

Lying Because We Care: Compassion Increases Prosocial Lying

Supplemental Material

Study 1

Table 1a: Regression table for the effect of compassion on prosocial lying, controlling for positive affect, negative affect, personal distress, specific emotions, and social perceptions.

	<i>Dependent variable:</i>			
	Overall Evaluations			
	(1)	(2)	(3)	(4)
Condition: compassion	-4.482*** (1.610)	-3.916** (1.765)	-5.517*** (1.456)	-5.817*** (1.515)
Time: shared	-0.723 (1.569)	-0.160 (1.720)	-2.623 (2.268)	-4.111 (2.547)
Positive affect	6.146*** (1.544)			1.872 (1.399)
Negative affect	-5.905 (4.076)			0.004 (3.608)
Personal distress	5.495* (3.050)			0.059 (2.689)
Interested		0.934 (0.860)		
Distressed		0.789 (1.061)		
Excited		1.211		

		(1.638)
Upset	0.666 (0.903)	
Strong	-1.276 (1.049)	
Guilty	0.196 (1.192)	
Scared	-1.256 (2.025)	
Hostile	2.391 (1.808)	
Enthusiastic	2.707* (1.608)	
Proud	-0.665 (1.410)	
Irritable	-1.922* (1.025)	
Alert	-1.711* (0.911)	
Ashamed	-3.155*** (1.210)	
Inspired	2.536** (1.217)	
Determined	0.039 (1.286)	
Nervous	3.064* (1.672)	

Attentive	-0.995 (0.811)		
Jittery	1.436 (1.578)		
Active	1.968* (1.188)		
Afraid	0.996 (1.782)		
Optimistic		3.824*** (0.591)	3.711*** (0.593)
Warm		-0.121 (0.699)	-0.073 (0.697)
Agreeable		0.173 (0.756)	0.098 (0.753)
Competent		1.817** (0.815)	1.738** (0.819)
Open		-0.111 (0.601)	-0.189 (0.600)
Likeable		0.349 (0.839)	0.291 (0.843)
Trusting		-0.082 (0.767)	-0.035 (0.767)
Trustworthy		2.117** (0.826)	2.075** (0.824)
Likely to be female		-0.955* (0.567)	-0.888 (0.567)

Condition: compassion*time: shared	2.139** (0.937)	2.003* (1.054)	3.734*** (0.987)	2.787*** (1.023)
Time: shared*positive affect	1.566* (0.899)			1.856** (0.944)
Time: shared*negative affect	-3.243 (2.372)			-3.845 (2.436)
Time: shared*personal distress	3.879** (1.775)			4.071** (1.815)
Time: shared*interested		1.267** (0.514)		
Time: shared*distressed		0.741 (0.634)		
Time: shared*excited		-2.901*** (0.979)		
Time: shared*upset		-0.045 (0.540)		
Time: shared*strong		-0.704 (0.627)		
Time: shared*guilty		-0.763 (0.712)		
Time: shared*scared		2.297* (1.210)		
Time: shared*hostile		-1.711 (1.080)		
Time: shared*enthusiastic		1.608*		

	(0.961)		
Time: shared*proud	0.214 (0.842)		
Time: shared*irritable	0.524 (0.612)		
Time: shared*alert	0.221 (0.544)		
Time: shared*ashamed	-0.346 (0.723)		
Time: shared*inspired	0.243 (0.727)		
Time: shared*determined	0.979 (0.768)		
Time: shared*nervous	0.405 (0.999)		
Time: shared*attentive	-0.072 (0.484)		
Time: shared*jittery	-1.408 (0.943)		
Time: shared*active	0.422 (0.710)		
Time: shared*afraid	0.079 (1.064)		
Time: shared*optimistic		-0.485 (0.400)	-0.622 (0.400)
Time: shared*warm		0.547 (0.474)	0.574 (0.471)

Time: shared*agreeable			0.161 (0.513)	0.107 (0.508)
Time: shared*competent			0.215 (0.553)	-0.038 (0.553)
Time: shared*open			-0.617 (0.408)	-0.658 (0.405)
Time: shared*likeable			0.225 (0.569)	0.140 (0.569)
Time: shared*trusting			-0.237 (0.520)	-0.154 (0.518)
Time: shared*trustworthy			0.881 (0.560)	0.837 (0.557)
Time: shared*likely to be female			0.645* (0.384)	0.783** (0.383)
Constant	18.984*** (2.695)	18.680*** (2.878)	4.453 (3.345)	2.653 (3.773)

Observations	792	792	792	792
Log Likelihood	-3,017.998	-2,959.015	-2,953.394	-2,936.081
Akaike Inf. Crit.	6,059.997	6,010.031	5,954.789	5,932.163
Bayesian Inf. Crit.	6,116.092	6,225.060	6,066.978	6,072.400

Note: Positive affect items: interested, excited, strong, enthusiastic, proud, alert, inspired, determined, attentive, active; negative affect: distressed, upset, guilty, scared, hostile, irritable, ashamed, nervous, jittery, afraid; personal distress: distressed, upset, scared, nervous, afraid.

