

Table S1. Final model Investment Decision (€) – €10)

Fixed Factor	Denominator df	F	Estimate	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper
Corrected Model	5.850	193.81			0.000		
Partner Pupil	5.850	134.96	0.436	0.038	0.000	0.362	0.510
Partner Group	5.850	2.34	0.046	0.030	0.126	-0.013	0.106
Partner Emotion	5.850	893.78	0.931	0.031	0.000	0.870	0.992
Partner Pupil * Partner Emotion	5.850	6.24	0.094	0.037	0.013	0.020	0.167
Partner Group * Partner Emotion	5.850	11.15	-0.101	0.030	0.001	-0.160	-0.042

Estimates of Covariance Parameters

Covariance Parameters	Z	Estimate	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper
Intercept [subject=id]	4.68	0.579	0.124	0.000	.381	.881

Dependent variable = Investment Decision, modulated by partner emotion expression, partner pupil and their interactions. All fixed factors were centered and treated as continuous (scale). Partner Pupil = dilating (coded 1), static (coded 0) or constricting (coded -1). Partner Group = In-group (coded -1), out-group (coded 1). Partner Emotion = Angry (coded -1), Happy (coded 1). Investments had a binary distribution function and were analyzed in a Generalized mixed model implemented in SPSS. Denominator Degrees of Freedom (df) computed in the generalized Linear mixed model are based on a maximum likelihood estimation.

Table S2. Final Full Pupil-mimicry model

Fixed Factor	Denominator df	F	Estimate	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	52,620	3.97	0.014	0.007	0.052	0.000	0.029
Lin	53,509	7.04	-0.031	0.012	0.010	-0.054	-0.008
Partner Pupil (A)	9779,935	37.80	0.013	0.002	0.000	0.009	0.017
Partner Group	9795,862	0.26	0.001	0.002	0.611	-0.003	0.004
Partner Emotion	9781,649	22.52	0.008	0.002	0.000	0.005	0.012
Lin * Partner Pupil (B)	68296,822	63.60	0.041	0.005	0.000	0.031	0.052
Lin * Partner Group	68253,357	9.01	0.013	0.004	0.003	0.004	0.021
Lin * Partner Emotion	62107,282	11.36	0.013	0.004	0.001	0.005	0.021
Partner Pupil * Partner Group	9779,799	3.75	-0.004	0.002	0.053	-0.008	0.000
Partner Pupil * Partner Emotion	9780,170	0.00	0.000	0.002	0.998	-0.004	0.004
Partner Group * Partner Emotion	9782,158	3.31	-0.003	0.002	0.069	-0.007	0.000
Lin * Partner Pupil * Partner Group	62088,435	0.50	-0.003	0.005	0.481	-0.013	0.006
Lin * Partner Pupil * Partner Emotion	62090,511	3.75	-0.009	0.005	0.053	-0.018	0.000
Lin * Partner Group * Partner Emotion	62104,228	3.71	-0.007	0.004	0.054	-0.015	0.000
Partner Pupil * Partner Group * Partner Emotion	9780,458	0.21	0.001	0.002	0.649	-0.003	0.005
Quadr	51,885	4.21	-0.011	0.006	0.045	-0.023	0.000
Quadr * Partner Pupil (C)	177403,343	0.03	0.000	0.003	0.869	-0.006	0.005
Quadr * Partner Group	175476,649	0.13	0.001	0.002	0.716	-0.004	0.005
Quadr * Partner Emotion	177423,570	5.91	-0.006	0.002	0.015	-0.010	-0.001
Quadr * Partner Pupil * Partner Group	177407,877	0.17	-0.001	0.003	0.684	-0.007	0.004
Quadr * Partner Pupil * Partner Emotion	177408,387	4.40	-0.006	0.003	0.036	-0.011	0.000
Quadr * Partner Group * Partner Emotion	177425,884	1.71	0.003	0.002	0.191	-0.001	0.007
Quadr * Partner Pupil * Partner Group * Partner Emotion	177405,063	4.06	-0.006	0.003	0.044	-0.011	0.000
Cub	55,437	0.32	0.002	0.003	0.573	-0.005	0.008
Cub * Partner Pupil	189232,645	18.37	-0.008	0.002	0.000	-0.012	-0.005
Cub * Partner Group	185132,168	5.76	-0.004	0.002	0.016	-0.007	-0.001
Estimates of Covariance Parameters							
Covariance Parameters		Estimate	Std. Error	Wald Z	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Repeated Measures	AR1 diagonal	0.035	0.000	94.75	0.000	0.035	0.036
	AR1 rho	0.948	0.001	1692.87	0.000	0.947	0.949
Intercept [subject = ID]	Variance	0.003	0.001	4.80	0.000	0.002	0.004
Lin [subject = ID]	Variance	0.006	0.001	4.43	0.000	0.004	0.010
Quadr [subject = ID]	Variance	0.001	0.000	4.18	0.000	0.001	0.002
Cub [subject = ID]	Variance	0.000	0.000	3.86	0.000	0.000	0.001

The final model was derived at via standard model selection. Dependent variable = baseline-corrected pupil-size, modulated by partner group, partner emotion, partner pupil and polynomials (all centered and treated as continuous (scale)). Partner Pupil = dilating (coded 1), static (coded 0) or constricting (coded -1). Partner Group = In-group (coded -1), out-group (coded 1). Partner Emotion = Angry (coded -1), Happy (coded 1). Numerator df = 1 for all fixed factors. df = Degrees of Freedom.

Table S3. Final Pupil-dilation mimicry model

Fixed Factor	Denominator df	F	Estimate	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	51,868	6.76	0.020	0.008	0.012	0.004	0.035
Lin	52,877	0.92	-0.013	0.013	0.343	-0.040	0.014
Partner Pupil (A)	6454,070	14.04	0.008	0.002	0.000	0.004	0.012
Partner Group	6134,447	0.09	0.001	0.002	0.765	-0.003	0.005
Partner Emotion	6452,642	11.97	0.007	0.002	0.001	0.003	0.012
Lin * Partner Pupil (B)	45734,245	27.97	0.028	0.005	0.000	0.017	0.038
Lin * Partner Group	45730,665	11.04	0.018	0.005	0.001	0.007	0.028
Partner Pupil * Partner Group	6121,753	12.81	-0.007	0.002	0.000	-0.011	-0.003
Partner Pupil * Partner Emotion	6121,845	0.39	0.001	0.002	0.530	-0.003	0.005
Partner Group * Partner Emotion	6122,119	1.19	-0.002	0.002	0.276	-0.006	0.002
Lin * Partner Pupil * Partner Group	41543,060	11.18	-0.016	0.005	0.001	-0.025	-0.007
Quadr	50,302	2.03	-0.010	0.007	0.160	-0.023	0.004
Quadr * Partner Pupil (C)	118021,618	4.47	-0.006	0.003	0.034	-0.011	0.000
Quadr * Partner Emotion	118032,466	8.74	-0.008	0.003	0.003	-0.014	-0.003
Cub	54,342	0.15	-0.001	0.003	0.699	-0.008	0.005
Cub * Partner Pupil	125169,823	12.14	-0.007	0.002	0.000	-0.011	-0.003
Cub * Partner Group	121810,768	7.23	-0.005	0.002	0.007	-0.009	-0.001
Cub * Partner Emotion	126030,701	0.32	0.001	0.002	0.572	-0.002	0.005
Cub * Partner Pupil * Partner Emotion	126098,814	4.76	-0.004	0.002	0.029	-0.007	0.000

Estimates of Covariance Parameters

Covariance Parameters		Estimate	Std. Error	Wald Z	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Repeated Measures	AR1 diagonal	0.036	0.000	76.70	0.000	0.035	0.037
	AR1 rho	0.949	0.001	1391.11	0.000	0.947	0.950
Intercept [subject = ID]	Variance	0.003	0.001	4.64	0.000	0.002	0.004
Lin [subject = ID]	Variance	0.008	0.002	4.31	0.000	0.005	0.013
Quadr [subject = ID]	Variance	0.002	0.000	4.10	0.000	0.001	0.003
Cub [subject = ID]	Variance	0.000	0.000	3.38	0.001	0.000	0.001

The final model was derived at via standard model selection. Dependent variable = baseline-corrected pupil-size, modulated by partner group, partner emotion, partner pupil and polynomials (all centered and treated as continuous (scale)). Partner Pupil = dilating (coded 1), static (coded -1). Partner Group = In-group (coded -1), out-group (coded 1). Partner Emotion = Angry (coded -1), Happy (coded 1). Numerator df = 1 for all fixed factors. df = Degrees of Freedom.

