

OUTPUT A: SAS

The REG Procedure

Model: MODEL1

Dependent Variable: satis1

Number of Observations Read 330

Number of Observations Used 330

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	33.28219	33.28219	87.04	<.0001
Error	328	125.41369	0.38236		
Corrected Total	329	158.69588			

Root MSE 0.61835 **R-Square** 0.2097

Dependent Mean 3.75939 **Adj R-Sq** 0.2073

Coeff Var 16.44817

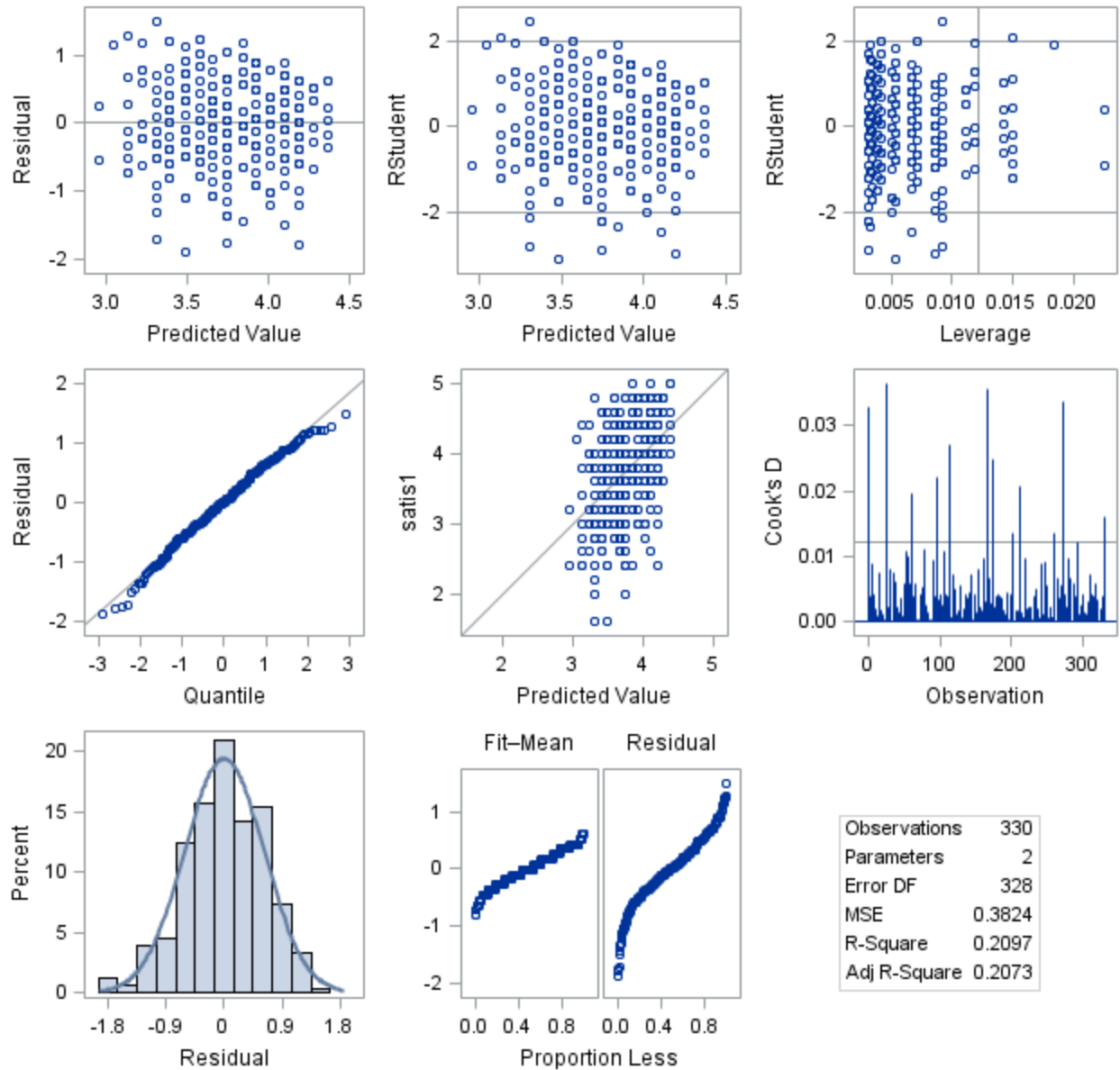
Parameter Estimates

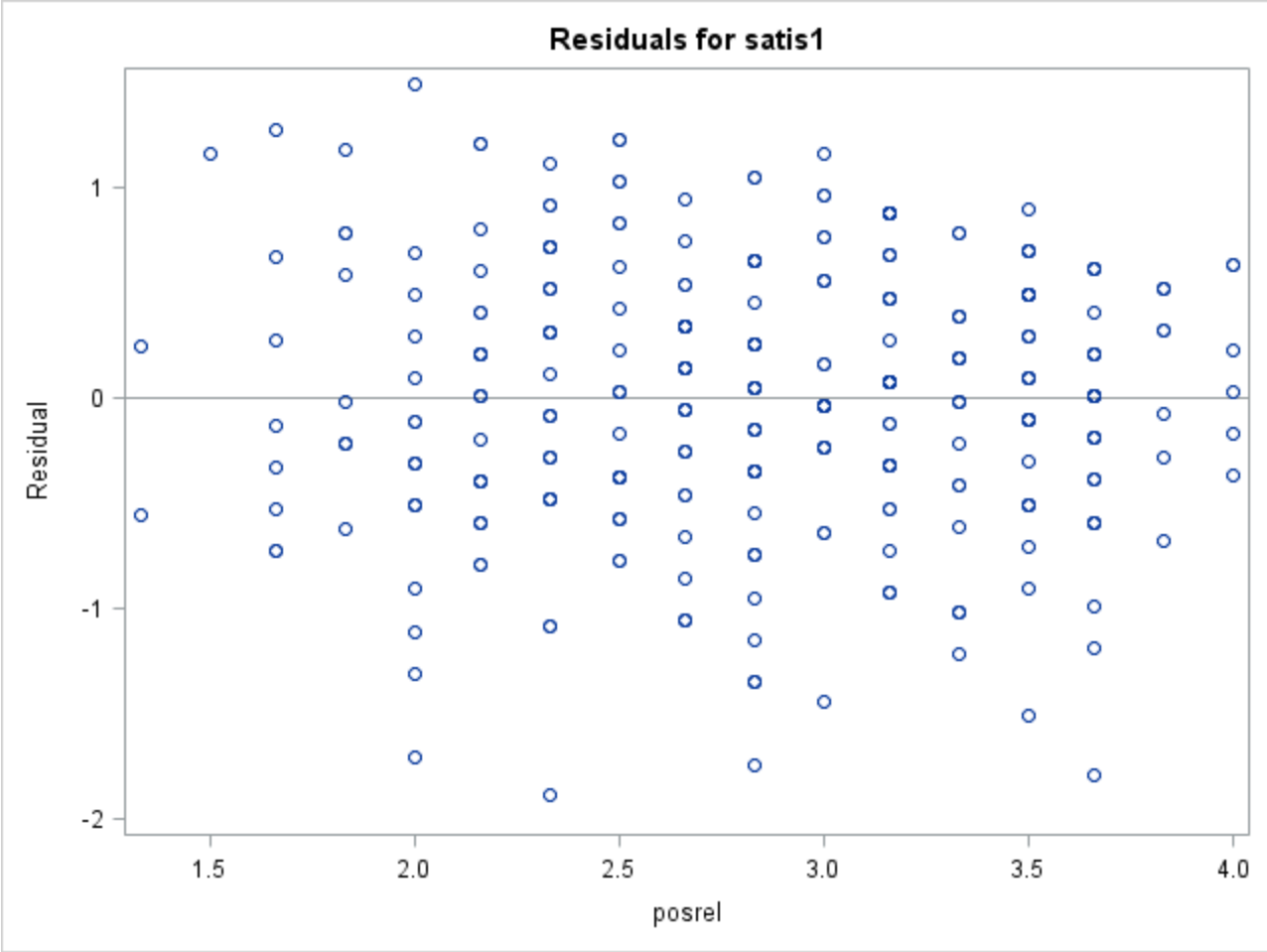
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Standardized Estimate	95% Confidence Limits	
Intercept	1	2.24622	0.16572	13.55	<.0001	0	1.92021	2.57223
posrel	1	0.53076	0.05689	9.33	<.0001	0.45796	0.41884	0.64267

The SAS System

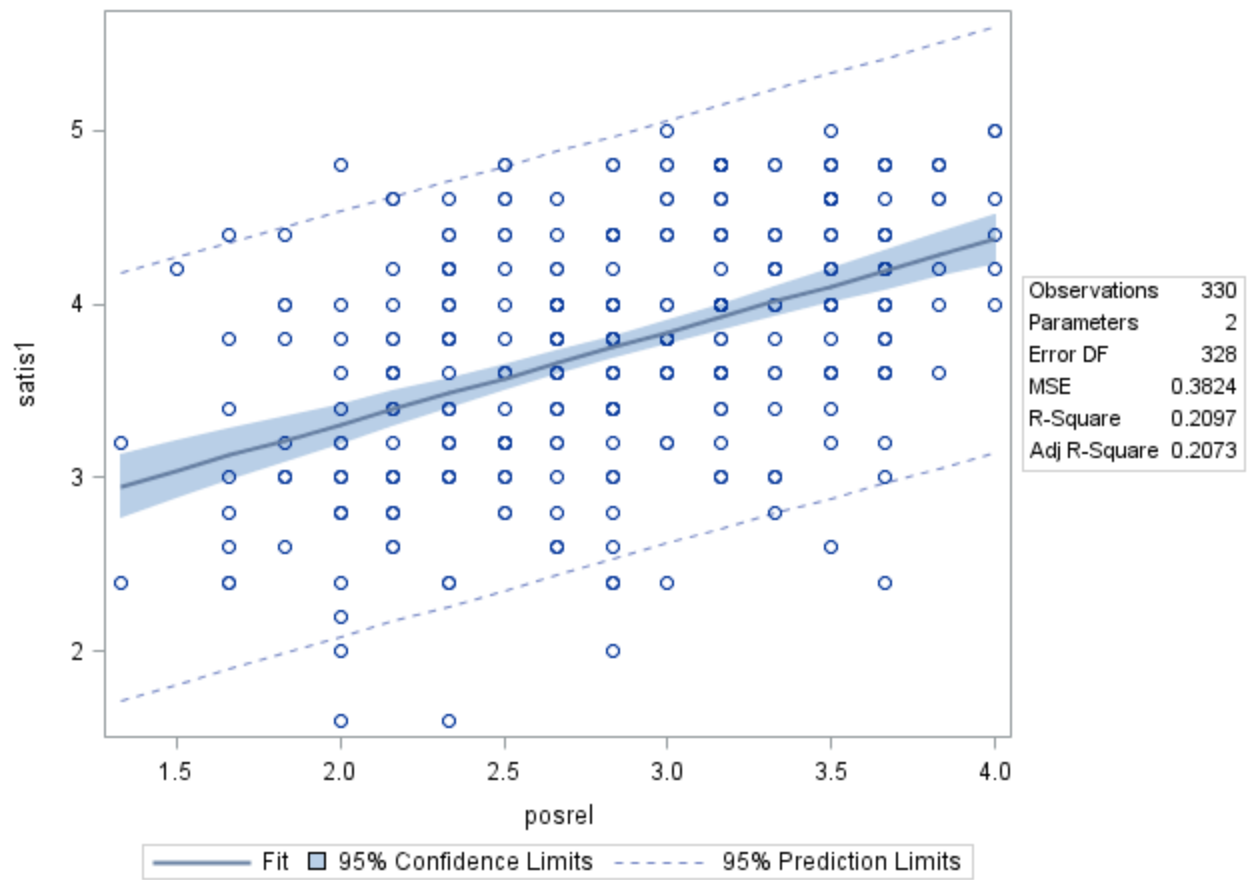
The REG Procedure
Model: MODEL1
Dependent Variable: satis1

Fit Diagnostics for satis1





Fit Plot for satis1



OUTPUT A: SPSS

regression/statistics defaults ci/dep=satis1/method=enter posrel.

Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	posrel ^b	.	Enter

a. Dependent Variable: satis1

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.458 ^a	.210	.207	.61835

a. Predictors: (Constant), posrel

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.282	1	33.282	87.044	.000 ^b
	Residual	125.414	328	.382		
	Total	158.696	329			

a. Dependent Variable: satis1

b. Predictors: (Constant), posrel

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.246	.166		13.554	.000
	posrel	.531	.057	.458	9.330	.000

Coefficients^a

Model		95.0% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	1.920	2.572
	posrel	.419	.643

a. Dependent Variable: satis1

OUTPUT B: SAS

The REG Procedure
 Model: MODEL1
 Dependent Variable: satis1

Number of Observations Read 330

Number of Observations Used 330

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	47.11953	15.70651	45.89	<.0001
Error	326	111.57635	0.34226		
Corrected Total	329	158.69588			

Root MSE	0.58503	R-Square	0.2969
Dependent Mean	3.75939	Adj R-Sq	0.2904
Coeff Var	15.56179		

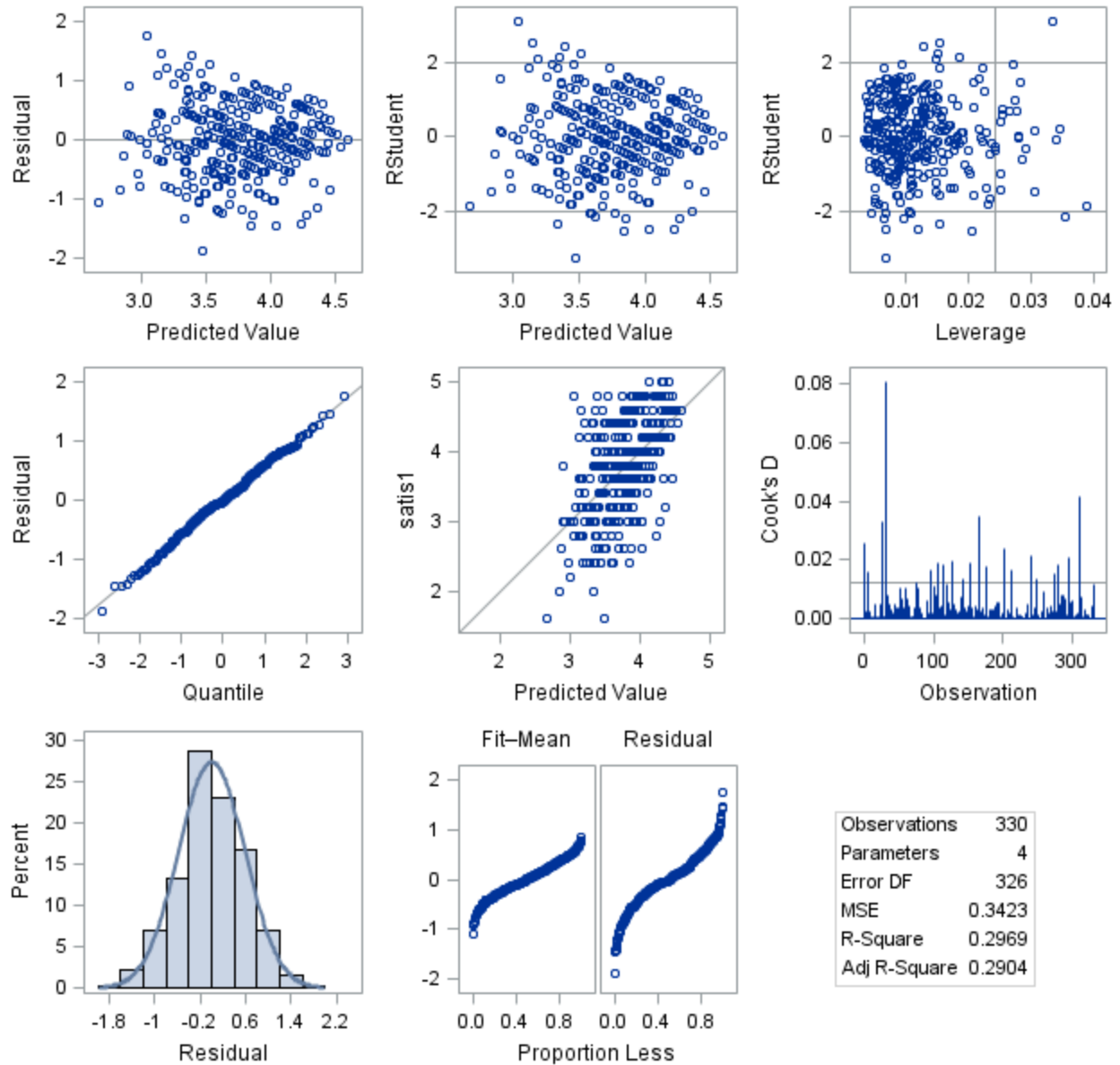
Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Standardized Estimate	95% Confidence Limits	
Intercept	1	1.47888	0.30890	4.79	<.0001	0	0.87119	2.08658
posrel	1	0.47230	0.05544	8.52	<.0001	0.40752	0.36323	0.58137
harass	1	-0.14514	0.08997	-1.61	0.1077	-0.07784	-0.32212	0.03185
se1	1	0.37292	0.06399	5.83	<.0001	0.27588	0.24703	0.49881

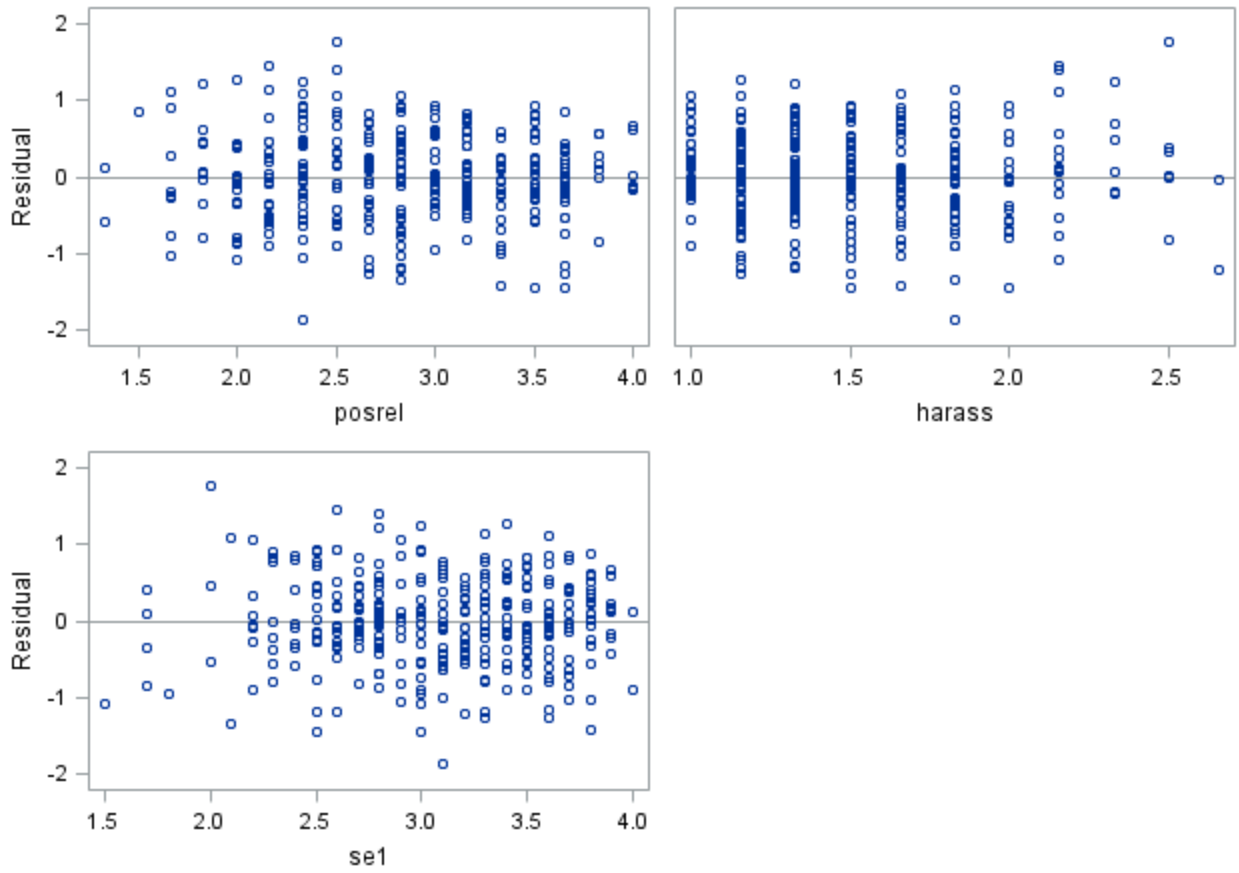
The SAS System

The REG Procedure
Model: MODEL1
Dependent Variable: satis1

Fit Diagnostics for satis1



Residual by Regressors for satis1



OUTPUT B: SPSS

regression/statistics defaults ci/dep=satis1/method=enter posrel harass se1.

Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	se1, posrel, harass ^b	.	Enter

a. Dependent Variable: satis1

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.545 ^a	.297	.290	.58503

a. Predictors: (Constant), se1, posrel, harass

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	47.120	3	15.707	45.891	.000 ^b
	Residual	111.576	326	.342		
	Total	158.696	329			

a. Dependent Variable: satis1

b. Predictors: (Constant), se1, posrel, harass

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.479	.309		4.788	.000
	posrel	.472	.055	.408	8.519	.000
	harass	-.145	.090	-.078	-1.613	.108
	se1	.373	.064	.276	5.828	.000

Coefficients^a

Model		95.0% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	.871	2.087
	posrel	.363	.581
	harass	-.322	.032
	se1	.247	.499

a. Dependent Variable: satis1

OUTPUT C: SAS

***** PROCESS v3.1 for SAS *****

Written by Andrew F. Hayes, Ph.D. <http://www.afhayes.com>

Documentation available in Hayes (2018) www.guilford.com/p/hayes3

Model and Variables

Model: 4
Y: LIKING
X: PROTEST
M: RESPAPPR

Sample size:

129

OUTCOME VARIABLE:

RESPAPPR

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.4992	0.2492	1.3753	42.1550	1.0000	127.0000	0.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.8841	0.1831	21.2078	0.0000	3.5217	4.2466
PROTEST	1.4397	0.2217	6.4927	0.0000	1.0009	1.8785

OUTCOME VARIABLE:

LIKING

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.4959	0.2459	0.8441	20.5483	2.0000	126.0000	0.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.7473	0.3058	12.2553	0.0000	3.1422	4.3524
PROTEST	-0.1007	0.2005	-0.5023	0.6163	-0.4975	0.2960
RESPAPPR	0.4024	0.0695	5.7884	0.0000	0.2648	0.5400

***** TOTAL EFFECT MODEL *****

OUTCOME VARIABLE:

LIKING

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.2131	0.0454	1.0601	6.0439	1.0000	127.0000	0.0153

Model

	coeff	se	t	p	LLCI	ULCI
constant	5.3102	0.16083	3.0244	0.0000	4.9921	5.6284
PROTEST	0.4786	0.1947	2.4584	0.0153	0.0934	0.8639

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI
0.4786	0.1947	2.4584	0.0153	0.0934	0.8639

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-0.1007	0.2005	-0.5023	0.6163	-0.4975	0.2960

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
RESPAPPR	0.5793	0.1508	0.3218	0.9010

Normal theory test for indirect effect(s):

	Effect	SE	Z	p
RESPAPPR	0.5793	0.1350	4.2924	0.0000

***** ANALYSIS NOTES AND ERRORS *****

**Level of confidence for all confidence
intervals in
output:
95.0000**

**Number of bootstrap
samples for percentile
bootstrap confidence
intervals:
10000**

OUTPUT C: SPSS

***** PROCESS Procedure for SPSS Version 3.1 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
Y : liking
X : protest
M : respappr

Sample
Size: 129

OUTCOME VARIABLE:
respappr

Model Summary

R	R-sq	MSE	F	df1	df2	p
.4992	.2492	1.3753	42.1550	1.0000	127.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.8841	.1831	21.2078	.0000	3.5217	4.2466
protest	1.4397	.2217	6.4927	.0000	1.0009	1.8785

OUTCOME VARIABLE:
liking

Model Summary

R	R-sq	MSE	F	df1	df2	p
.4959	.2459	.8441	20.5483	2.0000	126.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.7473	.3058	12.2553	.0000	3.1422	4.3524
protest	-.1007	.2005	-.5023	.6163	-.4975	.2960
respappr	.4024	.0695	5.7884	.0000	.2648	.5400

***** TOTAL EFFECT MODEL *****

OUTCOME VARIABLE:
liking

Model Summary

R	R-sq	MSE	F	df1	df2	p
.2131	.0454	1.0601	6.0439	1.0000	127.0000	.0153

Model

	coeff	se	t	p	LLCI	ULCI
constant	5.3102	.1608	33.0244	.0000	4.9921	5.6284
protest	.4786	.1947	2.4584	.0153	.0934	.8639

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI
.4786	.1947	2.4584	.0153	.0934	.8639

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.1007	.2005	-.5023	.6163	-.4975	.2960

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
respappr	.5793	.1518	.3097	.9060

Normal theory test for indirect effect(s):

	Effect	se	Z	p
respappr	.5793	.1350	4.2924	.0000

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

10000

OUTPUT D: SAS

***** PROCESS Procedure for SAS Version 3.0 *****

Written by Andrew F. Hayes, Ph.D. <http://www.afhayes.com>

Documentation available in Hayes (2018) www.guilford.com/p/hayes3

Model and Variables

Model: 4

Y: FAIL2

X: HARASS

M: SE2

Covariates:

SE1 FAIL1

Sample size:

330

OUTCOME VARIABLE:

SE2

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.5450	0.2971	0.2224	45.9259	3.0000	326.0000	0.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.0280	0.2412	8.4095	0.0000	1.5536	2.5024
HARASS	-0.2728	0.0717	-3.8025	0.0002	-0.4139	-0.1317

Model						
	coeff	se	t	p	LLCI	ULCI
SE1	0.4879	0.0536	9.1081	0.0000	0.3825	0.5933
FAIL1	-0.1010	0.0606	-1.6661	0.0967	-0.2202	0.0182

OUTCOME VARIABLE:

FAIL2

Model Summary						
R	R-sq	MSE	F	df1	df2	p
0.4059	0.1648	0.2105	16.0276	4.0000	325.0000	0.0000

Model						
	coeff	se	t	p	LLCI	ULCI
constant	2.0934	0.2588	8.0900	0.0000	1.5843	2.6025
HARASS	0.0196	0.0713	0.2754	0.7832	-0.1207	0.1599
SE2	-0.2175	0.0539	-4.0375	0.0001	-0.3235	-0.1115
SE1	-0.0672	0.0584	-1.1517	0.2503	-0.1820	0.0476
FAIL1	0.2307	0.0592	3.8966	0.0001	0.1142	0.3471

***** TOTAL EFFECT MODEL *****

OUTCOME VARIABLE:

FAIL2

Model Summary						
R	R-sq	MSE	F	df1	df2	p
0.3505	0.1229	0.2203	15.2219	3.0000	326.0000	0.0000

Model						
	coeff	se	t	p	LLCI	ULCI
constant	1.6523	0.2400	6.8842	0.0000	1.1801	2.1245

	Model					
	coeff	se	t	p	LLCI	ULCI
HARASS	0.0790	0.0714	1.1060	0.2695	-0.0615	0.2194
SE1	-0.1733	0.0533	-3.2513	0.0013	-0.2782	-0.0685
FAIL1	0.2526	0.0603	4.1886	0.0000	0.1340	0.3713

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI
0.0790	0.0714	1.1060	0.2695	-0.0615	0.2194

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
0.0196	0.0713	0.2754	0.7832	-0.1207	0.1599

Indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI
SE2	0.0593	0.0225	0.1092

***** ANALYSIS NOTES AND ERRORS *****

**Level of confidence
for all confidence
intervals in
output:**

95.0000

**Number of bootstrap
samples for percentile
bootstrap confidence
intervals:**

10000

OUTPUT D: SPSS

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
Y : fail2
X : harass
M : se2

Covariates:
se1 fail1

Sample
Size: 330

OUTCOME VARIABLE:
se2

Model Summary	R	R-sq	MSE	F	df1	df2	p
	.5450	.2971	.2224	45.9259	3.0000	326.0000	.0000

Model	coeff	se	t	p	LLCI	ULCI
constant	2.0280	.2412	8.4095	.0000	1.5536	2.5024
harass	-.2728	.0717	-3.8025	.0002	-.4139	-.1317
se1	.4879	.0536	9.1081	.0000	.3825	.5933
fail1	-.1010	.0606	-1.6661	.0967	-.2202	.0182

OUTCOME VARIABLE:
fail2

Model Summary	R	R-sq	MSE	F	df1	df2	p
	.4059	.1648	.2105	16.0276	4.0000	325.0000	.0000

Model	coeff	se	t	p	LLCI	ULCI
constant	2.0934	.2588	8.0900	.0000	1.5843	2.6025
harass	.0196	.0713	.2754	.7832	-.1207	.1599
se2	-.2175	.0539	-4.0375	.0001	-.3235	-.1115
se1	-.0672	.0584	-1.1517	.2503	-.1820	.0476
fail1	.2307	.0592	3.8966	.0001	.1142	.3471

***** TOTAL EFFECT MODEL *****

OUTCOME VARIABLE:
fail2

Model Summary

R	R-sq	MSE	F	df1	df2	p
.3505	.1229	.2203	15.2219	3.0000	326.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.6523	.2400	6.8842	.0000	1.1801	2.1245
harass	.0790	.0714	1.1060	.2695	-.0615	.2194
se1	-.1733	.0533	-3.2513	.0013	-.2782	-.0685
fail1	.2526	.0603	4.1886	.0000	.1340	.3713

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI
.0790	.0714	1.1060	.2695	-.0615	.2194

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
.0196	.0713	.2754	.7832	-.1207	.1599

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
se2	.0593	.0228	.0203	.1089

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

10000

----- END MATRIX -----

OUTPUT E: SAS

***** PROCESS Procedure for SAS Version 3.0 *****

Written by Andrew F. Hayes, Ph.D. <http://www.afhayes.com>

Documentation available in Hayes (2018) www.guilford.com/p/hayes3

Model and Variables

Model: 4

Y: INTEREST

X: PRONO

M1: COMM

M2: DIFF

Sample size:

231

OUTCOME VARIABLE:

COMM

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.3005	0.0903	1.5324	22.7252	1.0000	229.0000	0.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.1160	0.11352	7.4589	0.0000	2.8924	3.3396
PRONO	0.7769	0.1630	4.7671	0.0000	0.4558	1.0980

OUTCOME VARIABLE:

DIFF

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.0636	0.0040	1.6769	0.9298	1.0000	229.0000	0.3359

Model

	coeff	se	t	p	LLCI	ULCI
constant	4.9412	0.1187	41.6247	0.0000	4.7073	5.1751
PRONO	-0.1644	0.1705	-0.9643	0.3359	-0.5003	0.1715

OUTCOME VARIABLE:

INTEREST

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.4390	0.1927	1.9696	18.0666	3.0000	227.0000	0.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	0.5156	0.4634	1.1125	0.2671	-0.3976	1.4287
PRONO	-0.0976	0.1938	-0.5038	0.6149	-0.4795	0.2843
COMM	0.5342	0.0753	7.0949	0.0000	0.3858	0.6826
DIFF	0.1328	0.0720	1.8446	0.0664	-0.0091	0.2746

***** TOTAL EFFECT MODEL *****

OUTCOME VARIABLE:

INTEREST

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.0954	0.0091	2.3965	2.1032	1.0000	229.0000	0.1484

Model

	coeff	se	t	p	LLCI	ULCI
--	--------------	-----------	----------	----------	-------------	-------------

Model Summary

	R	R-sq	MSE	F	df1	df2	p
constant	2.8361	0.14191	9.9853	0.0000	2.5565	3.1158	
PRONO	0.2956	0.2038	1.4502	0.1484	-0.1060	0.6971	

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI
0.2956	0.2038	1.4502	0.1484	-0.1060	0.6971

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-0.0976	0.1938	-0.5038	0.6149	-0.4795	0.2843

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	0.3932	0.1133	0.1922	0.6344
COMM	0.4150	0.1120	0.2180	0.6544
DIFF	-0.0218	0.0275	-0.0866	0.0258
(C1)	0.4368	0.1174	0.2272	0.6852

Normal theory test for indirect effect(s):

	Effect	se	Z	p
COMM	0.4150	0.1056	3.9301	0.0001
DIFF	-0.0218	0.0283	-0.7703	0.4411

Specific indirect effect contrast definition(s):

(C1) COMM minus DIFF

***** ANALYSIS NOTES AND ERRORS *****

**Level of confidence for all confidence
intervals inoutput:**

95.0000

**Number of bootstrap samples for percentile
bootstrap confidence intervals:**

10000

Output E: SPSS

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.1 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
Y : interest
X : ProNo
M1 : comm
M2 : diff

