Once a liar always a liar?

Raymond M. Duch
Nuffield College
University of Oxford
raymond.duch@nuffield.ox.ac.uk *

Denise Laroze
Centre for Experimental Social Sciences
Universidad de Santiago de Chile
denise.laroze@cess.cl

Alexei Zakharov
Higher School of Economics
Moscow, Russia
al.v.zakharov@gmail.com

December 26, 2018

Nuffield College Centre for Experimental Social Sciences (CESS) Working Paper, Oxford

*Replication material can be found on `https://github.com/rayduch/Once-a-Liar`

Abstract

Lying is prevalent on both a grand scale and in mundane, day-to-day, interactions. But for many people there are intrinsic costs that prevent them from distorting information to their advantage. The goal of this study is to investigate how these costs depend on the magnitude to which the truth is distorted. We observe over 1000 individuals from the U.K., Russia and Chile making over 10000 lying decisions in a public goods game, while varying the benefit of lying. We find that the incidence and magnitude of lying do not depend on the benefits, which is not consistent with the marginal cost of lying being increasing in the size of the lie. Instead, we find that some subjects tend to be maximal liars with very low intrinsic lying costs, while some others lie up to a threshold that is not very sensitive to the extrinsic benefits of lying. We argue that maximal and partial lying are distinct phenomena. First, in two countries out of three, lying is not strongly conditional on the behavior of other individuals. Second, both ability at a real effort task and selfish behavior in the Dictator Game are strong and consistent predictors of maximal, but not partial, lying. Finally, the reaction time for a partial lying decision was much longer than for either a maximal lie or an honest declaration.

1 Introduction

Opportunities to misrepresent private information to one's advantage are ubiquitous and the cost to society of this dishonesty are enormous. Health care fraud may amount to up to $272 billion in US alone (Berwick and Hackbarth, 2012), and occupational fraud may cost 5% of company revenues worldwide (Association of Certified Fraud Examiners, 2016). Politicians and corporate executives lie, often to disastrous consequences. Lying occurs on scale both grand and small, as health services, tax authorities, banks, store owners, university professors, or public transportation firms are all well aware. According to some estimates, up to two thirds of day-to-day social interactions involve deception of some sort (M. DePaulo et al., 1996).

Dishonest behavior presents an empirical and theoretical puzzle. Classic economic theory predicts that individuals would always distort the truth to maximize their material gains, given the externally imposed costs and benefits (Becker, 1968). However, such behavior is far from universal in both laboratory and field. A large minority of subjects indeed cheat to the maximum extent possible (Abeler et al., 2014; Cohn et al., 2014), but most fail to take full advantage of lying (Abeler et al., 2017); it is now near consensus that, at least for some people, lying implies significant intrinsic costs.[1]

Many lying opportunities allow for partial lies, when the truth is distorted to a limited degree, and a part of the material gain is foregone. Partial lying is common and has been observed experimentally (Fischbacher and Follmi-Heusi, 2013; Gneezy et al., 2018). At the same time, the relationship between the size of the lie and the intrinsic costs of lying remains poorly understood. This implies two closely related research questions. First, what can we learn about the properties of individual cost functions? For example, are marginal costs of lying increasing with the magnitude of the lie, in which case we should expect the magnitude of a partial lie to vary with the benefit of lying? Second, how heterogeneous are individuals with respect to their cost functions? For example, do individuals belong to discrete preference types

[1]Many individuals behave completely honestly even if lying confers significant material benefits. People such as whistleblowers or journalists in politically repressive countries tell the truth in the face of considerable peril. Honesty is a valued trait in many cultures; for example, the Biblical 9th Commandment prohibits bearing "false witness against thy neighbor", while historic warrior codes such as Bushido or Chivalry view honesty as virtuous and morally right. In experiments, a significant share of subjects choose to behave honestly when it is in their clear interest to distort the truth (Gneezy, 2005; Gibson et al., 2013; Gneezy et al., 2013; Rosenbaum et al., 2014; Jacobsen et al., 2017), and may refuse to lie even when doing so would benefit other people as well (Erat and Gneezy, 2012).

(for example, are there opportunistic versus honest types), or do the preferences for truthfulness vary continuously throughout the population?[2] And, if the individuals are heterogeneous, what are the correlates of individual lying proclivities? Understanding these questions is essential to managing lying behavior.

In this paper we addressed these questions by examining how the likelihood of lying and the size of the lie reacted to the economic context in which the decision occurs. We observed, over multiple periods, subjects earning income through a real effort task and deciding what fraction (if any) of the income to declare to the experimenter. A certain percentage of income was deducted from each subject; the deductions were pooled and redistributed across groups of four subjects. Our experimental design allows the subject to choose the size of the lie: from not lying, to a partial lie when some but not all income is declared, to a maximal lie when the subject declares no income.

