

# Is Perceived Similarity More Than Assumed Similarity?

## An Interpersonal Path to Seeing Similarity Between Self and Others

\*masked for review\*

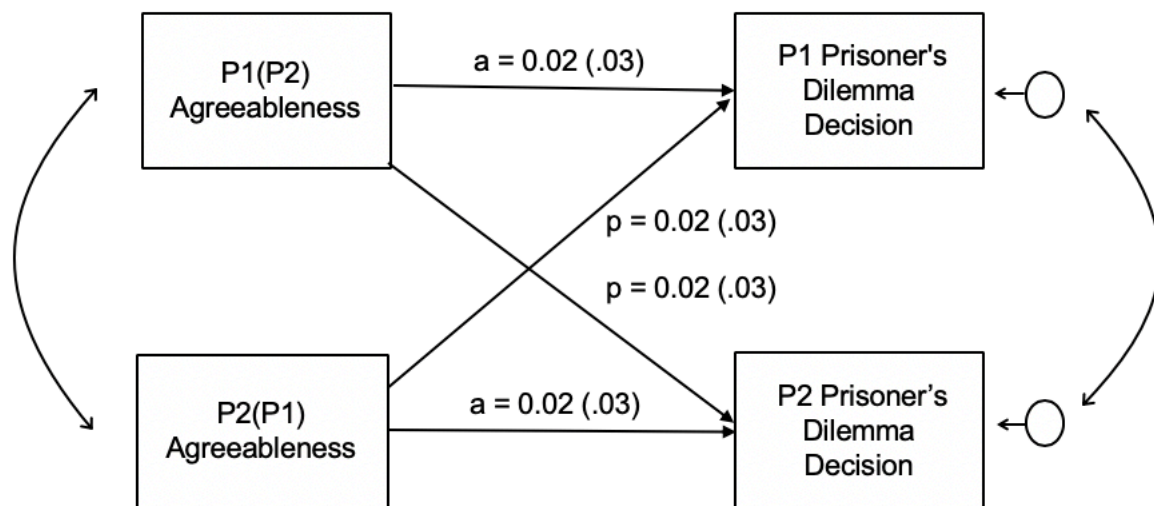
### Supplemental Materials

#### Results from Economic Game Analysis

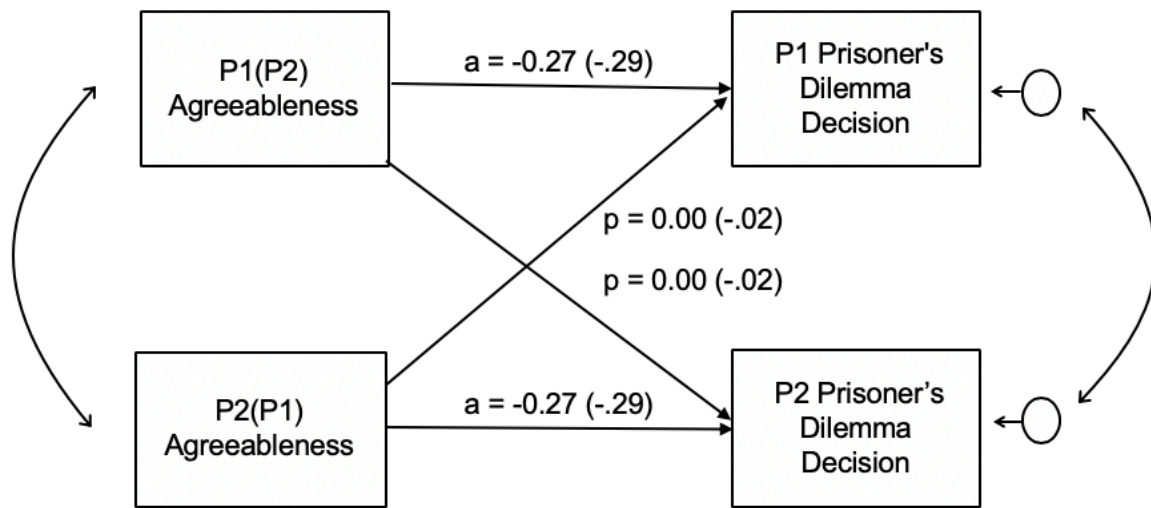
We preregistered and planned to test the hypothesis that perceptions of agreeableness are associated with more prosocial decisions. However, the distributions of both economic-game variables showed a pattern of heaping on certain values with very little variance. In the dictator game, 294 participants out of 322 chose to evenly split any winnings; in the prisoner's dilemma game, 304 participants out of 322 chose to cooperate. The lack of variance in these outcomes makes them a poor empirical test of a hypothesis about individual differences, since subjects did not differ enough in their decisions in the game. Because we preregistered this analysis, we report the results here.