Sample
Size: 232

OUTCOME VARIABLE:
comm

Model Summary

R	R-sq	MSE	F	df1	df2	p
.3031	.0919	1.5279	23.2670	1.0000	230.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.1160	.1133	27.4994	.0000	2.8927	3.3392
ProNo	.7831	.1624	4.8236	.0000	.4632	1.1030

OUTCOME VARIABLE:
diff

Model Summary

R	R-sq	MSE	F	df1	df2	p
.0594	.0035	1.6760	.8155	1.0000	230.0000	.3674

Model

	coeff	se	t	p	LLCI	ULCI
constant	4.9412	.1187	41.6352	.0000	4.7073	5.1750
ProNo	-.1536	.1700	-.9031	.3674	-.4886	.1815

OUTCOME VARIABLE:
interest

Model Summary

R	R-sq	MSE	F	df1	df2	p
.4418	.1952	1.9659	18.4348	3.0000	228.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	.4898	.4618	1.0607	.2899	-.4201	1.3996
ProNo	-.0895	.1933	-.4630	.6438	-.4705	.2914

comm	.5367	.0752	7.1418	.0000	.3886	.6848
diff	.1364	.0718	1.9008	.0586	-.0050	.2778

***** TOTAL EFFECT MODEL *****

OUTCOME VARIABLE:

interest

Model Summary

R	R-sq	MSE	F	df1	df2	p
.1000	.0100	2.3974	2.3217	1.0000	230.0000	.1290

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.8361	.1419	19.9817	.0000	2.5565	3.1158
ProNo	.3099	.2034	1.5237	.1290	-.0908	.7106

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI
.3099	.2034	1.5237	.1290	-.0908	.7106

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.0895	.1933	-.4630	.6438	-.4705	.2914

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	.3994	.1135	.1950	.6399
comm	.4203	.1128	.2171	.6594
diff	-.0209	.0282	-.0858	.0280
(C1)	.4413	.1189	.2251	.6927

Normal theory test for indirect effect(s):

	Effect	se	Z	p
comm	.4203	.1059	3.9706	.0001
diff	-.0209	.0284	-.7367	.4613

Specific indirect effect contrast definition(s):

(C1) comm minus diff

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

10000

----- END MATRIX -----

OUTPUT F: SAS

***** PROCESS Procedure for SAS Version 3.0 *****

Written by Andrew F. Hayes, Ph.D. <http://www.afhayes.com>

Documentation available in Hayes (2018) www.guilford.com/p/hayes3

Model and Variables

Model: 6

Y: MCIVIL

X: BINLADEN

M1: STEREO

M2: RTHREAT

Covariates:

SEX AGE IDEO

Sample size:

661

OUTCOME VARIABLE:

STEREO

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.3557	0.1265	0.6495	23.7609	4.0000	656.0000	0.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.9045	0.1322	14.4084	0.0000	1.6449	2.1640

	Model					
	coeff	se	t	p	LLCI	ULCI
BINLADEN	0.1358	0.0639	2.1258	0.0339	0.0104	0.2613
SEX	0.0398	0.0635	0.6262	0.5314	-0.0849	0.1644
AGE	0.0504	0.0192	2.6220	0.0089	0.0127	0.0882
IDEO	0.1293	0.0143	9.0483	0.0000	0.1012	0.1574

OUTCOME VARIABLE:

RTHREAT

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.6764	0.4575	0.6076	110.4916	5.0000	655.0000	0.0000

	Model					
	coeff	se	t	p	LLCI	ULCI
constant	-0.2548	0.1467	-1.7369	0.0829	-0.5428	0.0332
BINLADEN	0.0374	0.0620	0.6038	0.5462	-0.0843	0.1592
STEREO	0.7047	0.0378	18.6630	0.0000	0.6306	0.7789
SEX	0.1286	0.0614	2.0938	0.0367	0.0080	0.2492
AGE	0.0451	0.0187	2.4135	0.0161	0.0084	0.0818
IDEO	0.0898	0.0147	6.1257	0.0000	0.0610	0.1186

OUTCOME VARIABLE:

MCIVIL

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.6727	0.4526	0.5890	90.1100	6.0000	654.0000	0.0000

Model						
	coeff	se	t	p	LLCI	ULCI
constant	0.7165	0.1448	4.9499	0.0000	0.4323	1.0008
BINLADEN	-0.0311	0.0611	-0.5095	0.6106	-0.1510	0.0888
STEREO	0.1057	0.0460	2.2965	0.0220	0.0153	0.1960
RTHREAT	0.5491	0.0385	14.2732	0.0000	0.4736	0.6247
SEX	-0.1001	0.0607	-1.6504	0.0993	-0.2193	0.0190
AGE	-0.0103	0.0185	-0.5599	0.5758	-0.0466	0.0259
IDEO	0.0545	0.0148	3.6696	0.0003	0.0253	0.0836

***** TOTAL EFFECT MODEL *****

OUTCOME VARIABLE:

MCIVIL

Model Summary						
R	R-sq	MSE	F	df1	df2	p
0.3675	0.1351	0.9278	25.6100	4.0000	656.0000	0.0000

Model						
	coeff	se	t	p	LLCI	ULCI
constant	1.5149	0.1580	9.5894	0.0000	1.2047	1.8251
BINLADEN	0.0564	0.0764	0.7380	0.4608	-0.0936	0.2063
SEX	-0.0099	0.0759	-0.1310	0.8958	-0.1589	0.1391
AGE	0.0393	0.0230	1.7085	0.0880	-0.0059	0.0844
IDEO	0.1675	0.0171	9.8053	0.0000	0.1339	0.2010

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Total effect of X on Y					
Effect	se	t	p	LLCI	ULCI
0.0564	0.0764	0.7380	0.4608	-0.0936	0.2063

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-0.0311	0.0611	-0.5095	0.6106	-0.1510	0.0888

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	0.0875	0.0465	-0.0015	0.1804
Ind1	0.0144	0.0099	-0.0003	0.0369
Ind2	0.0206	0.0338	-0.0434	0.0885
Ind3	0.0526	0.0250	0.0057	0.1033

Indirect effect key:

Ind1 BINLADEN -> STEREO -> MCIVIL
Ind2 BINLADEN -> RTHREAT -> MCIVIL
Ind3 BINLADEN -> STEREO -> RTHREAT -> MCIVIL

***** ANALYSIS NOTES AND ERRORS *****

**Level of confidence
for all confidence
intervals in
output:**

95.0000

**Number of bootstrap
samples for percentile
bootstrap confidence
intervals:**

10000

Output F: SPSS

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 6
Y : mcivil
X : binladen
M1 : stereo
M2 : rthreat

Covariates:
sex age ideo

Sample
Size: 661

OUTCOME VARIABLE:
stereo

Model Summary	R	R-sq	MSE	F	df1	df2	p
	.3557	.1265	.6495	23.7609	4.0000	656.0000	.0000

Model	coeff	se	t	p	LLCI	ULCI
constant	1.9045	.1322	14.4084	.0000	1.6449	2.1640
binladen	.1358	.0639	2.1258	.0339	.0104	.2613
sex	.0398	.0635	.6262	.5314	-.0849	.1644
age	.0504	.0192	2.6220	.0089	.0127	.0882
ideo	.1293	.0143	9.0483	.0000	.1012	.1574

OUTCOME VARIABLE:
rthreat

Model Summary	R	R-sq	MSE	F	df1	df2	p
	.6764	.4575	.6076	110.4916	5.0000	655.0000	.0000

Model	coeff	se	t	p	LLCI	ULCI
constant	-.2548	.1467	-1.7369	.0829	-.5428	.0332
binladen	.0374	.0620	.6038	.5462	-.0843	.1592
stereo	.7047	.0378	18.6630	.0000	.6306	.7789
sex	.1286	.0614	2.0938	.0367	.0080	.2492
age	.0451	.0187	2.4135	.0161	.0084	.0818
ideo	.0898	.0147	6.1257	.0000	.0610	.1186

OUTCOME VARIABLE:

mcivil

Model Summary

R	R-sq	MSE	F	df1	df2	p
.6727	.4526	.5890	90.1100	6.0000	654.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	.7165	.1448	4.9499	.0000	.4323	1.0008
binladen	-.0311	.0611	-.5095	.6106	-.1510	.0888
stereo	.1057	.0460	2.2965	.0220	.0153	.1960
rthreat	.5491	.0385	14.2732	.0000	.4736	.6247
sex	-.1001	.0607	-1.6504	.0993	-.2193	.0190
age	-.0103	.0185	-.5599	.5758	-.0466	.0259
ideo	.0545	.0148	3.6696	.0003	.0253	.0836

***** TOTAL EFFECT MODEL *****

OUTCOME VARIABLE:

mcivil

Model Summary

R	R-sq	MSE	F	df1	df2	p
.3675	.1351	.9278	25.6100	4.0000	656.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.5149	.1580	9.5894	.0000	1.2047	1.8251
binladen	.0564	.0764	.7380	.4608	-.0936	.2063
sex	-.0099	.0759	-.1310	.8958	-.1589	.1391
age	.0393	.0230	1.7085	.0880	-.0059	.0844
ideo	.1675	.0171	9.8053	.0000	.1339	.2010

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI
.0564	.0764	.7380	.4608	-.0936	.2063

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.0311	.0611	-.5095	.6106	-.1510	.0888

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	.0875	.0460	.0005	.1798
Ind1	.0144	.0098	-.0002	.0373
Ind2	.0206	.0338	-.0446	.0895
Ind3	.0526	.0248	.0050	.1021

Indirect effect key:

Ind1 binladen	->	stereo	->	mcivil		
Ind2 binladen	->	rthreat	->	mcivil		
Ind3 binladen	->	stereo	->	rthreat	->	mcivil

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
10000

----- END MATRIX -----

OUTPUT G: SAS

The REG Procedure
Model: MODEL1
Dependent Variable: crave2

Number of Observations Read 168

Number of Observations Used 168

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	42.32144	8.46429	11.63	<.0001
Error	162	117.88427	0.72768		
Corrected Total	167	160.20571			