We manipulated several features of the game. Our primary interest was to analyze the nature of intrinsic costs associated with the size of the lie. To this purpose, we varied the economic benefit of lying by letting the percentage of income that was deducted from subjects differ across experimental sessions. As a robustness check, we manipulated the economic conditions under which income was earned. In some sessions, wage inequality was introduced, and the subjects in each group differed by the amount of income that they earned for completing the real effort task. In other sessions, subjects randomly received a large unearned random bonus of a fixed size in addition to the income earned through the real effort task. Finally, in some sessions subjects were randomly re-assigned to groups in each period.

We report the following results. First, our observations do not support the assumption that the marginal costs of lying are positive and strictly increasing with the size of the lie. The experimental conditions — in particular, the percentage of declared income that was deducted — were not correlated with either the probability that the individual would lie maximally or partially or behave honestly, nor with the size of the lie conditional on lying partially. At the same time, lying behavior across all periods of the game was quite stable, despite the subjects being able to observe the pooled deductions made in the previous periods. As much as 34.9% of

[2]Previous arguments both in favor (Hurkens and Kartik, 2009) and against (Gibson et al., 2013) the type-based model treated lying as a binary choice and, therefore, did not consider the possibility of limited lying.

individuals lied maximally in at least 8 periods out of 10, maximizing their monetary payoffs; another 23.6% were partial liars who consistently distorted information for private gain, but stopped short of maximizing their payoffs; finally, some 19.5% were consistently honest and cheated in no more than 2 periods.[3]

To see how our results imply that the marginal costs are not positive and increasing, consider the following argument. Let there be a unit mass of individuals indexed by i, and define the size of the lie $l_i \in [0, 1]$ as the fraction of income that is not declared by individual i. Then the extrinsic benefit of lying will be linear in the size of the lie, and equal to $\frac{3}{4}bI_il_i$, where I_i is the income of i, and $b \in [0, 1]$ is the deduction rate.

Now assume that the net intrinsic cost of lying be equal to $\alpha_i c(l_i)$, where $c(\cdot)$ is a twice differentiable function, with $c' > 0$ and $c'' > 0$. The value $\alpha_i \geq 0$ is the parameter specific to individual i; individuals with a smaller α have a larger propensity to lie.[4] Let $\frac{\alpha_i}{I_i}$ be distributed on $[0, \infty)$ with distribution function $F(\cdot)$ and density $f(\cdot)$.

The individual i will be honest if $\frac{\alpha_i}{I_i} \geq \frac{3b}{4c'(0)} \equiv a_0$, will be a maximal liar if $\frac{\alpha_i}{I_i} \leq \frac{3b}{4c'(1)} \equiv a_1$, and will be a partial liar otherwise, with size of the lie $l^*(\frac{\alpha_i}{I_i})$ the solution to $\frac{\alpha_i}{I_i} = \frac{3b}{4c'(l)}$; that value, as well as a_0 and a_1, will be increasing in b.

Now suppose that, as in our experiment, the fractions of maximal liars, partial liars, and honest individuals do not change with b, and the fraction of partial liars is positive. Then we must have $f(a_0) = f(a_1) = 0$. But that also implies that the average size of lie for partial liars $\frac{1}{F(a_0)-F(a_1)} \int_{a_1}^{a_0} l^*(a)dF(a)$ is increasing in b. However, in our experiment, the average size of the partial lie, as well as the fraction of partial/maximal liars, do not vary across treatments with different deduction rates.[5]

The outcome observed in the experiment is consistent with a different set of assumptions. Suppose that the cost of lying for individual i is zero if l_i is below some threshold value $r_i \in [0, 1)$,

[3]This is consistent with experimental work suggesting stability of within-subject choices over time and across different games (Andreoni and Miller, 2002). A number of subsequent experiments find that subjects make reasonably stable choices in identical replications of experimental games within a session (Fischbacher and Gachter, 2010), over time (Volk et al., 2012) and also in different games measuring similar preferences (Blanco et al., 2011).

[4]Under plausible regularity assumptions, our argument can be extended to a more general cost of lying function, including one where the cost of lying depends on both the magnitude of lying, and the individual's income.

