

## PSY 9556B (March 19) Mediation and Moderation continued

### Simulation of a Longitudinal Mediation Data Set

```
TITLE: Data generation for Longitudinal Mediation Model.
MONTECARLO:
NAMES ARE T1y1 T1y2 T1y3 T2y1 T2y2 T2y3 T3y1 T3y2 T3y3 T4y1 T4y2 T4y3
T1x1 T1x2 T1x3 T2x1 T2x2 T2x3 T3x1 T3x2 T3x3 T4x1 T4x2 T4x3
T1m1 T1m2 T1m3 T2m1 T2m2 T2m3 T3m1 T3m2 T3m3 T4m1 T4m2 T4m3;
NOBSERVATIONS = 1500;
NREPS = 5;
SEED = 53487;
SAVE = mediation.dat;
MODEL POPULATION:
T1Y by T1y1*.7 T1y2*.7 T1y3*.7;
T2Y by T2y1*.7 T2y2*.7 T2y3*.7;
T3Y by T3y1*.7 T3y2*.7 T3y3*.7;
T4Y by T4y1*.7 T4y2*.7 T4y3*.7;
T1X by T1x1*.7 T1x2*.7 T1x3*.7;
T2X by T2x1*.7 T2x2*.7 T2x3*.7;
T3X by T3x1*.7 T3x2*.7 T3x3*.7;
T4X by T4x1*.7 T4x2*.7 T4x3*.7;
T1m by T1m1*.7 T1m2*.7 T1m3*.7;
T2m by T2m1*.7 T2m2*.7 T2m3*.7;
T3m by T3m1*.7 T3m2*.7 T3m3*.7;
T4m by T4m1*.7 T4m2*.7 T4m3*.7;
T1y1-T1y3*.51; T2y1-T2y3*.51; T3y1-T3y3*.51 T4y1-T4y3*.51;
T1x1-T1x3*.51; T2x1-T2x3*.51; T3x1-T3x3*.51 T4x1-T4x3*.51;
T1m1-T1m3*.51; T2m1-T2m3*.51; T3m1-T3m3*.51 T4m1-T4m3*.51;
T1Y@1; T2Y@1; T3Y@1; T4Y@1; T1X@1; T2X@1; T3X@1; T4X@1;
T1m@1; T2m@1; T3m@1; T4m@1;
[T1y1-T1y3*8 T2y1-T2y3*8 T3y1-T3y3*8 T4y1-T4y3*8];
[T1x1-T1x3*50 T2x1-T2x3*50 T3x1-T3x3*50 T4x1-T4x3*50];
[T1m1-T1m3*5 T2m1-T2m3*5 T3m1-T3m3*5 T4m1-T4m3*5];
```

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## Simulation of a Longitudinal Mediation Data Set (continued)

```
T2Y on T1Y*.5;  
T3Y on T2Y*.5 T1Y*.2;  
T4Y on T3Y*.4 T2Y*.1 T1Y*.05;  
T2X on T1X*.4;  
T3X on T2X*.4 T1X*.1;  
T4X on T3X*.4 T2X*.1 T1X*.05;  
T2M on T1M*.4;  
T3M on T2M*.4 T1M*.1;  
T4M on T3M*.4 T2M*.1 T1M*.05;
```

```
T2Y ON T1M*.2;  
T3Y ON T2M*.3 T1X*.10;  
T2M ON T1X*.3;  
T4Y ON T3M*.3 T2X*.10;  
T3M ON T2X*.3;  
T4M ON T3X*.3;
```

```
T1X WITH T1M*.3 T1Y*.4;  
T1M WITH T1Y*.5;
```

```
T2X WITH T2M*.1 T2Y*.1;  
T2M WITH T2Y*.1;
```

```
T3X WITH T3M*.1 T3Y*.1;  
T3M WITH T3Y*.1;
```

```
T4X WITH T4M*.1 T4Y*.1;  
T4M WITH T4Y*.1;
```

```
ANALYSIS:TYPE = RANDOM;  
ALGORITHM = INTEGRATION;
```

