.0000
Scaling Correction Factor	Undefined
for MLM	

\* The chi-square value for MLM, MLMV, MLR, ULSMV, WLSM and WLSMV cannot be used for chi-square difference tests. MLM, MLR and WLSM chi-square difference testing is described in the Mplus Technical Appendices at [www.statmodel.com](http://www.statmodel.com). See chi-square difference testing in the index of the Mplus User's Guide.

CFI/TLI

CFI	1.000
TLI	1.000

RMSEA (Root Mean Square Error Of Approximation)

Estimate	0.000
----------	-------

SRMR (Standardized Root Mean Square Residual)

Value	0.000
-------	-------

MODEL RESULTS

		Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
NEGF	ON				
	NEG	0.630	0.093	6.740	0.000
	POS	-0.075	0.054	-1.395	0.163
POSF	ON				
	NEG	-0.139	0.103	-1.353	0.176
	POS	0.532	0.076	6.968	0.000
NEG	WITH				
	POS	-0.191	0.051	-3.734	0.000
NEGF	WITH				
	POSF	-0.069	0.021	-3.233	0.001

Means				
POS	2.778	0.062	44.634	0.000
NEG	0.629	0.044	14.301	0.000
Intercepts				
POSF	1.476	0.265	5.562	0.000
NEGF	0.515	0.185	2.784	0.005
Variances				
POS	0.585	0.079	7.410	0.000
NEG	0.292	0.053	5.517	0.000
Residual Variances				
POSF	0.199	0.027	7.461	0.000
NEGF	0.178	0.026	6.933	0.000

STANDARDIZED MODEL RESULTS

STDYX Standardization

		Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
NEGF	ON				
NEG		0.607	0.068	8.910	0.000
POS		-0.102	0.073	-1.410	0.159
POSF	ON				
NEG		-0.119	0.085	-1.398	0.162
POS		0.644	0.064	10.119	0.000
NEG	WITH				
POS		-0.463	0.088	-5.256	0.000
NEGF	WITH				
POSF		-0.366	0.092	-3.976	0.000
Means					
POS		3.632	0.295	12.311	0.000
NEG		1.164	0.087	13.426	0.000
Intercepts					
POSF		2.338	0.508	4.606	0.000
NEGF		0.917	0.334	2.750	0.006
Variances					
POS		1.000	0.000	999.000	999.000
NEG		1.000	0.000	999.000	999.000
Residual Variances					
POSF		0.500	0.061	8.252	0.000
NEGF		0.564	0.068	8.311	0.000

R-SQUARE

Observed Variable	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
POSF	0.500	0.061	8.253	0.000
NEGF	0.436	0.068	6.425	0.000