We estimated an Actor-Partner Interdependence Model (APIM) for each economic game, predicting economic game decisions with perceived partner Agreeableness. Agreeableness ratings were POMP scored prior to fitting models to aid with interpretation. The key hypothesis test was the actor effect, which in this model is the relationship between an individual's perception of their partner's Agreeableness and their decision in the economic game. The APIM for the dictator game showed identical non-significant actor,  $actor = 0.02$ , 95% CI = [-0.06, 0.09],  $\beta_a = .03$ ,  $p = .667$ , and partner effects,  $partner = 0.02$ , 95% CI = [-0.06, 0.09],  $\beta_p = .03$ ,  $p = .665$ . The APIM for the prisoner's dilemma game showed a significant actor effect,  $actor = -0.27$ , 95% CI = [-0.05 -0.01],  $\beta_a = -.29$ ,  $p = .003$ , but not a significant partner effect,  $partner = -0.00$ , 95% CI = [-0.03, 0.02],  $\beta_p = .02$ ,  $p = .910$ . The prisoner's dilemma decisions were keyed

such that higher scores indicate defecting. Thus, the significant negative actor effect suggests that perceptions of higher agreeableness in a partner are associated with cooperation. However, this effect would need to be replicated in data with variance in the response for us to have confidence in it.



*Figure 1.* APIM predicting decisions made in the dictator game from perceived Agreeableness of partner. Standardized path weights in parentheses.



*Figure 2.* APIM predicting decisions made in the prisoner's dilemma game from perceived Agreeableness of partner. Standardized path weights in parentheses.

### **Modified BFI used for behavioral observations.**

BFI-I Here are a number of characteristics that may or may not apply to the person you just observed. For example, do you agree that the person you observed is someone who *likes to spend time with others*? You would indicate your level of agreement by choosing one of the options (ex: disagree strongly, disagree a little, etc.).

Please indicate the extent to which you agree or disagree with each statement.

The person I observed....during the interaction

BFIC\_1 Was Outgoing, Sociable.

BFIC\_2 Was Compassionate, has a soft heart.

BFIC\_3 Was disorganized.

BFIC\_4 Was relaxed, handled stress well.

BFIC\_5 Demonstrated few artistic interests.

BFIC\_6 Was assertive.

BFIC\_7 Was respectful, treated their partner with respect.

BFIC\_8 Was lazy.

BFIC\_9 Stayed optimistic after experiencing a setback.

BFIC\_10 Demonstrated curiosity about many different things.

BFIC\_11 Rarely showed excitement or eagerness.

BFIC\_12 Found fault with their partner.

BFIC\_13 Was dependable, steady.

BFIC\_14 Was moody, had up and down mood swings.

BFIC\_15 Was inventive, found clever ways to do things.

BFIC\_16 Tended to be quiet.

BFIC\_17 Felt little sympathy for interaction partner.

BFIC\_18 Was systematic, liked to keep things in order.

BFIC\_19 Was tense at times

BFIC\_20 Was fascinated by art, music, or literature.

BFIC\_21 Was dominant, acted as a leader.

BFIC\_22 Started arguments with their interaction partner.

BFIC\_23 Had difficulty getting started on tasks.