## Analysis Based on Sample (n=1500) from Simulated Population

```
TITLE: Example with longitudinal latent moderation;
DATA: file is mediation.dat;
VARIABLE:
NAMES ARE T1y1 T1y2 T1y3 T2y1 T2y2 T2y3 T3y1 T3y2 T3y3 T4y1
T4y2 T4y3 T1x1 T1x2 T1x3 T2x1 T2x2 T2x3 T3x1 T3x2 T3x3 T4x1
T4x2 T4x3 T1m1 T1m2 T1m3 T2m1 T2m2 T2m3 T3m1 T3m2 T3m3 T4m1
T4m2 T4m3;
USEVARIABLES ARE T1y1 T1y2 T1y3 T2y1 T2y2 T2y3 T3y1 T3y2 T3y3
T4y1 T4y2 T4y3 T1x1 T1x2 T1x3 T2x1 T2x2 T2x3 T3x1 T3x2 T3x3
T4x1 T4x2 T4x3 T1m1 T1m2 T1m3 T2m1 T2m2 T2m3 T3m1 T3m2 T3m3
T4m1 T4m2 T4m3;
ANALYSIS:
bootstrap = 1000;
MODEL:
T1Y by T1y1 T1y2 T1y3;
T2Y by T2y1 T2y2 T2y3;
T3Y by T3y1 T3y2 T3y3;
T4Y by T4y1 T4y2 T4y3;
T1X by T1x1 T1x2 T1x3;
T2X by T2x1 T2x2 T2x3;
T3X by T3x1 T3x2 T3x3;
T4X by T4x1 T4x2 T4x3;
T1m by T1m1 T1m2 T1m3;
T2m by T2m1 T2m2 T2m3;
T3m by T3m1 T3m2 T3m3;
T4m by T4m1 T4m2 T4m3;

!residual correlations across time for loadings;
!none of these were significant so I removed them;
!T1y1 with T2y1 T3y1 T4y1;
!T2y1 with T3y1 T4y1;
!T3y1 with T4y1;
!T1y2 with T2y2 T3y2 T4y2;
!T2y2 with T3y2 T4y2;
!T3y2 with T4y2;
!T1y3 with T2y3 T3y3 T4y3;
!T2y3 with T3y3 T4y3;
!T3y3 with T4y3;
!T1m1 with T2m1 T3m1 T4m1;
!T2m1 with T3m1 T4m1;
!T3m1 with T4m1;
!T1m2 with T2m2 T3m2 T4m2;
!T2m2 with T3m2 T4m2;
!T3m2 with T4m2;
!T1m3 with T2m3 T3m3 T4m3;
!T2m3 with T3m3 T4m3;
!T3m3 with T4m3;
!T1x1 with T2x1 T3x1 T4x1;
!T2x1 with T3x1 T4x1;
!T3x1 with T4x1;
!T1x2 with T2x2 T3x2 T4x2;
!T2x2 with T3x2 T4x2;
!T3x2 with T4x2;
!T1x3 with T2x3 T3x3 T4x3;
!T2x3 with T3x3 T4x3;
!T3x3 with T4x3;
```

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## Analysis Based on Sample (n=1500) from Simulated Population

```
!autoregressive paths
T2Y on T1Y;
T3Y on T2Y T1Y;
T4Y on T3Y T2Y T1Y;
T2X on T1X;
T3X on T2X T1X;
T4X on T3X T2X T1X;
T2M on T1M;
T3M on T2M T1M;
T4M on T3M T2M T1M;

!correlations between latent variables/residuals at each time point
T1X WITH T1M T1Y;
T1M WITH T1Y;
T2X WITH T2M T2Y;
T2M WITH T2Y;
T3X WITH T3M T3Y;
T3M WITH T3Y;
T4X WITH T4M T4Y;
T4M WITH T4Y;

!cross-lagged paths
T2Y ON T1M;
T3Y ON T2M T1X;
T2M ON T1X;
T4Y ON T3M T2X;
T3M ON T2X;
T4M ON T3X;

MODEL INDIRECT:
T3Y IND T1X;
T4Y IND T2X;
T4Y IND T1X; !total indirect effect from beginning to end
OUTPUT: sampstat stdyx modindices tech4 cinterval(bcbootstrap);
```