[5]This argument requires the subjects to supply their effort inelastically, so their incomes are exogenous; however, we also believe this to be the case. The performance of subjects in the real effort task does not depend on the experimental conditions, including, crucially, the amount earned per completed real effort task.

and is equal to $c_i(l_i)$ if $l_i \in [r_i, 1]$, where $c_i(\cdot)$ is some function with $c_i' > 0$ and $c_i'' > 0$. If $r_i > 0$, then the individual can lie to a certain extent without incurring any costs. This assumption is grounded in a widely accepted perspective in the psychological literature that lies that fall below a certain threshold allow one to maintain a "positive self-image" and suffer little or no intrinsic cost, extracting some profit from the situation (Shalvi et al., 2015; Gino and Ariely, 2016),[6] while large lies can hurt the person's self-image, so lying costs increase in the size of the lie.[7] In that case, the individual will be a partial liar with $l_i^* = r_i$ if $\frac{c_i'(r_i)}{I_i} \geq \frac{3}{4}b$, and will be a maximal liar if $\frac{c_i'(1)}{I_i} \leq \frac{3}{4}b$.

We can also make inferences about the distribution of the propensity to lie in the population. We observe that the likelihood of lying maximally did not depend on the deduction rate. If increasing the deduction rate from b_1 to b_2 does not change the share of maximal liars, then there must be some individuals with $\frac{c_i'(1)}{I_i} \leq \frac{3b_1}{4}$, some with $\frac{c_i'(1)}{I_i} > \frac{3b_2}{4}$, but no individuals such that $\frac{c_i'(1)}{I_i} \in (\frac{3b_1}{4}, \frac{3b_2}{4}]$. Hence, we can infer that there are two groups of subjects in the population, with low and high intrinsic costs of lying, and relatively few individuals with the costs of lying in the middle range.

We report two individual-level characteristics that were correlated with the costs of lying. People who performed well at the real effort task were more likely to be maximal liars, and less likely to be either partial liars or honest.[8] This finding is aggressively robust, for three reasons. First, this correlation is present in the three quite different countries where we conducted the experiments as well as in the combined sample. Second, in any given period, lying depended on the subject's average performance over the 10 periods, and did not react to that period's deviation from the subject's average performance. Third, high-performance subjects were less

[6] The size of the threshold is specific to the individual and may be moderated by framing and circumstances, such as deniability (Mazar et al., 2008), recent behavior (Monin and T. Miller, 2001; Mazar and Zhong, 2010; Sachdeva et al., 2009), benefits to others (Gino et al., 2013), peer effects (Fosgaard et al., 2013), or moral reminders (Pruckner and Sausgruber, 2013).

[7] When paid proportionally to the reported number from a privately rolled die, the subjects lied less frequently if the number rolled on number was 1 or 6 (Hilbig and Hessler, 2013). Similarly, Gneezy et al. (2018) argue that the cost of lying depends on the size of the lie by observing the difference between a treatment where the subjects have to report a number between 1 and 10, and a treatment where they report one of ten words in an unfamiliar language (and, therefore, there is no dimension on which the size of the lie can differ). Unlike our work, however, these studies did not address the question whether the marginal cost of lying was constant, increasing, or decreasing in the size of the lie.

[8] Thus our finding is a refinement of recent research that finds a strong positive correlation between subject ability and lying proclivities, but does not differentiate between partial and maximal lying (Duch and Solaz, 2017; Gill et al., 2013).

likely than low-performance subjects to engage in near-maximal lying – that is when the size of the lie is large but the subject stops one step short from maximizing his profit. Maximal lying was also linked with donations in the dictator game: subjects who made zero donations were more likely to be maximal liars and less likely to be either partial liars or honest. This relationship is also highly significant in every country in our study. Females were less likely to lie maximally, and more likely to lie partially, while lying was not affected by whether income was obtained through effort or luck, the inequality of payoffs, or whether the subjects interacted in the same groups throughout the experiment or were rematched.

The only variable that was correlated with the magnitude of partial lying was generosity in the dictator game: Those who donated less lied to a greater extent. The decisions that involved partial lying also had longer reaction times than either maximal lying or honest choices. This finding is open to several interpretations. In a well-known framework for analyzing reaction times, shorter decisions are associated with an instinctive and emotional response, while longer decisions indicate cognitive reasoning (Rubinstein, 2007). A different strand of literature suggests that people are slower if they have to choose between alternatives that they value equally (Konovalov and Krajbich, 2017), so partial lying decisions might involve decision conflict. These two interpretations do not necessarily contradict each other, as the cognitive mechanism behind decision times is still not fully understood.[9]

2 Experimental Design

We employed a computer-based experimental design using ZTREE (Fischbacher, 2007). A total of 64 experimental sessions were conducted at the Centre for Experimental Social Sciences laboratories in University of Oxford, U.K., and Universidad de Santiago, Chile, and the Laboratory for Experimental and Behavioural Economics at the Higher School of Economics in Moscow, Russia. Several Chilean sessions were also conducted at Universidad del Desarrollo. In total, there were 1080 subjects (508 in the U.K., 316 in Chile, and 256 in Russia). Slightly over half