Items to measure social perceptions of essay writer: optimistic, warm, agreeable, competent,

likeable, trusting, trustworthy, likely to be female. See main text for full description of items. * $p < .10$; ** $p < .05$; *** $p < 0.01$.

Study 3

Paragraph about the charity shown to participants in the Prosocial Lie condition in Study 3

The AMF [Against Malaria Foundation] provides long-lasting insecticide-treated nets and has them distributed in developing countries to prevent malaria, a disease that kills over a million people a year. Insecticide-treated bed nets prevent deaths and many other non-fatal cases of malaria and are relatively inexpensive. AMF has been chosen as the #1 most effective charity in the world by GiveWell, a non-profit organization that conducts in-depth research aimed to determine how much good a given charity accomplishes (in terms of lives saved, lives improved, etc.) per dollar spent.

Table 2a: Regression table for the effect of compassion on clearly dishonest responses, controlling for positive affect, negative affect, personal distress, and personality traits.

	<i>Dependent variable:</i>			
	Clearly Dishonest Responses			
	(1)	(2)	(3)	(4)
Condition: compassion	9.139** (4.466)	16.087*** (5.939)	7.901** (3.805)	8.836* (4.604)
Positive affect	2.029			2.172

	(3.383)	(3.556)
Negative affect	2.373 (8.557)	3.813 (9.150)
Personal distress	-4.445 (7.493)	-5.243 (8.097)
Interested	-1.509 (2.612)	
Distressed	2.785 (2.805)	
Excited	0.252 (3.936)	
Upset	-5.145* (2.872)	
Strong	2.757 (2.798)	
Guilty	-0.726 (3.217)	
Scared	-6.809* (3.607)	
Hostile	1.342 (2.790)	
Enthusiastic	-3.487 (3.055)	
Proud	2.633 (3.195)	
Irritable	1.406	

	(2.112)		
Alert	-1.645 (2.424)		
Ashamed	1.203 (3.367)		
Inspired	-0.733 (2.632)		
Determined	0.881 (2.273)		
Nervous	4.879 (3.482)		
Attentive	0.451 (2.138)		
Jittery	-2.187 (2.690)		
Active	1.456 (3.066)		
Afraid	2.179 (4.025)		
Conscientiousness	5.539 (7.169)	5.730 (7.242)	
Neuroticism	-2.238 (3.199)	-2.426 (3.300)	
Openness	-3.351 (6.013)	-4.224 (6.241)	
Extraversion	2.176	0.919	

			(5.934)	(6.177)
Agreeableness			-1.427 (3.884)	-2.277 (4.054)
Constant	57.053*** (5.308)	58.142*** (6.366)	56.069 (35.887)	63.061* (37.165)
Observations	134	134	132	132
R ²	0.038	0.153	0.045	0.051
Adjusted R ²	0.009	-0.006	-0.001	-0.019
Residual Std. Error	21.361 (df = 129)	21.516 (df = 112)	21.539 (df = 125)	21.730 (df = 122)
F Statistic	1.290 (df = 4;129)	0.963 (df = 21;112)	0.977 (df = 6;125)	0.731 (df = 9;122)

Note: Positive affect items, negative affect items, and personal distress predictors are the same as those in Table 1a. Big 5 personality traits are conscientiousness, neuroticism, openness, extraversion, and agreeableness. Models that included personality traits have two less observations due to a computer malfunction that resulted in missing data for those variables for two responses. * $p < .10$, ** $p < .05$, *** $p < 0.01$.

Table 3a: Regression table for the effect of compassion on ambiguously dishonest responses, controlling for positive affect, negative affect, personal distress, and personality traits.

	<i>Dependent variable:</i>			
	Ambiguously Dishonest Responses			
	(1)	(2)	(3)	(4)
Condition: compassion	10.234***	16.222***	8.081**	10.046**

	(3.860)	(5.134)	(3.298)	(3.970)
Positive affect	3.228 (2.924)			3.398 (3.066)
Negative affect	1.065 (7.396)			2.081 (7.889)
Personal distress	-4.950 (6.476)			-5.309 (6.981)
Interested		0.408 (2.258)		
Distressed		1.656 (2.424)		
Excited		0.046 (3.402)		
Upset		-4.476* (2.483)		
Strong		2.163 (2.419)		
Guilty		-1.129 (2.781)		
Scared		-5.120 (3.118)		
Hostile		1.205 (2.412)		
Enthusiastic		-3.503 (2.641)		
Proud		3.306		

	(2.762)		
Irritable	1.254 (1.826)		
Alert	-1.879 (2.095)		
Ashamed	0.772 (2.911)		
Inspired	-1.594 (2.275)		
Determined	0.692 (1.965)		
Nervous	4.380 (3.010)		
Attentive	0.709 (1.848)		
Jittery	-1.106 (2.326)		
Active	1.717 (2.650)		
Afraid	0.963 (3.480)		
Conscientiousness	5.261 (6.214)	5.441 (6.244)	
Neuroticism	-2.486 (2.773)	-2.459 (2.845)	
Openness	-2.759 (5.212)	-3.679 (5.381)	

Extraversion			2.999 (5.143)	1.293 (5.326)
Agreeableness			-1.511 (3.366)	-2.443 (3.495)
Constant	60.694*** (4.588)	59.645*** (5.503)	56.625* (31.105)	65.202** (32.044)
Observations	134	134	132	132
R ²	0.060	0.172	0.061	0.077
Adjusted R ²	0.031	0.017	0.016	0.009
Residual Std. Error	18.463 (df = 129)	18.599 (df = 112)	18.669 (df = 125)	18.735 (df = 122)
F Statistic	2.067* (df = 4;129)	1.108 (df = 21;112)	1.362 (df = 6;125)	1.137 (df = 9;122)

Note: All predictors are the same as those in Table 2a. Models that included personality traits have two less observations due to a computer malfunction that resulted in missing data for those variables for two responses. * $p < .10$, ** $p < .05$, *** $p < 0.01$.

Results with Block Included as a Factor

For each dependent variable (clearly dishonest responses, ambiguously dishonest responses, honest responses), we conducted a 2 (Emotion: compassion vs. neutral) x 2 (Lie Type: prosocial vs. selfish) x 2 (Block: first vs. second) mixed-model ANOVA with repeated measures on the block factor. Although we did not have a priori expectations about interactions between block and either emotion or lie type, we included block as a factor given the possibility that dishonesty would increase in the second block due to fatigue or depleted self-control (e.g. Mead, Baumeister, Gino, Schweitzer, & Ariely, 2009).

For clearly dishonest responses, there was a significant Emotion x Lie Type interaction, $F(1,428) = 6.51, p = .01, \eta^2_p = .01$. Participants in the compassion condition ($M = 63.61, SD = 23.60$) exhibited significantly more prosocial lying than did those in the neutral condition ($M = 57.66, SD = 19.16$), $t(212) = 2.03, p = .04, d = .28$, $t(212) = 2.03, p = .04, d = .28$. There was not a statistically significant difference between selfish lying in the compassion condition ($M = 53.79, SD = 19.18$) versus in the neutral condition ($M = 57.91, SD = 19.78$), $p = .12$. While there was no main effect of emotion on lying ($p = .66$), there was a significant main effect of lie type, $F(1,428) = 5.28, p = .02, \eta^2_p = .01$, such that participants engaged in more lying in the prosocial lie conditions ($M = 60.52, SD = 21.56$) than in the selfish lie conditions ($M = 56.00, SD = 19.57$). There were no other main effects or interactions ($ps > .40$).

Similar results were obtained for ambiguously dishonest responses. There was again a significant Emotion x Lie Type interaction, $F(1,428) = 5.96, p = .02, \eta^2_p = .01$. Those in the compassion condition ($M = 66.78, SD = 20.29$) exhibited significantly more prosocial lying than did those in the neutral condition ($M = 60.89, SD = 16.26$), $t(212) = 2.35, p = .02, d = .32$. There was not a statistically significant difference between selfish lying in the compassion condition ($M = 58.83, SD = 16.39$) versus in the neutral condition ($M = 61.26, SD = 17.54$), $p > .25$. There was no main effect of emotion condition on lying ($p > .25$), but there was a significant main effect of lie type, $F(1,428) = 4.45, p = .04, \eta^2_p = .01$, such that participants engaged in more lying in the prosocial lie condition ($M = 63.72, SD = 18.50$) than in the selfish lie condition ($M = 60.14, SD = 17.02$). Additionally, there was a main effect of block, $F(1,428) = 4.56, p = .03, \eta^2_p = .01$, such that participants engaged in more prosocial lying in the second block than in the first ($M = 62.43, SD = 18.89$) than in the second ($M = 61.40, SD = 18.17$). There were no other significant main effects or interactions ($ps > .50$).

Finally, we examined honest responses. As predicted, there was no significant Emotion x Lie Type interaction, ($p = .29$). There were also no main effects of induction, lie type, or block on honest responses ($ps > .10$). There was a marginally significant Emotion x Block interaction ($F(1, 428) = 3.10$; $p = .08$, $\eta^2_p = .01$), such that those in the compassion condition ($M = 78.92$, $SD = 15.23$) exhibited less honest responses than those in the neutral condition ($M = 79.19$, $SD = 12.55$) in the first block, but more honest responses in the second block ($M_{\text{second}} = 80.05$, $SD_{\text{second}} = 14.12$ vs. $M_{\text{first}} = 78.34$, $SD_{\text{first}} = 13.62$). However, neither of these differences reached statistical significance ($ps > .20$).

References

Mead, N. L., Baumeister, R. F., Gino, F., Schweitzer, M. E., & Ariely, D. (2009). Too tired to tell the truth: Self-control resource depletion and dishonesty. *Journal of Experimental Social psychology*, 45(3), 594-597.