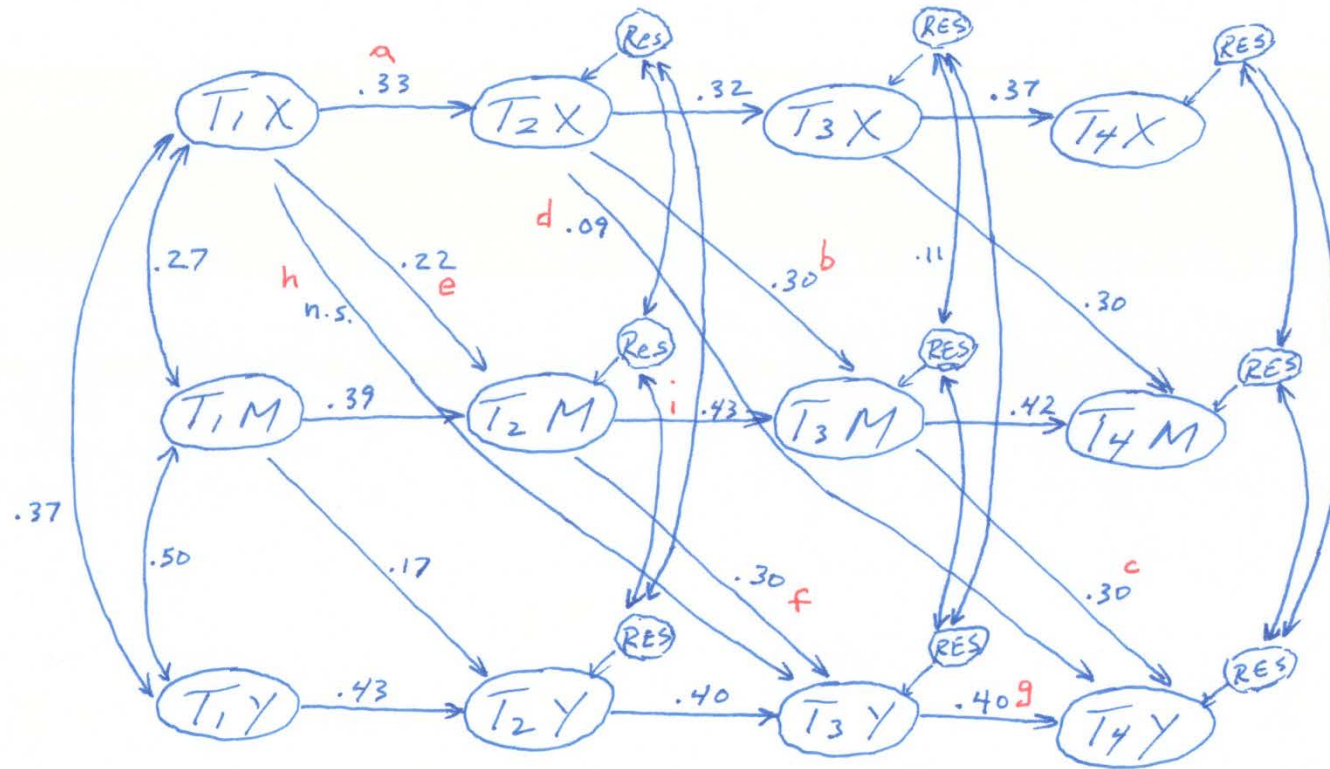
## Analysis Based on Sample (n=1500): Results

Number of Free Parameters	146
Loglikelihood	
H0 Value	-70791.521
H1 Value	-70525.206
Information Criteria	
Akaike (AIC)	141875.043
Bayesian (BIC)	142650.773
Sample-Size Adjusted BIC	142186.972
(n* = (n + 2) / 24)	
Chi-Square Test of Model Fit	
Value	532.630
Degrees of Freedom	556
P-Value	0.7552
RMSEA (Root Mean Square Error Of Approximation)	
Estimate	0.000
90 Percent C.I.	0.000 0.006
Probability RMSEA <= .05	1.000
CFI/TLI	
CFI	1.000
TLI	1.001
Chi-Square Test of Model Fit for the Baseline Model	
Value	19708.555
Degrees of Freedom	630
P-Value	0.0000
SRMR (Standardized Root Mean Square Residual)	
Value	0.019