BFIC\_24 Felt secure, comfortable with self.

BFIC\_25 Avoided intellectual, philosophical discussions.

BFIC\_26 Was not very active than their interaction partner.

BFIC\_27 Had a forgiving nature.

BFIC\_28 Was somewhat careless.

BFIC\_29 Was emotionally stable, not easily upset.

BFIC\_30 Had little creativity.

BFIC\_31 Was sometimes shy, introverted.

BFIC\_32 Was helpful and unselfish with their interaction partner.

BFIC\_33 Kept things neat and tidy.

BFIC\_34 Worried a lot.

BFIC\_35 Valued art and beauty.

BFIC\_36 Found it hard to influence their interaction partner.

BFIC\_37 Was sometimes rude to their interaction partner.

BFIC\_38 Was efficient, got things done.

BFIC\_39 Expressed sadness.

BFIC\_40 Shared complex and/or deep thoughts.

BFIC\_41 Was full of energy.

BFIC\_42 Was suspicious of their interaction partner's intentions.

BFIC\_43 Was reliable, could be counted on.

BFIC\_44 Kept their emotions under control.

BFIC\_45 Had difficulty imagining things.

BFIC\_46 Was talkative.

BFIC\_47 Was cold and uncaring.

BFIC\_48 Left a mess, didn't clean up.

BFIC\_49 Rarely felt anxious or afraid.

BFIC\_50 Expressed that poetry and plays are boring.

BFIC\_51 Preferred to have their interaction partner take charge.

BFIC\_52 Was polite, courteous to their interaction partner.

BFIC\_53 Was persistent, worked until task is finished.

BFIC\_54 Looked depressed, blue.

BFIC\_55 Showed little interest in abstract ideas.

BFIC\_56 Showed a lot of enthusiasm.

BFIC\_57 Assumed the best about their interaction partner.

BFIC\_58 Behaved irresponsibly.

BFIC\_59 Was temperamental, got emotional easily.

BFIC\_60 Was original, came up with new ideas.



**BFI-2 and SBI Correlation Tables for Variables Used to Fit Domain Level DPMs**

Table 1

*BFI-2: Extraversion. Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. p1_trait_extra	57.61	17.83					
2. p1_state_extra	54.24	16.63	.31**				
			[.16, .44]				
3. p1_perc_p2_extr a	54.68	16.65	.11	-.05			
			[-.05, .26]	[-.20, .11]			
4. p2_trait_extra	57.79	16.69	.05	-.03	.23**		
			[-.11, .20]	[-.19, .12]	[.08, .37]		
5. p2_state_extra	52.03	15.80	.05	-.10	.55**	.17*	
			[-.10, .20]	[-.26, .05]	[.43, .65]	[.01, .31]	
6. p2_perc_p1_extr a	55.97	18.06	.26**	.56**	.06	.11	-.01
			[.11, .40]	[.44, .66]	[-.10, .21]	[-.04, .26]	[-.16, .14]

*Note.* *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .

Table 2

*BFI-2: Agreeableness. Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. p1_trait_agree	67.99	13.90					
2. p1_state_agree	66.87	10.45	.14 [-.01, .29]				
3. p1_perc_p2_agree	73.80	10.12	.31** [.17, .45]	.13 [-.03, .28]			
4. p2_trait_agree	69.93	13.73	-.11 [-.26, .04]	-.13 [-.28, .02]	.03 [-.13, .18]		
5. p2_state_agree	67.10	10.68	.09 [-.07, .24]	.07 [-.08, .22]	.21** [.06, .36]	.19* [.03, .33]	
6. p2_perc_p1_agree	75.32	11.53	.21** [.05, .35]	.37** [.22, .49]	.21** [.06, .35]	.21** [.06, .36]	.21** [.06, .35]

*Note.* *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .

Table 3

*BFI-2: Conscientiousness. Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. p1_trait_consc	62.56	15.50					
2. p1_state_consc	70.97	7.43	.12 [-.03, .27]				
3. p1_perc_p2_con sc	71.58	12.08	.28** [.13, .42]	.13 [-.03, .28]			
4. p2_trait_consc	63.18	16.67	-.03 [-.19, .12]	-.03 [-.18, .13]	.16* [.01, .31]		
5. p2_state_consc	71.81	7.58	.07 [-.08, .22]	-.00 [-.16, .15]	.09 [-.06, .24]	.07 [-.08, .23]	
6. p2_perc_p1_con sc	71.64	12.63	-.05 [-.21, .10]	.25** [.10, .39]	.03 [-.13, .18]	.02 [-.13, .18]	.09 [-.07, .24]

*Note.* *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .

Table 4

*BFI-2: Neuroticism. Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. p1_trait_neuro	49.12	17.69					
2. p1_state_neuro	35.17	6.96	.08 [-.08, .23]				
3. p1_perc_p2_neu ro	38.61	9.24	.14 [-.01, .29]	-.04 [-.19, .12]			
4. p2_trait_neuro	50.49	16.36	-.13 [-.28, .02]	-.09 [-.24, .07]	.11 [-.05, .26]		
5. p2_state_neuro	35.12	7.53	-.07 [-.22, .09]	-.16* [-.31, -.01]	.14 [-.01, .29]	.10 [-.05, .25]	
6. p2_perc_p1_neu ro	37.45	10.47	-.03 [-.18, .13]	.07 [-.09, .22]	.07 [-.09, .22]	.17* [.02, .32]	.24** [.08, .38]

*Note.* *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .

Table 5

*BFI-2: Openness. Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. p1_trait_open	68.18	16.90					
2. p1_state_open	52.97	13.00	.25** [.10, .39]				
3. p1_perc_p2_ope n	64.36	16.34	.26** [.11, .40]	.24** [.09, .38]			
4. p2_trait_open	67.85	15.24	-.07 [-.22, .08]	.00 [-.15, .16]	.36** [.22, .49]		
5. p2_state_open	51.41	13.09	.08 [-.07, .23]	.31** [.16, .44]	.38** [.24, .50]	.35** [.21, .48]	
6. p2_perc_p1_ope n	64.32	15.19	.18* [.02, .32]	.42** [.28, .54]	.09 [-.07, .24]	.03 [-.12, .19]	.12 [-.04, .27]

*Note.* *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .

Table 6

*SBI: Affiliation. Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. p1_trait_aff	64.06	7.01					
2. p1_state_aff	59.72	5.28	.22** [.06, .36]				
3. p1_perc_p2_aff	66.97	6.51	.29** [.15, .43]	.16* [.00, .31]			
4. p2_trait_aff	64.05	7.45	-.13 [-.28, .02]	-.07 [-.22, .09]	.15 [-.01, .30]		
5. p2_state_aff	59.70	5.41	.08 [-.08, .23]	.13 [-.03, .28]	.24** [.09, .38]	.33** [.19, .46]	
6. p2_perc_p1_aff	66.66	7.54	.11 [-.04, .26]	.26** [.11, .40]	.24** [.09, .38]	.37** [.23, .50]	.13 [-.02, .28]

*Note.* *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .

Table 7

*SBI: Dominance (labelled control).. Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. p1_trait_control	51.78	8.96					
2. p1_state_control	49.08	9.02	.22** [.07, .36]				
3. p1_perc_p2_con trol	50.68	7.65	.03 [-.12, .18]	-.22** [-.36, -.07]			
4. p2_trait_control	51.92	8.48	.06 [-.10, .21]	-.12 [-.27, .04]	.30** [.15, .44]		
5. p2_state_control	47.72	8.33	-.03 [-.19, .12]	-.34** [-.47, -.20]	.39** [.25, .51]	.27** [.12, .41]	
6. p2_perc_p1_con trol	50.97	9.30	.11 [-.05, .26]	.40** [.26, .52]	-.10 [-.25, .05]	.01 [-.15, .16]	-.12 [-.27, .04]

*Note.* *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .