OLS Equation Estimations for *Interact*

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ABO and ABOS equations were re-derived from the same data as used in L. Smith-Lovin and D. Heise, *Analyzing Social Interaction: Advances in Affect Control Theory*. (New York: Gordon and Breach, 1988), but the estimations here were done with OLS rather than LISREL, and here no corrections for measurement error were made.

Data were structured as follows.

Rater sex	Setting	ABO out-of-context measures	ABO in-context measures	Setting out-of-context measures	Setting in-context measures
0	0	male data	male data	all zeros	missing data
1	0	female data	female data	all zeros	missing data
0	1	male data	male data	male data	male data
1	1	female data	female data	female data	female data

Terms in each equation were determined by the following stepwise procedure. (The Ba' solution drops BeOa, which did come out significant (.016 coefficient), in order to keep within the 35-predictor limit of INTERACT.)

1.   Begin with a model in which the dependent variable is estimated from a Constant, first-order terms Ae Ap Aa Be Bp Ba Oe Op Oa Se Sp Sa, consistency terms AeBe AeOe BeOe AeBeOe ApBp ApOp BpOp ApBpOp AaBa AaOa BaOa AaBaOa, all other second-order terms not involving setting, and additional third-order terms as reported in Smith-Lovin and Heise (1988), Chapter 2. Also include a rater-sex variable (male=0, female=1) and its products with all the ABOS variables. Also include a Setting dummy variable (0=ABO, 1=ABOS) and its products with all of the ABOS variables.

Setting EPA dependent variables involve the same model plus the higher-order setting terms as reported in Smith-Lovin and Heise (1988), Chapter 3. Sample sizes in this case precluded estimating any sex-of-rater effect beyond an adjustment constant.

The initial model was put through Systat's STEP procedure (in MGLH), forcing ABO first-order

and consistency terms and allowing other terms to enter or be removed with the default alpha value of 0.15.

2.   Using the model defined in step 1, Systat's STEP procedure was run again, forcing the nine ABO first-order terms and allowing other terms to enter or be removed with an alpha value of 0.10.

3.   Using the model defined in step 2, Systat's STEP procedure was run again, forcing no variables and using an enter-remove alpha value of 0.01.

4.   Using the model defined in step 3, Systat was used to estimate the equations reported here.

The self-directed-action equations are based on new data not previously reported. After finding no rater effects, the data were structured as follows.

Actor sex defined by pronoun	AB out-of-context measures	AB in-context measures
0	male and female data	male and female data
1	male and female data	male and female data

The stepwise procedure was similar.

1.   Begin with a model in which the dependent variable is estimated from a Constant, first-order terms Ae Ap Aa Be Bp Ba, consistency terms AeBe ApBp AaBa, and all other second-order terms. Also include a sex-of-actor variable (male=0, female=1) and its products with all the AB variables.

      The initial model was put through Systat's STEP procedure, forcing AB first-order and consistency terms and allowing other terms to enter or be removed with the default alpha value of 0.15.

2.   Using the model defined in step 1, Systat's STEP procedure was run again, forcing no variables and using an enter-remove alpha value of 0.01.

3.   Using the model defined in step 2, Systat was used to estimate the equations reported here.

Self-directed action in which the respondent was instructed to "Imagine you are ... " were done the same way, but sex-of-actor (which would be the same as sex-of-rater) was ignored because of small sample size.

Actor	ABO Frame, male rater			Increment, female rater			Increment, ABOS frame		
	Ae'	Ap'	Aa'	Ae'	Ap'	Aa'	Ae'	Ap'	Aa'
Constant	-0.251	-0.138	0.079	0.231					
Ae	0.449		0.055		-0.085		-0.101		
Ap		0.589	-0.048					-0.126	
Aa		0.075	0.651			0.118			
Be	0.425	-0.083	-0.080		-0.067		0.091		
Bp	-0.052	0.465	0.101						
Ba	-0.089		0.269						
Oe				0.048	0.052				
Op									
Oa							0.119		
Se									
Sp									
Sa							0.072		
AeBe	0.050								
AeBp	-0.036								
AeBa									
AeOe									
ApBe		0.046							
ApBp		-0.069							
ApBa									
ApOe							0.075		
ApOp									
ApOa									
AaBe									
AaBp									-0.059
AaBa		-0.033	-0.054						
BeOe	0.119	0.018							

