Online Appendix for: Commitment Requests Do Not Affect Truth-Telling in Laboratory and Online Experiments

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Abstract

Using a standard cheating game, we investigate whether the request to sign a no-cheating declaration affects truth-telling. Our design varies the content of a no-cheating declaration (reference to ethical behavior vs. reference to possible sanctions) and the type of experiment (online vs. offline). Irrespective of the declaration's content, commitment requests do not affect truth-telling, neither in the laboratory nor online. The inefficacy of commitment requests appears robust across different samples and does not depend on psychological measures of reactance.

Keywords: cheating, lying, truth-telling, compliance, commitment, no-cheating rule, no-cheating declaration, commitment request

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Online Appendix A. Regression Analyses

Table A.1: Treatment Effects on Cheating: Regression Results

	All Observations			Laboratory		Online	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Ethics Treatment	-0.014	-0.014	-0.017	-0.028	-0.033	0.009	0.009
	(0.043)	(0.043)	(0.043)	(0.054)	(0.054)	(0.071)	(0.071)
Sanction Treatment	-0.012	-0.011	-0.011	-0.021	-0.022	0.006	0.006
	(0.043)	(0.043)	(0.043)	(0.054)	(0.054)	(0.072)	(0.072)
Neutral Treatment							0.016
							(0.071)
Online		0.051	0.027				
		(0.037)	(0.040)				
Lab Konstanz			-0.080*		-0.081*		
			(0.047)		(0.047)		
N. of obs.	691	691	691	427	427	264	353
Mean control group	0.325	0.325	0.325	0.313	0.313	0.344	0.344

Notes: This table shows linear probability models using as dependent variable an indicator for participants who cheated. Columns (1) to (3) use all observations on participants who had a profitable option to cheat. The omitted category for subject pools in Column (3) is Lab Munich. Columns (4) and (5) use only observations collected in laboratory sessions (Konstanz and Munich). Columns (6) and (7) use only observations collected online (subject pool of laboratory Nuremberg). Column (7) also reports the effect of the additional treatment ("Neutral") that we implemented only in the online experiment but not in the laboratory experiment. This treatment used a neutrally framed commitment request. For further details, see the AEA RCT registry entry at https://doi.org/10.1257/rct.6700 and https://doi.org/10.1257/rct.9683. Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Online Appendix B. Psychological Reactance and Heterogeneous Treatment Effects

Following our preregistration[1], we also shed light on potential treatment heterogeneity regarding measures of participants' psychological reactance. Below, we first propose a simple conceptual framework for cheating and lying behavior. This framework is an extension of Kajackaite and Gneezy (2017) and nests possible explanations for negative and positive effects of commitment requests. Second, we analyze empirically, whether heterogeneous treatment effects are observed, using measures of psychological reactance by Hong (1992).

Suppose an agent faces a binary decision to either cheat or not. She observes the state of nature t and then self-reports the state. The agent has two option. She can either report the true state t or report a false state t'. The monetary payoff from stating t is m_t and from reporting t' is $m_{t'}$. This results in a monetary benefit of cheating of $m_{t'} - m_t > 0$. With $p(m_{t'}, m_t)$ denoting the perceived probability of punishment and $s(m_{t'}, m_t)$ denoting the perceived sanction in case of detection, we capture the extrinsic cost of cheating by the expected sanction $S[p(m_{t'}, m_t), s(m_{t'}, m_t)]$. Comparing only the monetary payoff and the extrinsic cost of cheating, the agent will cheat whenever $m_{t'} - m_t > S[p(m_{t'}, m_t), s(m_{t'}, m_t)]$. This inequality illustrates the fundamental trade-off from Becker's (1968) model on the economics of crime: An agent cheats if the benefits of dishonesty outweigh the expected costs.

As discussed in the paper's introduction, the agent's decision may additionally depend on her intrinsic disutility of cheating. For example, a person might have a bad conscience if she realizes that she did not comply with her moral standards. We capture the disutility from not reporting truthfully by adding an intrinsic (psychological) cost of cheating $0 \leq C_i \leq \infty$ to the agent's decision problem. Following Kajackaite and Gneezy (2017), we make the simplifying assumption that C_i is a fixed cost (i.e., it does not depend on the extent of cheating denoted by $t' - t$ and $m_{t'} - m_t$).