Root MSE 0.85304 **R-Square** 0.2642

Dependent Mean 2.11429 **Adj R-Sq** 0.2415

Coeff Var 40.34658

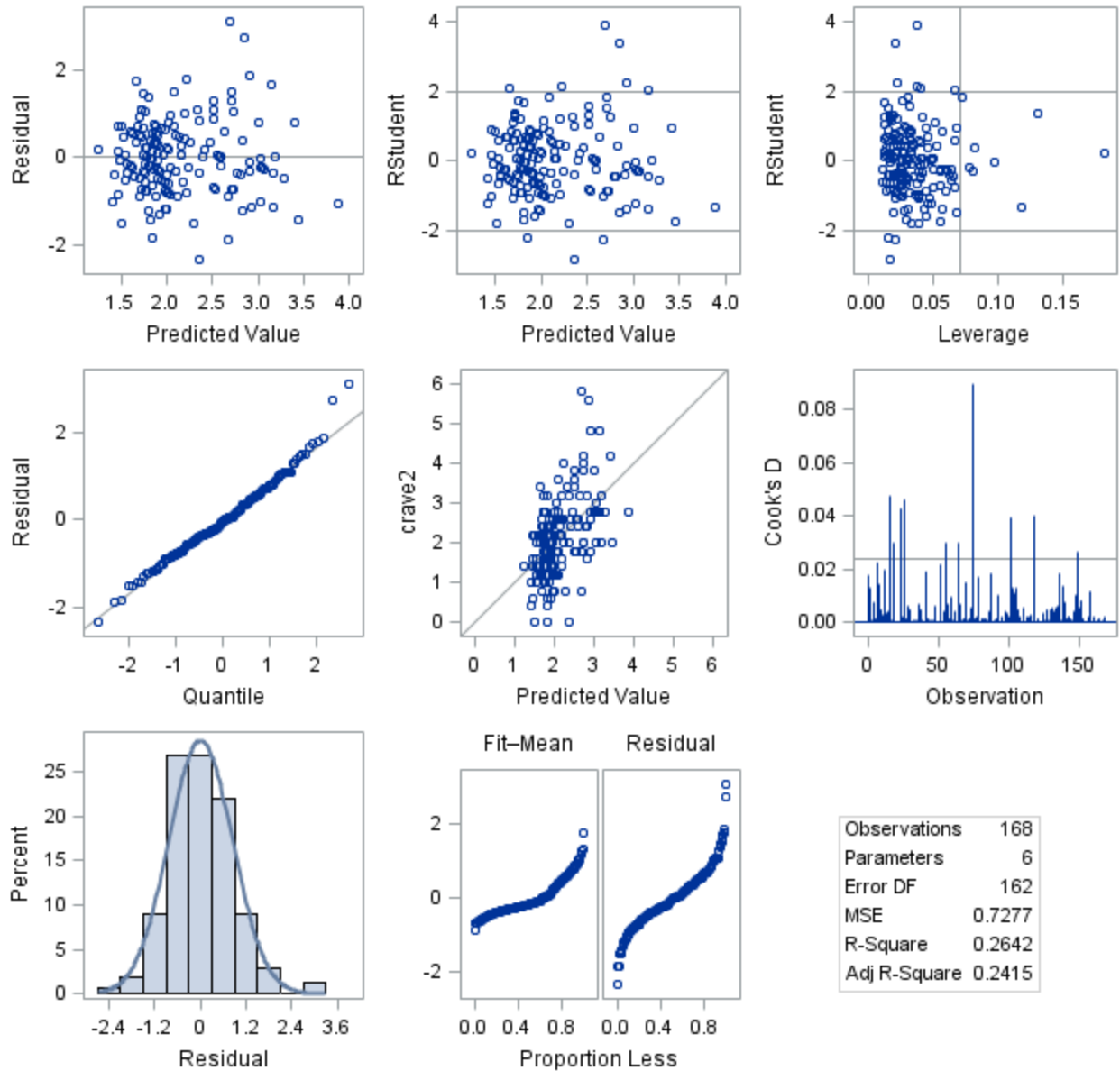
Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	1.03847	0.47010	2.21	0.0286
mbrp	1	0.58724	0.52413	1.12	0.2642
bdi0	1	1.12208	0.27620	4.06	<.0001
mbrpdep	1	-0.94845	0.42346	-2.24	0.0265
treathrs	1	-0.01767	0.01028	-1.72	0.0875
crave0	1	0.19204	0.07347	2.61	0.0098

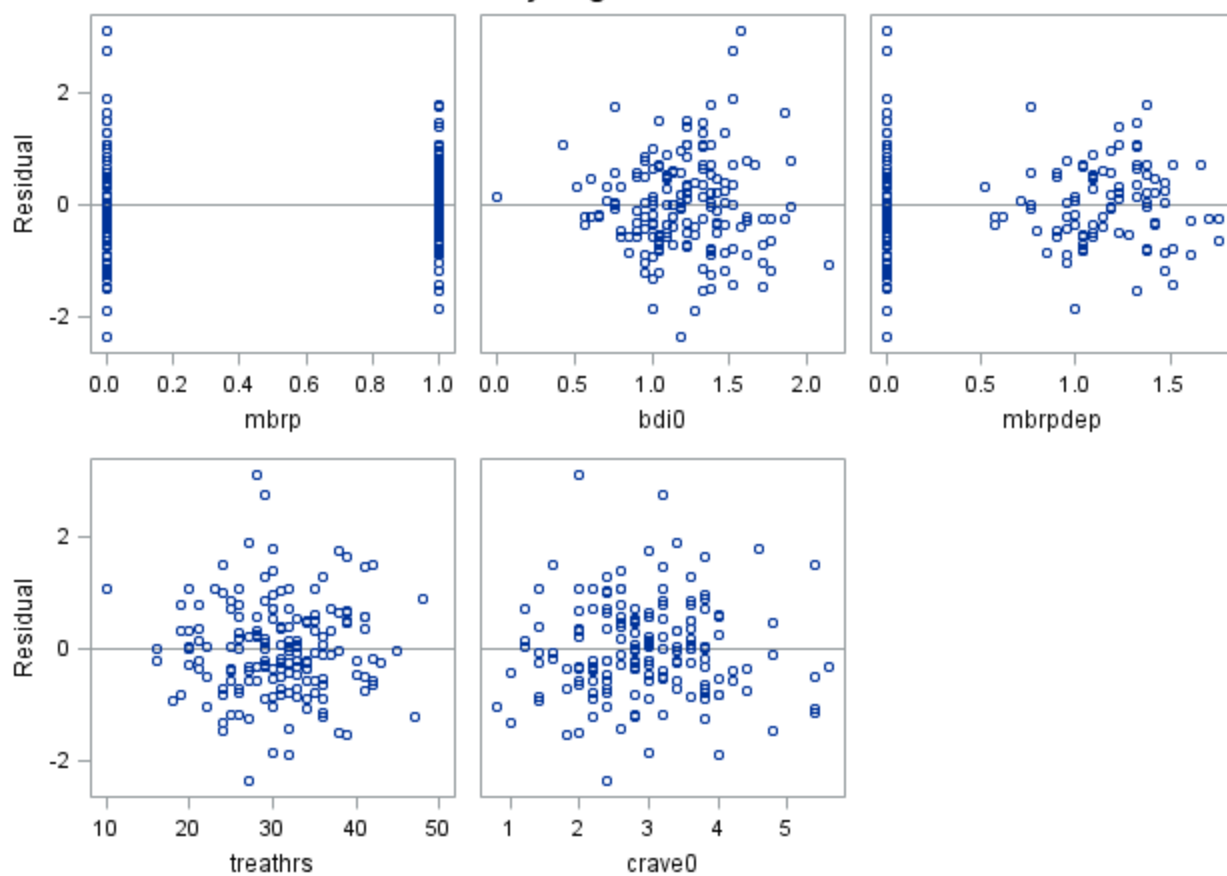
The SAS System

The REG Procedure
Model: MODEL1
Dependent Variable: crave2

Fit Diagnostics for crave2



Residual by Regressors for crave2



OUTPUT G: SPSS

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	CRAVE0: Baseline craving, mbrpdep, TREATHRS: Hours of therapy, BDI0: Beck Depression Inventory baseline, MBRP: Therapy as usual (0) or MBRP therapy (1) ^b		Enter

a. Dependent Variable: CRAVE2: Craving at two month follow-up

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.514 ^a	.264	.241	.8530

a. Predictors: (Constant), CRAVE0: Baseline craving, mbrpdep, TREATHRS: Hours of therapy, BDI0: Beck Depression Inventory baseline, MBRP: Therapy as usual (0) or MBRP therapy (1)

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	42.321	5	8.464	11.632	.000 ^b

Residual	117.884	162	.728		
Total	160.206	167			

a. Dependent Variable: CRAVE2: Craving at two month follow-up

b. Predictors: (Constant), CRAVE0: Baseline craving, mbrpdep, TREATHRS: Hours of therapy, BDI0: Beck Depression Inventory baseline, MBRP: Therapy as usual (0) or MBRP therapy (1)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.038	.470		2.209	.029
	MBRP: Therapy as usual (0) or MBRP therapy (1)	.587	.524	.299	1.120	.264
	BDI0: Beck Depression Inventory baseline	1.122	.276	.366	4.063	.000
	mbrpdep	-.948	.423	-.598	-2.240	.026
	TREATHRS: Hours of therapy	-.018	.010	-.120	-1.719	.088
	CRAVE0: Baseline craving	.192	.073	.183	2.614	.010

a. Dependent Variable: CRAVE2: Craving at two month follow-up

OUTPUT H: SAS

***** PROCESS Procedure for SAS Version 3.0 *****

Written by Andrew F. Hayes, Ph.D. <http://www.afhayes.com>

Documentation available in Hayes (2018) www.guilford.com/p/hayes3

Model and Variables

Model: 1

Y: CRAVE2

X: MBRP

W: BDI0

Covariates:

TREATHRS CRAVE0

Sample size:

168

OUTCOME VARIABLE:

CRAVE2

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.5140	0.2642	0.7277	11.6319	5.0000	162.0000	0.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.0385	0.4701	2.2090	0.0286	0.1102	1.9668

Model						
	coeff	se	t	p	LLCI	ULCI
MBRP	0.5872	0.5241	1.1204	0.2642	-0.4478	1.6222
BDI0	1.1221	0.2762	4.0625	0.0001	0.5767	1.6675
Int_1	-0.9485	0.4235	-2.2398	0.0265	-1.7847	-0.1122
TREATHRS	-0.0177	0.0103	-1.7190	0.0875	-0.0380	0.0026
CRAVE0	0.1920	0.0735	2.6138	0.0098	0.0470	0.3371

Product terms key:

Int_1 : MBRP x BDI0

Test(s) of highest order unconditional interactions:

	R2-chng	F	df1	df2	p
X*W	0.0228	5.0166	1.0000	162.0000	0.0265

Focal predict: MBRP (X)

Mod var: BDI0 (W)

Conditional effects of the focal predictor at values of the moderator(s):

BDI0	Effect	se	t	p	LLCI	ULCI
0.8772	-0.2447	0.1922	-1.2733	0.2047	-0.6243	0.1348
1.1962	-0.5473	0.1375	-3.9818	0.0001	-0.8188	-0.2759
1.5153	-0.8500	0.1933	-4.3973	0.0000	-1.2317	-0.4683

**Moderator value(s) defining Johnson-Neyman
significance region(s):**

Value	% below	% above
0.9681	21.4286	78.5714

Conditional effect of focal predictor at values of the moderator:

BDI0	Effect	se	t	p	LLCI	ULCI
0.0000	0.5872	0.5241	1.1204	0.2642	-0.4478	1.6222
0.1070	0.4858	0.4806	1.0108	0.3136	-0.4632	1.4347
0.2140	0.3843	0.4373	0.8787	0.3809	-0.4793	1.2479
0.3210	0.2828	0.3946	0.7167	0.4746	-0.4964	1.0620
0.4280	0.1813	0.3525	0.5144	0.6077	-0.5147	0.8773
0.5350	0.0798	0.3112	0.2565	0.7979	-0.5348	0.6944
0.6420	-0.0217	0.2713	-0.0798	0.9365	-0.5574	0.5141
0.7490	-0.1231	0.2334	-0.5276	0.5985	-0.5840	0.3377
0.8560	-0.2246	0.1986	-1.1312	0.2596	-0.6167	0.1675
0.9630	-0.3261	0.1688	-1.9318	0.0551	-0.6595	0.0072
0.9681	-0.3309	0.1676	-1.9747	0.0500	-0.6618	0.0000
1.0700	-0.4276	0.1472	-2.9047	0.0042	-0.7183	-0.1369
1.1770	-0.5291	0.1377	-3.8435	0.0002	-0.8009	-0.2573
1.2840	-0.6306	0.1426	-4.4220	0.0000	-0.9122	-0.3490
1.3910	-0.7321	0.1607	-4.5553	0.0000	-1.0494	-0.4147
1.4980	-0.8335	0.1882	-4.4288	0.0000	-1.2052	-0.4619
1.6050	-0.9350	0.2216	-4.2186	0.0000	-1.3727	-0.4973
1.7120	-1.0365	0.2587	-4.0063	0.0001	-1.5474	-0.5256
1.8190	-1.1380	0.2981	-3.8178	0.0002	-1.7266	-0.5494
1.9260	-1.2395	0.3389	-3.6571	0.0003	-1.9088	-0.5702
2.0330	-1.3410	0.3808	-3.5216	0.0006	-2.0929	-0.5890
2.1400	-1.4424	0.4234	-3.4072	0.0008	-2.2784	-0.6064

Data for visualizing the conditional effect of the focal predictor:

MBRP	BDI0	CRAVE2
0.0000	0.8772	2.0456
1.0000	0.8772	1.8009
0.0000	1.1962	2.4037

MBRP	BDI0	CRAVE2
1.0000	1.1962	1.8563
0.0000	1.5153	2.7617
1.0000	1.5153	1.9117

***** ANALYSIS NOTES AND ERRORS *****

**Level of confidence
for all confidence
intervals in
output:**

95.0000

W values in conditional tables are the mean and +/- SD from the mean

OUTPUT H: SPSS

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 1
Y : crave2
X : mbrp
W : bdi0

Covariates:
treathrs crave0

Sample
Size: 168

OUTCOME VARIABLE:
crave2

Model Summary	R	R-sq	MSE	F	df1	df2	p
	.5140	.2642	.7277	11.6319	5.0000	162.0000	.0000

Model	coeff	se	t	p	LLCI	ULCI
constant	1.0385	.4701	2.2090	.0286	.1102	1.9668
mbrp	.5872	.5241	1.1204	.2642	-.4478	1.6222
bdi0	1.1221	.2762	4.0625	.0001	.5767	1.6675
Int_1	-.9485	.4235	-2.2398	.0265	-1.7847	-.1122
treathrs	-.0177	.0103	-1.7190	.0875	-.0380	.0026
crave0	.1920	.0735	2.6138	.0098	.0470	.3371

Product terms key:
Int_1 : mbrp x bdi0

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0228	5.0166	1.0000	162.0000	.0265

Focal predict: mbrp (X)
Mod var: bdi0 (W)

Conditional effects of the focal predictor at values of the moderator(s):

bdi0	Effect	se	t	p	LLCI	ULCI
.8772	-.2447	.1922	-1.2733	.2047	-.6243	.1348
1.1963	-.5473	.1375	-3.9818	.0001	-.8188	-.2759
1.5153	-.8500	.1933	-4.3973	.0000	-1.2317	-.4683

Moderator value(s) defining Johnson-Neyman significance region(s):

Value	% below	% above
-------	---------	---------

.9681 21.4286 78.5714

Conditional effect of focal predictor at values of the moderator:

bdi0	Effect	se	t	p	LLCI	ULCI
.0000	.5872	.5241	1.1204	.2642	-.4478	1.6222
.1070	.4858	.4806	1.0108	.3136	-.4632	1.4347
.2140	.3843	.4373	.8787	.3809	-.4793	1.2479
.3210	.2828	.3946	.7167	.4746	-.4964	1.0620
.4280	.1813	.3525	.5144	.6077	-.5147	.8773
.5350	.0798	.3112	.2565	.7979	-.5348	.6944
.6420	-.0217	.2713	-.0798	.9365	-.5574	.5141
.7490	-.1231	.2334	-.5276	.5985	-.5840	.3377
.8560	-.2246	.1986	-1.1312	.2596	-.6167	.1675
.9630	-.3261	.1688	-1.9318	.0551	-.6595	.0072
.9681	-.3309	.1676	-1.9747	.0500	-.6618	.0000
1.0700	-.4276	.1472	-2.9047	.0042	-.7183	-.1369
1.1770	-.5291	.1377	-3.8435	.0002	-.8009	-.2573
1.2840	-.6306	.1426	-4.4220	.0000	-.9122	-.3490
1.3910	-.7321	.1607	-4.5553	.0000	-1.0494	-.4147
1.4980	-.8335	.1882	-4.4288	.0000	-1.2052	-.4619
1.6050	-.9350	.2216	-4.2186	.0000	-1.3727	-.4973
1.7120	-1.0365	.2587	-4.0063	.0001	-1.5474	-.5256
1.8190	-1.1380	.2981	-3.8178	.0002	-1.7266	-.5494
1.9260	-1.2395	.3389	-3.6571	.0003	-1.9088	-.5702
2.0330	-1.3410	.3808	-3.5216	.0006	-2.0929	-.5890
2.1400	-1.4424	.4234	-3.4072	.0008	-2.2784	-.6064

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

 mbrp bdi0 crave2 .
BEGIN DATA.

 .0000 .8772 2.0456
 1.0000 .8772 1.8009
 .0000 1.1963 2.4037
 1.0000 1.1963 1.8563
 .0000 1.5153 2.7617
 1.0000 1.5153 1.9117

END DATA.

GRAPH/SCATTERPLOT=

 bdi0 WITH crave2 BY mbrp .

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

W values in conditional tables are the mean and +/- SD from the mean.

----- END MATRIX -----

OUTPUT I: SAS

***** PROCESS Procedure for SAS Version 3.0 *****

Written by Andrew F. Hayes, Ph.D. <http://www.afhayes.com>

Documentation available in Hayes (2018) www.guilford.com/p/hayes3

Model and Variables

Model: 1

Y: CRAVE2

X: BDI0

W: MBRP

Covariates:

TREATHRS CRAVE0

Sample size:

168

OUTCOME VARIABLE:

CRAVE2

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.5140	0.2642	0.7277	11.6319	5.0000	162.0000	0.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.0385	0.4701	2.2090	0.0286	0.1102	1.9668
BDI0	1.1221	0.2762	4.0625	0.0001	0.5767	1.6675

Model						
	coeff	se	t	p	LLCI	ULCI
MBRP	0.5872	0.5241	1.1204	0.2642	-0.4478	1.6222
Int_1	-0.9485	0.4235	-2.2398	0.0265	-1.7847	-0.1122
TREATHRS	-0.0177	0.0103	-1.7190	0.0875	-0.0380	0.0026
CRAVE0	0.1920	0.0735	2.6138	0.0098	0.0470	0.3371

Product terms key:

Int_1 : BDI0 x MBRP

Test(s) of highest order unconditional interactions:

	R2-chng	F	df1	df2	p
X*W	0.0228	5.0166	1.0000	162.0000	0.0265

Focal predict: BDI0 (X)

Mod var: MBRP (W)

Conditional effects of the focal predictor at values of the moderator(s):

MBRP	Effect	se	t	p	LLCI	ULCI
0.0000	1.1221	0.2762	4.0625	0.0001	0.5767	1.6675
1.0000	0.1736	0.3281	0.5291	0.5974	-0.4744	0.8216

***** ANALYSIS NOTES AND ERRORS *****

**Level of confidence
for all confidence
intervals in
output:**

95.0000

OUTPUT I: SPSS

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 1
Y : crave2
X : bdi0
W : mbrp

Covariates:
treathrs crave0

Sample
Size: 168

OUTCOME VARIABLE:
crave2

Model Summary	R	R-sq	MSE	F	df1	df2	p
	.5140	.2642	.7277	11.6319	5.0000	162.0000	.0000

Model	coeff	se	t	p	LLCI	ULCI
constant	1.0385	.4701	2.2090	.0286	.1102	1.9668
bdi0	1.1221	.2762	4.0625	.0001	.5767	1.6675
mbrp	.5872	.5241	1.1204	.2642	-.4478	1.6222
Int_1	-.9485	.4235	-2.2398	.0265	-1.7847	-.1122
treathrs	-.0177	.0103	-1.7190	.0875	-.0380	.0026
crave0	.1920	.0735	2.6138	.0098	.0470	.3371

Product terms key:
Int_1 : bdi0 x mbrp

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0228	5.0166	1.0000	162.0000	.0265

Focal predict: bdi0 (X)
Mod var: mbrp (W)

Conditional effects of the focal predictor at values of the moderator(s):

mbrp	Effect	se	t	p	LLCI	ULCI
.0000	1.1221	.2762	4.0625	.0001	.5767	1.6675
1.0000	.1736	.3281	.5291	.5974	-.4744	.8216

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

----- END MATRIX -----

OUTPUT J: SAS

***** PROCESS Procedure for SAS Version 3.0 *****

Written by Andrew F. Hayes, Ph.D. <http://www.afhayes.com>

Documentation available in Hayes (2018) www.guilford.com/p/hayes3

Model and Variables

Model: 14

Y: PERFORM

X: DYSFUNC

M: NEGONE

W: NEGEXP

Covariates:

D1 D2 D3

Sample size:

60

OUTCOME VARIABLE:

NEGONE

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.5026	0.2526	0.2213	4.6462	4.0000	55.0000	0.0027

Model

	coeff	se	t	p	LLCI	ULCI
constant	-0.2057	0.1305	-1.5760	0.1208	-0.4672	0.0559

Model						
	coeff	se	t	p	LLCI	ULCI
DYSFUNC	0.6095	0.1668	3.6546	0.0006	0.2753	0.9437
D1	0.3487	0.1715	2.0332	0.0469	0.0050	0.6923
D2	0.2951	0.2122	1.3906	0.1700	-0.1302	0.7204
D3	0.2507	0.1663	1.5078	0.1373	-0.0825	0.5840

OUTCOME VARIABLE:

PERFORM

Model Summary						
R	R-sq	MSE	F	df1	df2	p
0.5937	0.3524	0.2006	4.0428	7.0000	52.0000	0.0013

Model						
	coeff	se	t	p	LLCI	ULCI
constant	-0.1754	0.1305	-1.3444	0.1847	-0.4373	0.0864
DYSFUNC	0.3729	0.1808	2.0622	0.0442	0.0100	0.7357
NEGTONE	-0.4886	0.1377	-3.5485	0.0008	-0.7649	-0.2123
NEGEXP	-0.0221	0.1176	-0.1875	0.8520	-0.2581	0.2140
Int_1	-0.4498	0.2451	-1.8353	0.0722	-0.9417	0.0420
D1	0.1815	0.1720	1.0556	0.2960	-0.1635	0.5266
D2	0.0841	0.2099	0.4004	0.6905	-0.3372	0.5053
D3	0.2816	0.1648	1.7087	0.0935	-0.0491	0.6123