BeOp	-0.059	-0.019							
BpOe	-0.049								
BpOp	0.063				-0.043		-0.072		
BpOa		0.030							
BaOe									
BaOp									
AeBeOe	0.025	0.009							
AeBpOp	0.026								
ApBpOp									
ApBpOa			-0.023						
R^2	0.837	0.712	0.769						

Behavior	ABO Frame, male rater			Increment, female rater			Increment, ABOS frame		
	Be'	Bp'	Ba'	Be'	Bp'	Ba'	Be'	Bp'	Ba'
Constant	-0.129	0.062	-0.002	0.096		0.112			
Ae	0.104								
Ap		0.128	-0.065						
Aa			0.270			0.059			
Be	0.557	-0.124	-0.058		-0.041				
Bp	-0.061	0.685	0.119						
Ba	-0.122		0.614						
Oe					0.047				
Op					-0.040		-0.140		
Oa			0.039						
Se									
Sp								0.093	
Sa									
AeBe	0.014								
AeBp									
AeBa					-0.035				
AeOe				0.026					
ApBe				0.032					
ApBp									
ApBa									
ApOe							0.087		
ApOp									
ApOa		0.033							
AaBe									
AaBp									
AaBa									
BeOe	0.109	0.021							

BeOp	-0.046								
BpOe									
BpOp	0.043								
BpOa									
BaOe									
BaOp	0.032								
AeBeOe	0.022	0.010							
AeBpOp	0.021								
ApBpOp	-0.019		0.017						
ApBpOa									
R^2	0.856	0.699	0.778						

Object	ABO Frame, male rater			Increment, female rater			Increment, ABOS frame		
	Oe'	Op'	Oa'	Oe'	Op'	Oa'	Oe'	Op'	Oa'
Constant	-0.099	-0.428	-0.027	0.251		-0.090			
Ae									
Ap									
Aa									
Be	0.113	0.189	0.032		-0.063		0.058		
Bp		-0.121							
Ba		0.052	0.054						
Oe	0.611	-0.085			-0.094	0.046	-0.117		
Op		0.617	-0.046				-0.137	-0.234	
Oa		0.081	0.663			0.164			-0.185
Se	🟥	🟥	🟥	🟥	🟥	🟥		0.080	
Sp	🟥	🟥	🟥	🟥	🟥	🟥			
Sa	🟥	🟥	🟥	🟥	🟥	🟥			
AeBe	0.033	0.012							
AeBp		0.028							
AeBa									
AeOe			-0.015						
ApBe									
ApBp									
ApBa								-0.147	
ApOe									
ApOp			-0.030						
ApOa				0.032					
AaBe									
AaBp									
AaBa									
BeOe	0.043	0.028	0.012						

BeOp		0.021							
BpOe	-0.025								
BpOp									
BpOa				-0.048					
BaOe					0.051				
BaOp									
AeBeOe	0.010								
AeBpOp									
ApBpOp		-0.023							
ApBpOa					-0.041				
R^2	0.861	0.752	0.753						