Finally, we extend the framework such that it incorporates psychological reactance. Assume the agent faces a situation in which an external request to report truthfully is activated, indicated by $r = 1$; if such a request is not made, then $r = 0$. In the case of an external request, a reactant agent obtains an additional fixed intrinsic utility of cheating $0 \leq R_i \leq \infty$. As

[1] https://doi.org/10.1257/rct.9683.

discussed in the introduction, reactance makes cheating more attractive and reflects the psychological benefit of regaining one's freedom of choice by not reporting truthfully under a request to tell the truth. Note that we allow for heterogeneity in C_i and R_i. Putting the extrinsic and intrinsic costs and benefits of cheating together, the agent will not report truthfully if

$$m_{t'} - m_t - S[p(m_{t'}, m_t), s(m_{t'}, m_t)] - C_i + R_i \cdot 1\{r = 1\} > 0, \qquad (1)$$

where $1\{\cdot\}$ is an indicator function.

Equation (1) mirrors the channels through which commitment requests can affect cheating. On the one hand, commitment requests may increase the intrinsic disutility of cheating C_i. On the other hand, reactant agents derive additional intrinsic utility from cheating R_i, if they are requested to commit to truthful reporting. Different forms of commitment requests can thus lead to more or less cheating, depending on how sharply C_i and R_i are shifted.[2]

Table A.2 provides results from linear probability models in which we interact the treatment dummies with indicators for whether a participant belongs to the medium or high tertile of psychological reactance in our sample. Pooling the data from the online and offline setting (Column 1), coefficients for potential interactions are small and statistically insignificant interaction. Analyzing potential heterogeneity separately for the lab (Column 2) and online data (Column 3), we also find no indication for systematic heterogeneity in reactions to our treatments.

[2]Conditional on the setting and the specific form of the declaration of compliance, commitment requests might also change the expected sanction $S[\cdot]$. The the discussion of this topic in the description of the experimental design.

Table A.2: Interactions Between Treatments and Reactance Tertiles

	All Observations	Laboratory	Online
	(1)	(2)	(3)
Ethics Treatment	0.024	-0.052	0.076
	(0.073)	(0.095)	(0.134)
Sanction Treatment	-0.036	0.018	-0.060
	(0.073)	(0.101)	(0.120)
Medium Reactance	-0.056	-0.034	-0.093
	(0.077)	(0.095)	(0.113)
High Reactance	-0.010	0.017	-0.007
	(0.078)	(0.102)	(0.132)
Ethics × Medium	-0.036	0.119	-0.014
	(0.106)	(0.132)	(0.173)
Ethics × High	-0.064	-0.048	-0.192
	(0.107)	(0.141)	(0.188)
Sanction × Medium	0.091	-0.044	0.137
	(0.112)	(0.135)	(0.168)
Sanction × High	0.027	-0.033	0.053
	(0.105)	(0.144)	(0.193)
Online	0.017		
	(0.045)		
Lab Konstanz	-0.073	-0.080	
	(0.049)	(0.049)	
N. of obs.	670	406	264
Mean control group	0.322	0.308	0.344

Notes: This table shows linear probability models using as dependent variable an indicator for participants who cheated. Column (1) uses all observations on participants who had a profitable option to cheat. The omitted category for subject pools is Lab Munich. Column (2) uses only observations collected in laboratory sessions (Konstanz and Munich). Column (3) uses only observations collected online (subject pool of laboratory Nuremberg). *Medium Reactance* is an indicator for participants in the second tertile regarding reactance. *High Reactance* is an indicator for participants in the third tertile regarding reactance. The number of observations is slightly lower than in Figure 1 and Table A.1 because some participants did not show up for the online survey after the experimental sessions. We could therefore not elicit these participants' reactance. Robust standard errors in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Online Appendix C. Measuring Psychological Reactance

Psychological Reactance Scale (Hong, 1992)

The following statements concern your general attitudes. Read each statement and please indicate how much you agree or disagree with each statement. If you strongly agree, mark a 5. If you strongly disagree, mark a 1. If the statement is more or less true of you, find the number between 5 and 1 that best describes you. There are no right or wrong answers. Just answer as accurately as possible.

Behavioral and Cognitive Component (De las Cuevas et al., 2014)

1. Regulations trigger a sense of resistance in me.
2. I find contradicting others stimulating.
3. When something is prohibited, I usually think, "That's exactly what I am going to do."
4. I consider advice from others to be an intrusion.
5. Advice and recommendations usually induce me to do just the opposite.
6. I am content only when I am acting of my own free will.
7. I resist the attempts of others to influence me.
8. When someone forces me to do something, I feel like doing the opposite.

Affective Component (De las Cuevas et al., 2014)

9. The thought of being dependent on others aggravates me.
10. I become frustrated when I am unable to make free and independent decisions.
11. It irritates me when someone points out things, which are obvious to me.
12. I become angry when my freedom of choice is restricted.
13. It makes me angry when another person is held up as a role model for me to follow.
14. It disappoints me to see others submitting to standards and rules.

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