## If we had used a smaller sample n= 317

Number of Free Parameters	146
Loglikelihood	
H0 Value	-14705.598
H1 Value	-14411.009
Information Criteria	
Akaike (AIC)	29703.195
Bayesian (BIC)	30250.607
Sample-Size Adjusted BIC	29787.538
(n* = (n + 2) / 24)	
Chi-Square Test of Model Fit	
Value	589.177
Degrees of Freedom	556
P-Value	0.1597
RMSEA (Root Mean Square Error Of Approximation)	
Estimate	0.014
90 Percent C.I.	0.000 0.023
Probability RMSEA <= .05	1.000
CFI/TLI	
CFI	0.992
TLI	0.991
Chi-Square Test of Model Fit for the Baseline Model	
Value	4935.968
Degrees of Freedom	630
P-Value	0.0000
SRMR (Standardized Root Mean Square Residual)	
Value	0.044

## Analysis Based on Sample (n=1500): Results



ONLY ARI PATHS INCLUDED  
IN FIGURE

### MEDIATED PATHS

1.  $T_1X$  to  $T_3Y$ : .065
2.  $T_2X$  to  $T_4Y$ : .090
3.  $T_1X$  to  $T_4Y$ : .118

abc  
ad  
eic  
efg  
hg

## Analysis Based on Sample (n=1500): Results

CONFIDENCE INTERVALS OF STANDARDIZED TOTAL, TOTAL INDIRECT, SPECIFIC INDIRECT,  
AND DIRECT EFFECTS

STDYX Standardization

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%
Effects from T1X to T3Y							
Total	-0.006	0.013	0.023	0.075	0.126	0.136	0.155
Total indirect	0.036	0.043	0.047	0.065	0.084	0.087	0.094
Specific indirect							
T3Y							
T2M							
T1X	0.036	0.043	0.047	0.065	0.084	0.087	0.094
Direct							
T3Y							
T1X	-0.073	-0.053	-0.043	0.009	0.062	0.072	0.092
Effects from T2X to T4Y							
Total	0.109	0.126	0.134	0.178	0.222	0.231	0.247
Total indirect	0.057	0.065	0.069	0.090	0.111	0.115	0.122
Specific indirect							
T4Y							
T3M							
T2X	0.057	0.065	0.069	0.090	0.111	0.115	0.122
Direct							
T4Y							
T2X	0.013	0.031	0.041	0.089	0.137	0.146	0.164

## Analysis Based on Sample (n=1500): Results

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%
Effects from T1X to T4Y							
Total	0.075	0.086	0.091	0.118	0.146	0.151	0.161
Total indirect	0.075	0.086	0.091	0.118	0.146	0.151	0.161
Specific indirect							
T4Y							
T3Y							
T1X	-0.030	-0.022	-0.018	0.004	0.025	0.029	0.037
T4Y							
T2X							
T1X	0.003	0.010	0.013	0.030	0.046	0.049	0.056
T4Y							
T3Y							
T2M							
T1X	0.012	0.016	0.017	0.026	0.035	0.037	0.040
T4Y							
T3M							
T2X							
T1X	0.017	0.020	0.022	0.030	0.038	0.040	0.043
T4Y							
T3M							
T2M							
T1X	0.015	0.018	0.020	0.029	0.038	0.039	0.043



## Analysis Based on Sample (n=1500): Results

### ESTIMATED CORRELATION MATRIX FOR THE LATENT VARIABLES

	T1Y	T2Y	T3Y	T4Y	T1X
T1Y	1.000				
T2Y	0.516	1.000			
T3Y	0.499	0.587	1.000		
T4Y	0.327	0.401	0.563	1.000	
T1X	0.371	0.206	0.265	0.237	1.000
T2X	0.123	0.124	0.128	0.266	0.333
T3X	0.092	0.069	0.133	0.167	0.248
T4X	0.052	0.044	0.068	0.150	0.140
T1M	0.497	0.386	0.392	0.291	0.270
T2M	0.273	0.262	0.460	0.382	0.324
T3M	0.180	0.170	0.284	0.470	0.252
T4M	0.156	0.135	0.211	0.336	0.216

### ESTIMATED CORRELATION MATRIX FOR THE LATENT VARIABLES

	T2X	T3X	T4X	T1M	T2M
T2X	1.000				
T3X	0.370	1.000			
T4X	0.296	0.426	1.000		
T1M	0.090	0.067	0.038	1.000	
T2M	0.167	0.099	0.062	0.444	1.000
T3M	0.372	0.240	0.147	0.271	0.503
T4M	0.280	0.407	0.215	0.235	0.320