Product terms key:

Int_1 : NEGSTONE x NEGEXP

Test(s) of highest order unconditional interactions:

	R2-chng	F	df1	df2	p
M*W	0.0419	3.3684	1.0000	52.0000	0.0722

Focal predict: NEGSTONE (M)

Mod var: NEGEXP (W)

Conditional effects of the focal predictor at values of the moderator(s):

NEGEXP	Effect	se	t	p	LLCI	ULCI
-0.5308	-0.2498	0.2196	-1.1379	0.2604	-0.6904	0.1907
-0.0600	-0.4616	0.1434	-3.2188	0.0022	-0.7494	-0.1738
0.6000	-0.7585	0.1633	-4.6451	0.0000	-1.0862	-0.4308

Data for visualizing the conditional effect of the focal predictor:

NEGSTONE	NEGEXP	PERFORM
-0.4500	-0.5308	0.1258
-0.0350	-0.5308	0.0222
0.5224	-0.5308	-0.1171
-0.4500	-0.0600	0.2108
-0.0350	-0.0600	0.0192
0.5224	-0.0600	-0.2381
-0.4500	0.6000	0.3298
-0.0350	0.6000	0.0150
0.5224	0.6000	-0.4078

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
0.3729	0.1808	2.0622	0.0442	0.0100	0.7357

Conditional indirect effects of X on Y:

INDIRECT EFFECT:

DYSFUNC -> NEG TONE -> PERFORM

NEGEXP	Effect	BootSE	BootLLCI	BootULCI
-0.5308	-0.1523	0.1517	-0.4393	0.1830
-0.0600	-0.2813	0.1250	-0.5451	-0.0571
0.6000	-0.4623	0.1690	-0.8083	-0.1472

Index of moderated mediation:

	Index	BootSE	BootLLCI	BootULCI
NEGEXP	-0.2742	0.1768	-0.7025	-0.0234

***** ANALYSIS NOTES AND ERRORS *****

**Level of confidence
for all confidence
intervals in
output:**

95.0000

**Number of bootstrap
samples for percentile
bootstrap confidence
intervals:**

10000

W values in conditional tables are the 16th, 50th, and 84th percentiles

NOTE: Some bootstrap samples had to be replaced. The number of such replacements was:

OUTPUT J: SPSS

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 14
Y : perform
X : dysfunc
M : negtone
W : negexp

Covariates:
d1 d2 d3

Sample
Size: 60

OUTCOME VARIABLE:
negtone

Model Summary	R	R-sq	MSE	F	df1	df2	p
	.5026	.2526	.2213	4.6462	4.0000	55.0000	.0027

Model	coeff	se	t	p	LLCI	ULCI
constant	-.2057	.1305	-1.5760	.1208	-.4672	.0559
dysfunc	.6095	.1668	3.6546	.0006	.2753	.9437
d1	.3487	.1715	2.0332	.0469	.0050	.6923
d2	.2951	.2122	1.3906	.1700	-.1302	.7204
d3	.2507	.1663	1.5078	.1373	-.0825	.5840

OUTCOME VARIABLE:
perform

Model Summary	R	R-sq	MSE	F	df1	df2	p
	.5937	.3524	.2006	4.0428	7.0000	52.0000	.0013

Model	coeff	se	t	p	LLCI	ULCI
constant	-.1754	.1305	-1.3444	.1847	-.4373	.0864
dysfunc	.3729	.1808	2.0622	.0442	.0100	.7357
negtone	-.4886	.1377	-3.5485	.0008	-.7649	-.2123
negexp	-.0221	.1176	-.1875	.8520	-.2581	.2140
Int_1	-.4498	.2451	-1.8353	.0722	-.9417	.0420
d1	.1815	.1720	1.0556	.2960	-.1635	.5266
d2	.0841	.2099	.4004	.6905	-.3372	.5053
d3	.2816	.1648	1.7087	.0935	-.0491	.6123

Product terms key:

Int_1 : negtone x negexp

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
M*W	.0419	3.3684	1.0000	52.0000	.0722

Focal predict: negtone (M)
Mod var: negexp (W)

Conditional effects of the focal predictor at values of the moderator(s):

negexp	Effect	se	t	p	LLCI	ULCI
-.5308	-.2498	.2196	-1.1379	.2604	-.6904	.1907
-.0600	-.4616	.1434	-3.2188	.0022	-.7494	-.1738
.6000	-.7585	.1633	-4.6451	.0000	-1.0862	-.4308

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
.3729	.1808	2.0622	.0442	.0100	.7357

Conditional indirect effects of X on Y:

INDIRECT EFFECT:

dysfunc -> negtone -> perform

negexp	Effect	BootSE	BootLLCI	BootULCI
-.5308	-.1523	.1497	-.4365	.1726
-.0600	-.2813	.1249	-.5472	-.0569
.6000	-.4623	.1683	-.8113	-.1543

Index of moderated mediation:

	Index	BootSE	BootLLCI	BootULCI
negexp	-.2742	.1727	-.6833	-.0243

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

10000

W values in conditional tables are the 16th, 50th, and 84th percentiles.

----- END MATRIX -----

OUTPUT K: SAS

***** PROCESS Procedure for SAS Version 3.0 *****

Written by Andrew F. Hayes, Ph.D. <http://www.afhayes.com>

Documentation available in Hayes (2018) www.guilford.com/p/hayes3

Model and Variables

Model: 7

Y: USE4

X: MBRP

M: CRAVE2

W: BDI0

Covariates:

CRAVE0 TREATHR

Sample size:

168

OUTCOME VARIABLE:

CRAVE2

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.5140	0.2642	0.7277	11.6319	5.0000	162.0000	0.0000

Model

coeff	se	t	p	LLCI	ULCI
--------------	-----------	----------	----------	-------------	-------------

Model						
	coeff	se	t	p	LLCI	ULCI
constant	1.0385	0.4701	2.2090	0.0286	0.1102	1.9668
MBRP	0.5872	0.5241	1.1204	0.2642	-0.4478	1.6222
BDI0	1.1221	0.2762	4.0625	0.0001	0.5767	1.6675
Int_1	-0.9485	0.4235	-2.2398	0.0265	-1.7847	-0.1122
CRAVE0	0.1920	0.0735	2.6138	0.0098	0.0470	0.3371
TREATHRS	-0.0177	0.0103	-1.7190	0.0875	-0.0380	0.0026

Product terms key:

Int_1 : MBRP x BDI0

Test(s) of highest order unconditional interactions:

	R2-chng	F	df1	df2	p
X*W	0.0228	5.0166	1.0000	162.0000	0.0265

Focal predict: MBRP (X)

Mod var: BDI0 (W)

Conditional effects of the focal predictor at values of the moderator(s):

BDI0	Effect	se	t	p	LLCI	ULCI
0.9020	-0.2683	0.1850	-1.4500	0.1490	-0.6336	0.0971
1.1900	-0.5414	0.1375	-3.9384	0.0001	-0.8129	-0.2699
1.5180	-0.8525	0.1941	-4.3923	0.0000	-1.2358	-0.4692

OUTCOME VARIABLE:

USE4

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.7304	0.5335	0.2105	46.6070	4.0000	163.0000	0.0000

	Model					
	coeff	se	t	p	LLCI	ULCI
constant	1.1298	0.2150	5.2545	0.0000	0.7052	1.5544
MBRP	0.0926	0.0773	1.1979	0.2327	-0.0601	0.2453
CRAVE2	0.4810	0.0402	11.9547	0.0000	0.4015	0.5604
CRAVE0	-0.0884	0.0397	-2.2246	0.0275	-0.1668	-0.0099
TREATHRS	-0.0199	0.0056	-3.5720	0.0005	-0.0309	-0.0089

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y					
Effect	se	t	p	LLCI	ULCI
0.0926	0.0773	1.1979	0.2327	-0.0601	0.2453

Conditional indirect effects of X on Y:

INDIRECT EFFECT:
 MBRP -> CRAVE2 -> USE4

BDI0	Effect	BootSE	BootLLCI	BootULCI
0.9020	-0.1290	0.0756	-0.2858	0.0179
1.1900	-0.2604	0.0856	-0.4445	-0.1122
1.5180	-0.4100	0.1365	-0.7073	-0.1770

Index of moderated mediation:

	Index	BootSE	BootLLCI	BootULCI
BDI0	-0.4562	0.2162	-0.9372	-0.0890

***** ANALYSIS NOTES AND ERRORS *****

**Level of confidence
for all confidence
intervals in
output:**

95.0000

**Number of bootstrap
samples for percentile
bootstrap confidence
intervals:**

10000

W values in conditional tables are the 16th, 50th, and 84th percentiles

OUTPUT K: SPSS

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 7
Y : use4
X : mbrp
M : crave2
W : bdi0

Covariates:
crave0 treathrs

Sample
Size: 168

OUTCOME VARIABLE:
crave2

Model Summary

R	R-sq	MSE	F	df1	df2	p
.5140	.2642	.7277	11.6319	5.0000	162.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.0385	.4701	2.2090	.0286	.1102	1.9668
mbrp	.5872	.5241	1.1204	.2642	-.4478	1.6222
bdi0	1.1221	.2762	4.0625	.0001	.5767	1.6675
Int_1	-.9485	.4235	-2.2398	.0265	-1.7847	-.1122
crave0	.1920	.0735	2.6138	.0098	.0470	.3371
treathrs	-.0177	.0103	-1.7190	.0875	-.0380	.0026

Product terms key:

Int_1 : mbrp x bdi0

Test(s) of highest order unconditional interaction(s):

R2-chng	F	df1	df2	p	
X*W	.0228	5.0166	1.0000	162.0000	.0265

Focal predict: mbrp (X)
Mod var: bdi0 (W)

Conditional effects of the focal predictor at values of the moderator(s):

bdi0	Effect	se	t	p	LLCI	ULCI
.9020	-.2683	.1850	-1.4500	.1490	-.6336	.0971
1.1900	-.5414	.1375	-3.9384	.0001	-.8129	-.2699
1.5180	-.8525	.1941	-4.3923	.0000	-1.2358	-.4692

OUTCOME VARIABLE:

use4

Model Summary

R	R-sq	MSE	F	df1	df2	p
.7304	.5335	.2105	46.6070	4.0000	163.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.1298	.2150	5.2545	.0000	.7052	1.5544
mbrp	.0926	.0773	1.1979	.2327	-.0601	.2453
crave2	.4810	.0402	11.9547	.0000	.4015	.5604
crave0	-.0884	.0397	-2.2246	.0275	-.1668	-.0099
treathrs	-.0199	.0056	-3.5720	.0005	-.0309	-.0089

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
.0926	.0773	1.1979	.2327	-.0601	.2453

Conditional indirect effects of X on Y:

INDIRECT EFFECT:

mbrp -> crave2 -> use4

bdi0	Effect	BootSE	BootLLCI	BootULCI
.9020	-.1290	.0770	-.2869	.0183
1.1900	-.2604	.0862	-.4458	-.1090
1.5180	-.4100	.1367	-.7080	-.1767

Index of moderated mediation:

	Index	BootSE	BootLLCI	BootULCI
bdi0	-.4562	.2172	-.9463	-.0934

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

10000

W values in conditional tables are the 16th, 50th, and 84th percentiles.

----- END MATRIX -----

OUTPUT L: SAS

***** PROCESS Procedure for SAS Version 3.0 *****

Written by Andrew F. Hayes, Ph.D. <http://www.afhayes.com>

Documentation available in Hayes (2018) www.guilford.com/p/hayes3

Model and Variables

Model: 4

Y: LIKING

X: COND

M: RESPAPPR

Sample size:

129

**Coding of categorical X variable
for analysis:**

COND	X1	X2
0	0	0
1	1	0
2	0	1

OUTCOME VARIABLE:

RESPAPPR

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.5106	0.2607	1.3649	22.2190	2.0000	126.0000	0.0000

Model						
	coeff	se	t	p	LLCI	ULCI
constant	3.8841	0.1825	21.2881	0.0000	3.5231	4.2452
X1	1.2612	0.2550	4.9456	0.0000	0.7565	1.7659
X2	1.6103	0.2522	6.3842	0.0000	1.1111	2.1095

OUTCOME VARIABLE:
LIKING

Model Summary						
R	R-sq	MSE	F	df1	df2	p
0.5031	0.2531	0.8427	14.1225	3.0000	125.0000	0.0000

Model						
	coeff	se	t	p	LLCI	ULCI
constant	3.7103	0.3074	12.0711	0.0000	3.1020	4.3187
X1	-0.0037	0.2190	-0.0169	0.9865	-0.4371	0.4297
X2	-0.2202	0.2280	-0.9658	0.3360	-0.6715	0.2310
RESPAPPR	0.4119	0.0700	5.8844	0.0000	0.2734	0.5504

***** TOTAL EFFECT MODEL *****

OUTCOME VARIABLE:
LIKING

Model Summary						
R	R-sq	MSE	F	df1	df2	p
0.2151	0.0463	1.0676	3.0552	2.0000	126.0000	0.0506

Model						
	coeff	se	t	p	LLCI	ULCI

	Model					
	coeff	se	t	p	LLCI	ULCI
constant	5.3102	0.1614	32.9083	0.0000	4.9909	5.6296
X1	0.5158	0.2255	2.2870	0.0239	0.0695	0.9621
X2	0.4431	0.2231	1.9863	0.0492	0.0016	0.8845

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Relative total effects of X on Y:

	Effect	se	t	p	LLCI	ULCI
X1	0.5158	0.2255	2.2870	0.0239	0.0695	0.9621
X2	0.4431	0.2231	1.9863	0.0492	0.0016	0.8845

Omnibus test of total effect of X on Y:

R2-chng	F	df1	df2	p
0.0463	3.0552	2.0000	126.0000	0.0506

Relative direct effects of X on Y

	Effect	se	t	p	LLCI	ULCI
X1	-0.0037	0.2190	-0.0169	0.9865	-0.4371	0.4297
X2	-0.2202	0.2280	-0.9658	0.3360	-0.6715	0.2310

Omnibus test of direct effect of X on Y:

R2-chng	F	df1	df2	p
0.0087	0.7286	2.0000	125.0000	0.4846

Relative indirect effects of X on Y

COND -> RESPAPPR -> LIKING

	Effect	BootSE	BootLLCI	BootULCI
X1	0.5195	0.1509	0.2471	0.8401
X2	0.6633	0.1657	0.3593	1.0059

***** ANALYSIS NOTES AND ERRORS *****

**Level of confidence
for all confidence
intervals in
output:**

95.0000

**Number of bootstrap
samples for percentile
bootstrap confidence
intervals:**

10000

OUTPUT L: SPSS

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 7
Y : use4
X : mbrp
M : crave2
W : bdi0

Covariates:
crave0 treathrs

Sample
Size: 168

OUTCOME VARIABLE:
crave2

Model Summary

R	R-sq	MSE	F	df1	df2	p
.5140	.2642	.7277	11.6319	5.0000	162.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.0385	.4701	2.2090	.0286	.1102	1.9668
mbrp	.5872	.5241	1.1204	.2642	-.4478	1.6222
bdi0	1.1221	.2762	4.0625	.0001	.5767	1.6675
Int_1	-.9485	.4235	-2.2398	.0265	-1.7847	-.1122
crave0	.1920	.0735	2.6138	.0098	.0470	.3371
treathrs	-.0177	.0103	-1.7190	.0875	-.0380	.0026

Product terms key:

Int_1 : mbrp x bdi0

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0228	5.0166	1.0000	162.0000	.0265

Focal predict: mbrp (X)
Mod var: bdi0 (W)

Conditional effects of the focal predictor at values of the moderator(s):

bdi0	Effect	se	t	p	LLCI	ULCI
.9020	-.2683	.1850	-1.4500	.1490	-.6336	.0971
1.1900	-.5414	.1375	-3.9384	.0001	-.8129	-.2699
1.5180	-.8525	.1941	-4.3923	.0000	-1.2358	-.4692

OUTCOME VARIABLE:

use4

Model Summary

R	R-sq	MSE	F	df1	df2	p
.7304	.5335	.2105	46.6070	4.0000	163.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.1298	.2150	5.2545	.0000	.7052	1.5544
mbrp	.0926	.0773	1.1979	.2327	-.0601	.2453
crave2	.4810	.0402	11.9547	.0000	.4015	.5604
crave0	-.0884	.0397	-2.2246	.0275	-.1668	-.0099
treathrs	-.0199	.0056	-3.5720	.0005	-.0309	-.0089

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
.0926	.0773	1.1979	.2327	-.0601	.2453

Conditional indirect effects of X on Y:

INDIRECT EFFECT:

mbrp -> crave2 -> use4

bdi0	Effect	BootSE	BootLLCI	BootULCI
.9020	-.1290	.0770	-.2869	.0183
1.1900	-.2604	.0862	-.4458	-.1090
1.5180	-.4100	.1367	-.7080	-.1767

Index of moderated mediation:

	Index	BootSE	BootLLCI	BootULCI
bdi0	-.4562	.2172	-.9463	-.0934

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

10000

W values in conditional tables are the 16th, 50th, and 84th percentiles.

----- END MATRIX -----

OUTPUT M: SAS

***** MEMORE Procedure for SAS Version 1.1 *****

Written by Amanda K. Montoya and Andrew F. Hayes

Documentation available at afhaves.com

Variables:

Y = PAIN2 PAIN1

M = HORMONE2 HORMONE1

Computed Variables:

Ydiff = PAIN2 - PAIN1

Mdiff = HORMONE2 - HORMONE1

Mavg = (HORMONE2 + HORMONE1) /2 centered

Sample Size:

20

Outcome:

Ydiff = PAIN2 - PAIN1

Model

	Effect	SE	t	df	p	LLCI	ULCI
'X'	-6.5000	2.0654	-3.1471	19.0000	0.0053	-10.8232	-2.1768

Outcome:

Mdiff = HORMONE2 - HORMONE1

Model

	Effect	SE	t	df	p	LLCI	ULCI
'X'	-2.2500	0.9173	-2.4528	19.0000	0.0240	-4.1701	-0.3299

Outcome:

Ydiff = PAIN2 - PAIN1

Model Summary

R	R-sq	MSE	F	df1	df2	p
0.5554	0.3085	65.9384	3.7918	2.0000	17.0000	0.0435

Model

	Effect	SE	t	df	p	LLCI	ULCI
'X'	-3.7654	2.0869	-1.8043	17.0000	0.0889	-8.1687	0.6379
Mdiff	1.2154	0.4572	2.6583	17.0000	0.0166	0.2507	2.1801
Mavg	-0.1302	0.3209	-0.4057	17.0000	0.6900	-0.8074	0.5470

***** TOTAL, DIRECT, AND INDIRECT EFFECTS *****

Total effect of X on Y

Effect	SE	t	df	p	LLCI	ULCI
-6.5000	2.0654	-3.1471	19.0000	0.0053	-10.8232	-2.1768

Direct effect of X on Y

Effect	SE	t	df	p	LLCI	ULCI
-3.7654	2.0869	-1.8043	17.0000	0.0889	-8.1687	0.6379

Indirect Effect of X on Y through M

	Effect	Boot SE	BootLLCI	BootULCI
Ind1	-2.7346	1.3262	-5.6979	-0.5390

Indirect effect key

Ind1 X -> M1diff -> Ydiff

***** ANALYSIS NOTES AND WARNINGS *****

Check SAS log for errors. Do not interpret output if errors are found.

Bootstrap confidence interval method: Percentile

Number of samples
for bootstrap
confidence intervals:

10000

Level of confidence
for all confidence
intervals in output:

95

OUTPUT M: SPSS

Run MATRIX procedure:

***** MEMORE Procedure for SPSS Version 1.1 *****

Written by Amanda Montoya

Documentation available at afhayes.com

Variables:

Y = pain2 pain1

M = hormone2 hormone1

Computed Variables:

Ydiff = pain2 - pain1
Mdiff = hormone2 - hormone1
Mavg = (hormone2 + hormone1) /2 Centered

Sample Size:

20

Outcome: Ydiff = pain2 - pain1

Model

	Effect	SE	t	df	p	LLCI	ULCI
'X'	-6.5000	2.0654	-3.1471	19.0000	.0053	-10.8233	-2.1767

Outcome: Mdiff = hormone2 - hormone1

Model

	Effect	SE	t	df	p	LLCI	ULCI
'X'	-2.2500	.9173	-2.4528	19.0000	.0240	-4.1701	-.3299

Outcome: Ydiff = pain2 - pain1

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.5554	.3085	65.9384	3.7918	2.0000	17.0000	.0435

Model

	coeff	SE	t	df	p	LLCI	ULCI
'X'	-3.7654	2.0869	-1.8043	17.0000	.0889	-8.1689	.6381
Mdiff	1.2154	.4572	2.6583	17.0000	.0166	.2506	2.1801
Mavg	-.1302	.3209	-.4057	17.0000	.6900	-.8074	.5470

***** TOTAL, DIRECT, AND INDIRECT EFFECTS *****

Total effect of X on Y

	Effect	SE	t	df	p	LLCI	ULCI
	-6.5000	2.0654	-3.1471	19.0000	.0053	-10.8233	-2.1767

Direct effect of X on Y

	Effect	SE	t	df	p	LLCI	ULCI
	-3.7654	2.0869	-1.8043	17.0000	.0889	-8.1689	.6381

Indirect Effect of X on Y through M

	Effect	BootSE	BootLLCI	BootULCI

Ind1 -2.7346 1.3069 -5.6645 -.5186

Indirect Key

Ind1 X -> Mldiff -> Ydiff

***** ANALYSIS NOTES AND WARNINGS *****

Bootstrap confidence interval method used: Percentile bootstrap.

Number of bootstrap samples for bootstrap confidence intervals:
10000

Level of confidence for all confidence intervals in output:
95.00

The following variables were mean centered prior to analysis:
(hormone2 + hormone1) /2

----- END MATRIX -----