Table S4. Final Pupil-constriction mimicry model

Fixed Factor	Denominator df	F	Estimate	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	52.343	1.17	0.008	0.007	0.284	-0.007	0.022
Lin	54.263	23.13	-0.055	0.011	0.000	-0.077	-0.032
Partner Pupil (A)	6508.795	5.48	0.005	0.002	0.019	0.001	0.009
Partner Group	6520.063	4.51	0.004	0.002	0.034	0.000	0.009
Partner Emotion	6508.111	13.29	0.008	0.002	0.000	0.004	0.012
Lin * Partner Pupil (B)	40893.682	6.10	0.012	0.005	0.014	0.002	0.021
Lin * Partner Group	40895.322	9.31	0.014	0.005	0.002	0.005	0.024
Lin * Partner Emotion	40891.710	11.76	0.016	0.005	0.001	0.007	0.025
Partner Pupil * Partner Group	6509.368	2.34	0.003	0.002	0.126	-0.001	0.007
Partner Pupil * Partner Emotion	6508.367	1.19	-0.002	0.002	0.276	-0.006	0.002
Partner Group * Partner Emotion	6509.486	2.45	-0.003	0.002	0.118	-0.007	0.001
Lin * Partner Pupil * Partner Group	40896.151	7.39	0.013	0.005	0.007	0.004	0.022
Lin * Partner Pupil * Partner Emotion	40885.444	4.88	-0.010	0.005	0.027	-0.020	-0.001
Quadr	50.298	2.78	-0.009	0.006	0.102	-0.021	0.002
Quadr * Partner Pupil (C)	117740.802	4.17	0.006	0.003	0.041	0.000	0.011
Quadr * Partner Group	116324.154	0.23	0.001	0.003	0.630	-0.004	0.007
Quadr * Partner Emotion	117740.898	0.77	-0.002	0.003	0.380	-0.008	0.003
Quadr * Partner Pupil * Partner Group	117717.170	0.17	-0.001	0.003	0.682	-0.007	0.004
Quadr * Partner Pupil * Partner Emotion	117745.159	0.61	-0.002	0.003	0.433	-0.008	0.003
Quadr * Partner Group * Partner Emotion	117688.824	3.28	0.005	0.003	0.070	0.000	0.010
Quadr * Partner Pupil * Partner Group * Partner Emotion	109702.343	3.86	-0.005	0.003	0.049	-0.010	0.000
Cub	54.741	4.42	0.007	0.003	0.040	0.000	0.014

Estimates of Covariance Parameters						95% Confidence Interval	
Covariance Parameters		Estimate	Std. Error	Wald Z	Sig.	Lower Bound	Upper Bound
Repeated Measures	AR1 diagonal	0.035	0.000	77.46	0.000	0.034	0.035
	AR1 rho	0.947	0.001	1368.19	0.000	0.946	0.949
Intercept [subject = ID]	Variance	0.002	0.001	4.62	0.000	0.002	0.004
Lin [subject = ID]	Variance	0.005	0.001	4.06	0.000	0.003	0.009
Quadr [subject = ID]	Variance	0.001	0.000	3.75	0.000	0.001	0.002
Cub [subject = ID]	Variance	0.000	0.000	3.40	0.001	0.000	0.001

The final model was derived at via standard model selection. Dependent variable = baseline-corrected pupil-size, modulated by partner group, partner emotion, partner pupil and polynomials (all centered and treated as continuous (scale)). Partner Pupil = constricting (coded -1), static (coded 1). Partner Group = In-group (coded -1), out-group (coded 1). Partner Emotion = Angry (coded -1), Happy (coded 1). Numerator df = 1 for all fixed factors. df = Degrees of Freedom.

Table S5. Link Dilation Mimicry and Investment Decision (Partner Dilating – Partner Static Pupil)

Fixed Factor		95% Confidence Interval					
	Denominator df	F	Estimate	Std. Error	Sig.	Lower Bound	Upper Bound
Intercept	513	2.761	0.078	0.206	0.705	-0.327	0.483
Partner Group	513	0.284	-0.053	0.099	0.594	-0.248	0.142
Pupil Participant	513	0.190	0.286	0.658	0.664	-1.006	1.578
Partner Group *	513	6.502	-1.651	-2.550	0.011	-2.922	-0.379
Pupil Participant							
Covariance Parameters		Estimate	Wald Z	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Var(Intercept) [subject = ID]		4.541	15.278	0.297	0.000	3.994	5.162

Dependent variable = Investments in partners with dilating minus constricting pupils (i.e. partner-pupil contingent trust). Pupil Participant = Baseline-corrected pupil-size when partner pupil is dilating minus constricting. This model investigates a link between dilation mimicry and trust, modulated by partner group. df = Degrees of Freedom. Sig. * $p < .05$