### ESTIMATED CORRELATION MATRIX FOR THE LATENT VARIABLES

	T3M	T4M
T3M	1.000	
T4M	0.535	1.000

## Moderation with Latent Variables in Longitudinal Design

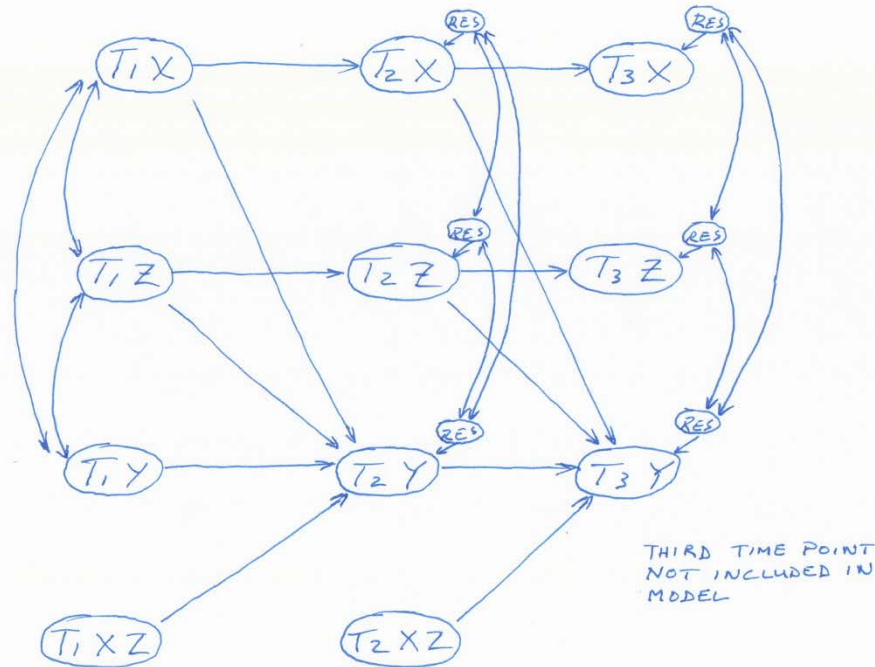
### Simulation of a Longitudinal Moderation Data Set

```
TITLE: Data generation syntax.
MONTECARLO:
NAMES ARE T1y1 T1y2 T1y3 T2y1 T2y2 T2y3 T3y1 T3y2 T3y3
T1x1 T1x2 T1x3 T2x1 T2x2 T2x3 T3x1 T3x2 T3x3
T1z1 T1z2 T1z3 T2z1 T2z2 T2z3 T3z1 T3z2 T3z3;
NOBSERVATIONS = 1500;
NREPS = 5;
SEED = 53487;
SAVE = moderation3.dat;
MODEL POPULATION:
T1Y by T1y1*.7 T1y2*.7 T1y3*.7;
T2Y by T2y1*.7 T2y2*.7 T2y3*.7;
T3Y by T3y1*.7 T3y2*.7 T3y3*.7;
T1X by T1x1*.7 T1x2*.7 T1x3*.7;
T2X by T2x1*.7 T2x2*.7 T2x3*.7;
T3X by T3x1*.7 T3x2*.7 T3x3*.7;
T1Z by T1z1*.7 T1z2*.7 T1z3*.7;
T2Z by T2z1*.7 T2z2*.7 T2z3*.7;
T3Z by T3z1*.7 T3z2*.7 T3z3*.7;
T1y1-T1y3*.51; T2y1-T2y3*.51; T3y1-T3y3*.51;
T1x1-T1x3*.51; T2x1-T2x3*.51; T3x1-T3x3*.51;
T1z1-T1z3*.51; T2z1-T2z3*.51; T3z1-T3z3*.51;
T1Y@1; T2Y@1; T3Y@1; T1X@1; T2X@1; T3X@1; T1Z@1; T2Z@1; T3Z@1;
[T1y1-T1y3*8 T2y1-T2y3*8 T3y1-T3y3*8];
[T1x1-T1x3*50 T2x1-T2x3*50 T3x1-T3x3*50];
[T1z1-T1z3*5 T2z1-T2z3*5 T3z1-T3z3*5];
T1XZ | T1X xwith T1Z; !note that the syntax for interaction is xwith not with
T2XZ | T2X xwith T2Z;
```

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# Moderation with Latent Variables in Longitudinal Design

## Simulation of a Longitudinal Moderation Data Set



```

T2Y on T1Y*.4;
T3Y on T2Y*.4 T1Y*.1;
T2X on T1X*.7;
T3X on T2X*.7 T1X*.2;
T2Z on T1Z*.5;
T3Z on T2Z*.5 T1Z*.5;
T2Y on T1X*.1 T1Z*.1 T1XZ*.2;
T3Y on T2X*.1 T2Z*.1 T2XZ*.2;
T1Y with T1X*.2 T1Z*.2;
T1X with T1Z*.1;
T2Y with T2X*.05 T2Z*.05;
T2X with T2Z*.05;
T3Y with T3X*.05 T2X*.05;
T3X with T2X*.05;
ANALYSIS: TYPE = RANDOM;
ALGORITHM = INTEGRATION;
    
```

## Moderation Analysis Based on Sample (n=1500) from Simulated Population

```
TITLE: Example with longitudinal latent moderation;
DATA: file is moderation.dat;
VARIABLE:
NAMES ARE T1y1 T1y2 T1y3 T2y1 T2y2 T2y3 T3y1 T3y2 T3y3
T1x1 T1x2 T1x3 T2x1 T2x2 T2x3 T3x1 T3x2 T3x3
T1z1 T1z2 T1z3 T2z1 T2z2 T2z3 T3z1 T3z2 T3z3;
USEVARIABLES ARE T1y1 T1y2 T1y3 T2y1 T2y2 T2y3
T1x1 T1x2 T1x3 T2x1 T2x2 T2x3
T1z1 T1z2 T1z3 T2z1 T2z2 T2z3;
ANALYSIS:TYPE = RANDOM;
ALGORITHM = INTEGRATION;
!estimator = ml;
MODEL:
T1Y by T1y1* T1y2 T1y3;
T2Y by T2y1* T2y2 T2y3;
T1X by T1x1* T1x2 T1x3;
T2X by T2x1* T2x2 T2x3;
T1Z by T1z1* T1z2 T1z3;
T2Z by T2z1* T2z2 T2z3;
T1Y@1; T2Y@1; T1X@1; T2X@1; T1Z@1; T2Z@1;
T1XZ | T1X xwith T1Z; !note that the syntax for interaction is xwith not with
T2Y on T1Y;
T2X on T1X;
T2Z on T1Z;
T2Y on T1X T1Z T1XZ;
T1Y with T1X T1Z;
T1X with T1Z;
T2Y with T2X T2Z;
T2X with T2Z;
OUTPUT: sampstat;
```

# Moderation Analysis Based on Sample (n=1500) from Simulated Population

## MODEL FIT INFORMATION

Number of Free Parameters 66

## Loglikelihood

H0 Value -35429.971  
H0 Scaling Correction Factor 0.9952  
for MLR

## Information Criteria

Akaike (AIC) 70991.943  
Bayesian (BIC) 71342.615  
Sample-Size Adjusted BIC 71132.952  
( $n^* = (n + 2) / 24$ )

T2Y	ON				
T1Y		0.418	0.040	10.482	0.000
T1X		0.116	0.038	3.096	0.002
T1Z		0.075	0.036	2.087	0.037
T1XZ		0.171	0.038	4.453	0.000
T2X	ON				
T1X		0.711	0.046	15.340	0.000
T2Z	ON				
T1Z		0.565	0.042	13.517	0.000
T1Y	WITH				
T1X		0.236	0.032	7.389	0.000
T1Z		0.204	0.033	6.136	0.000
T1X	WITH				
T1Z		0.094	0.033	2.876	0.004
T2Y	WITH				
T2X		-0.014	0.036	-0.394	0.694
T2Z		-0.013	0.038	-0.333	0.739
T2X	WITH				
T2Z		0.106	0.039	2.730	0.006

# Moderation Analysis Based on Sample – Orthogonalizing Approach

```
compute x1z1 = x1*z1.  
compute x1z2 = x1*z2.  
compute x1z3 = x1*z3.  
compute x2z1 = x2*z1.  
compute x2z2 = x2*z2.  
compute x2z3 = x2*z3.  
compute x3z1 = x3*z1.  
compute x3z2 = x3*z2.  
compute x3z3 = x3*z3.  
execute.
```

## REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT x1z1  
/METHOD=ENTER x1 x2 x3 z1 z2 z3  
/SAVE RESID.
```

## REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT x1z2  
/METHOD=ENTER x1 x2 x3 z1 z2 z3  
/SAVE RESID.
```

## REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT x1z3  
/METHOD=ENTER x1 x2 x3 z1 z2 z3  
/SAVE RESID.
```

## REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT x2z1  
/METHOD=ENTER x1 x2 x3 z1 z2 z3  
/SAVE RESID.
```

## REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT x2z2  
/METHOD=ENTER x1 x2 x3 z1 z2 z3  
/SAVE RESID.
```

## REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT x2z3  
/METHOD=ENTER x1 x2 x3 z1 z2 z3  
/SAVE RESID.
```

## REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT x3z1  
/METHOD=ENTER x1 x2 x3 z1 z2 z3  
/SAVE RESID.
```

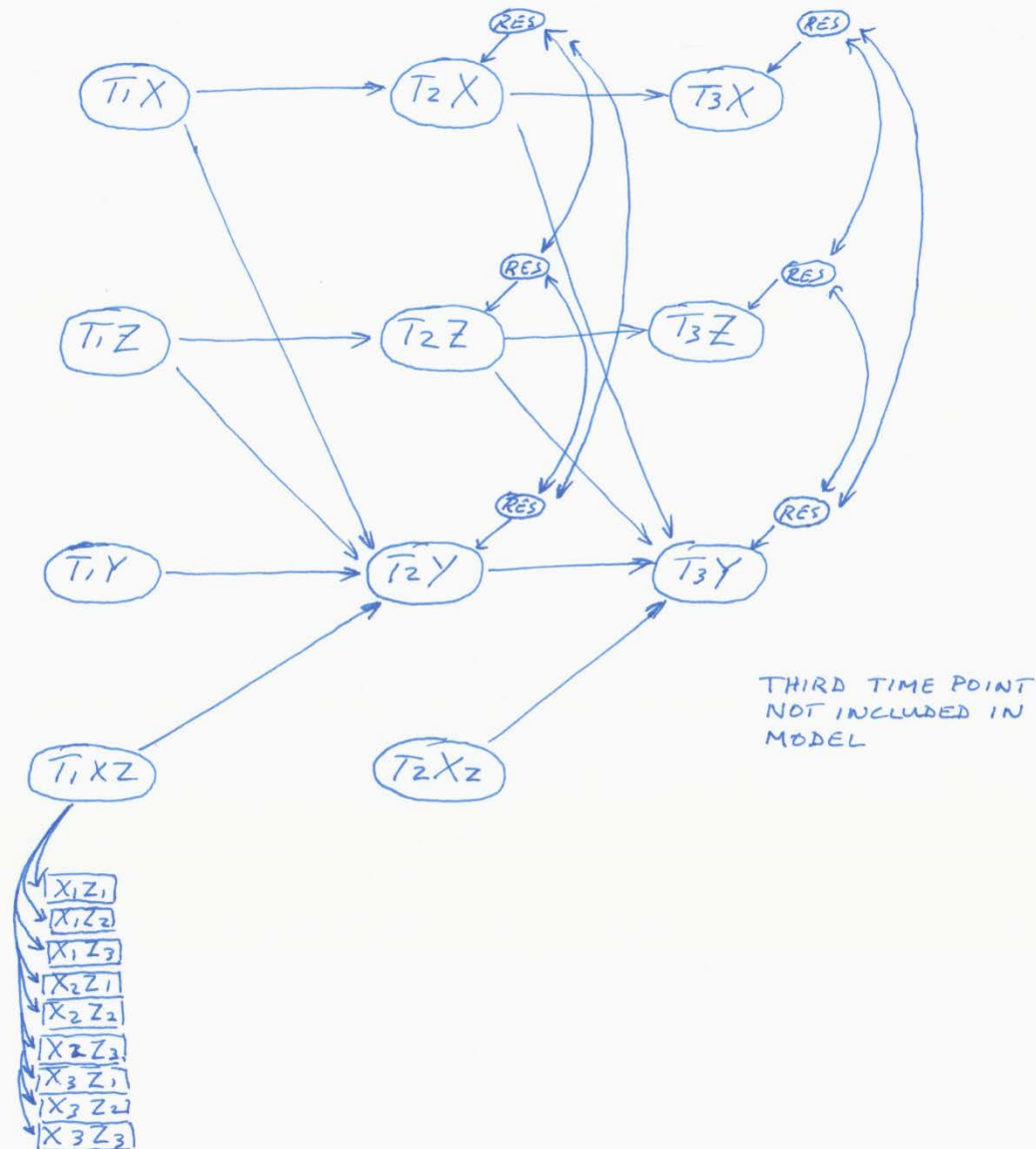
## REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT x3z2  
/METHOD=ENTER x1 x2 x3 z1 z2 z3  
/SAVE RESID.
```

## REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT x3z3  
/METHOD=ENTER x1 x2 x3 z1 z2 z3  
/SAVE RESID.
```

## Moderation Analysis Based on Sample – Orthogonalizing Approach



# Moderation Analysis Based on Sample – Orthogonalizing Approach

THE MODEL ESTIMATION TERMINATED NORMALLY

## MODEL FIT INFORMATION

Number of Free Parameters 112

## Loglikelihood

H0 Value -51524.762  
H1 Value -51411.297

## Information Criteria

Akaike (AIC) 103273.523  
Bayesian (BIC) 103868.604  
Sample-Size Adjusted BIC 103512.811  
( $n^* = (n + 2) / 24$ )

## Chi-Square Test of Model Fit

Value 226.929  
Degrees of Freedom 293  
P-Value 0.9984

## RMSEA (Root Mean Square Error Of Approximation)

Estimate 0.000  
90 Percent C.I. 0.000 0.000  
Probability RMSEA  $\leq$  .05 1.000

## CFI/TLI

CFI 1.000  
TLI 1.006

## Chi-Square Test of Model Fit for the Baseline Model

Value 14640.524  
Degrees of Freedom 351  
P-Value 0.0000

## SRMR (Standardized Root Mean Square Residual)

Value 0.016



## Moderation Analysis Based on Sample – Orthogonalizing Approach

T2Y	ON				
T1Y		0.418	0.041	10.222	0.000
T1X		0.120	0.037	3.267	0.001
T1Z		0.073	0.036	2.007	0.045
T1INT		0.178	0.043	4.173	0.000
T2Z	ON				
T1Z		0.567	0.042	13.461	0.000
T2X	ON				
T1X		0.711	0.047	15.276	0.000
T1X	WITH				
T1INT		0.000	0.000	999.000	999.000
T1Y		0.235	0.032	7.259	0.000
T1Z	WITH				
T1INT		0.000	0.000	999.000	999.000
T1Y		0.204	0.033	6.170	0.000
T1X		0.096	0.033	2.874	0.004
T2X	WITH				
T2Z		0.106	0.038	2.765	0.006
T2Y		-0.014	0.038	-0.372	0.710
T2Z	WITH				
T2Y		-0.013	0.037	-0.361	0.718
T1INT	WITH				
T1Y		0.027	0.040	0.680	0.496

Mplus LMS (from slide 13)

T2Y	ON				
T1Y		0.418	0.040	10.482	0.000
T1X		0.116	0.038	3.096	0.002
T1Z		0.075	0.036	2.087	0.037
T1XZ		0.171	0.038	4.453	0.000
T2X	ON				
T1X		0.711	0.046	15.340	0.000
T2Z	ON				
T1Z		0.565	0.042	13.517	0.000
T1Y	WITH				
T1X		0.236	0.032	7.389	0.000
T1Z		0.204	0.033	6.136	0.000
T1X	WITH				
T1Z		0.094	0.033	2.876	0.004
T2Y	WITH				
T2X		-0.014	0.036	-0.394	0.694
T2Z		-0.013	0.038	-0.333	0.739
T2X	WITH				
T2Z		0.106	0.039	2.730	0.006