Setting	ABOS Frame, male rater			Increment, female rater		
	Se'	Sp'	Sa'	Se'	Sp'	Sa'
Constant	-0.346	-0.057	0.090		0.145	
Ae						
Ap						
Aa			0.074			
Be	0.112					
Bp		0.105				
Ba						
Oe						
Op						
Oa						
Se	0.597	-0.141	-0.068			
Sp		0.655				
Sa	-0.064		0.744			
AeBe			-0.027			
AeBp						
AeBa						
AeOe						
ApBe						
ApBp						
ApBa						
ApOe						
ApOp						
ApOa						
AaBe						
AaBp						
AaBa						
BeOe	0.026					
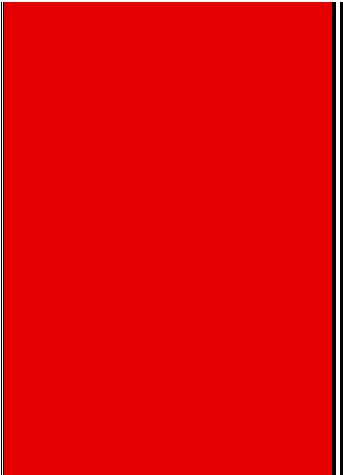
BeOp			
BpOe			
BpOp			
BpOa		0.056	
BaOe			
BaOp			
AeBeOe			
AeBpOp			
ApBpOp			
ApBpOa			
R^2	0.852	0.761	0.865
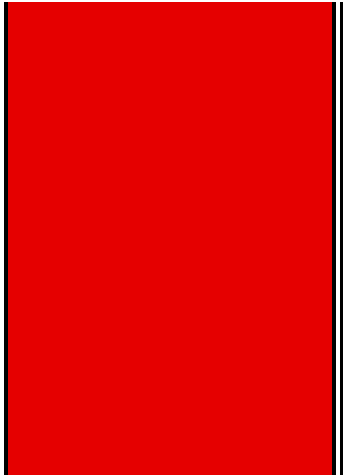
Self- directed action: Actor	Male acting on self			Increment, female actor		
	Ae'	Ap'	Aa'	Ae'	Ap'	Aa'
Constant	-0.307	-0.571	-0.191			
Ae	0.466					
Ap		0.374	-0.072			
Aa			0.572			
Be	0.238	0.161	0.097			
Bp			-0.175		-0.087	
Ba		0.212	0.370			
Oe						
Op						
Oa						
Se						
Sp						
Sa						
AeBe	0.077				0.053	0.035
AeBp	-0.061					
AeBa						
AeOe						
ApBe			0.017			
ApBp						
ApBa	-0.071					
ApOe						
ApOp						
ApOa						
AaBe	-0.027					
AaBp						
AaBa						
BeOe						

BeOp						
BpOe						
BpOp						
BpOa						
BaOe						
BaOp						
AeBeOe						
AeBpOp						
ApBpOp						
ApBpOa						
R^2	0.638	0.625	0.797			

Self-directed action: Behavior	Male acting on self			Increment, female actor		
	Be'	Bp'	Ba'	Be'	Bp'	Ba'
Constant	-0.451	-0.533	-0.258			
Ae	0.309	0.068				
Ap		0.216	-0.058			
Aa			0.430			
Be	0.293	0.069	0.069			
Bp		0.155	-0.140			
Ba		0.127	0.447			
Oe						
Op						
Oa						
Se						
Sp						
Sa						
AeBe	0.069		0.020	0.071	0.035	
AeBp	-0.082					
AeBa						
AeOe						
ApBe						
ApBp						
ApBa						
ApOe						
ApOp						
ApOa						
AaBe						
AaBp						
AaBa						
BeOe						

BeOp						
BpOe						
BpOp						
BpOa						
BaOe						
BaOp						
AeBeOe						
AeBpOp						
ApBpOp						
ApBpOa						
R^2	0.529	0.491	0.760			

Imagine YOU self-directed (all raters)	Actor			Behavior		
	Ae'	Ap'	Aa'	Be'	Bp'	Ba'
Constant	-0.209	-0.498	-0.210	-0.200	-0.243	-0.296
Ae	0.150					
Ap						
Aa			0.330			0.213
Be	0.448	0.199	0.210	0.407	0.196	0.098
Bp	-0.345		-0.264			
Ba	0.544	0.646	0.568	0.384	0.541	0.520
Oe						
Op						
Oa						
Se						
Sp						
Sa						
AeBe						
AeBp						
AeBa						
AeOe						
ApBe						
ApBp						
ApBa		0.214			0.128	
ApOe						
ApOp						
ApOa						
AaBe						
AaBp						
AaBa						
BeOe						
BeOp						

BpOe			
BpOp			
BpOa			
BaOe			
BaOp			
AeBeOe			
AeBpOp			
ApBpOp			
ApBpOa			
R^2	0.668	0.563	0.675

0.600	0.487	0.525