[9]Much of the recent experimental evidence suggests that the lying decision is relatively complex and demanding and therefore takes more time. There is evidence to this effect in the cognitive psychology literature (Agosta et al., 2013; Verschuere and Shalvi, 2014). Lohse et al. (2018) find that time pressure results in more honest choices and more time, at least, allows individuals to better explore the lying options. And there is related evidence that the social consequences of prior decisions affect response times such that pro-social decisions may be quicker (Rand et al., 2014).

of all subjects were male (52.1% in U.K., 49.1% in Chile, and 52% in Russia). The majority of subjects were in their late teens and 20s, with the median age being 22 years in U.K. and Chile, and 20 years in Russia. The full list of sessions is available in Table A1, Appendix A.

The experiment consisted of between four and five stages. At the beginning of each stage, the subjects were given printed instructions for that stage, which were then read aloud by the experimenter. The payoffs for all stages were reported to the subjects at the end of the experiment.

The experiment started with the subjects playing a standard Dictator Game. Each subject was asked to allocate an endowment of 1000 ECUs between himself and another randomly selected subject in the room; participants were informed that only one in each pair will receive the endowment.[10]

The dictator game was followed by 10 periods where each subject first completed a one-minute real-effort task, earning a fixed amount of ECUs for each successful addition of two-digit numbers, and then had to declare the amount earned. A fixed percentage was then deducted from the declared amount, and redistributed among the subject's four-player group. The subject was then informed about the amount that was redistributed from other subjects in the group. The payoff from that part of the experiment was equal to the payoff from a randomly selected period.[11] The 10 paying periods were preceded by one (Russia) or two (Chile and the UK) practice periods.

After the RET and declaration stage, we elicited subjects' risk preferences with a standard 10-choice task (see, for instance, Holt and Laury (2002)), where each subject had to make 10 choices between a safe lottery and a risky lottery. Each safe lottery offered two similar amounts (£2 and £1.6 in the UK, 2000 and 1600 Pesos in Chile, and 50 and 40 Roubles in Russia), while the corresponding risky lottery offered a large and a small amount (3.85 and 0.1 £, 3850 and 100 Pesos, and 96.25 and 2.5 Roubles, respectively).[12] The subjects were informed that, at the

[10]The screenshot from the dictator game stage of the experiment is shown on Figure A1 in Appendix A.

[11]The screenshots from the RET and declaration stage of the experiment are shown on Figures A2-A5 in Appendix A show the screenshots from the experiment, while the printed instructions are shown on Figure A6. Following the RET and declaration stage, the subjects were then rematched and played another 10 periods, with declared incomes audited with some probability. In case of an audit, the deduction rate was applied to the entire income, and the subject payed a fine equal to 50% of the difference between the earned and declared amounts.

[12]See Figures A7 and A7 in Appendix A for screenshots.

end of the experiment, one pair of lotteries would be selected at random, and the lottery chosen by the subject would be used to determine his payoff in that part of the experiment. Higher willingness to take risks should correspond to a higher proportion of risky lotteries chosen by the subject.

Finally, the subjects answered a post-experiment questionnaire. Before completing the final questionnaire, in some sessions subjects played two versions of the "die roll game" (previously, it was used extensively used to analyze both the extent and correlates of lying (Fischbacher and Follmi-Heusi, 2013; Abeler et al., 2014; Gächter and Schulz, 2016)). The subjects were first asked to roll a six-sided die in private and report its value. The task was then repeated with an electronic version of the die that appeared on the screen. The subjects were informed that the reward for each task would be equal to 100 ECU times the value reported.[13]

On average, a session lasted 90 minutes, including instructions and payment. ECU earnings were converted at the exchange rate of 300 ECUs per £1 in Oxford and 300 ECUs per 500 Chilean Pesos in Santiago. The exchange rate in Moscow was 7 ECU for sessions without the die roll task, and 8 ECU per Russian Rouble for sessions with the die roll task. The minimum, mean, and maximum payoffs in Oxford were £9.6, £20.72, and £39.9; in Moscow these figures were 430, 832.3, and 1250 Russian Roubles, and in Santiago they were 4300, 10224, and 16500 Chilean Pesos.

Our design had several advantages. First, the subjects could choose the magnitude of the lie, from being completely honest, to lying maximally, with the extrinsic benefits of lying being proportional to the percentage of income (either 10%, 20%, or 30% in most treatments) that was deducted from the subject's declared income.[14] Second, performance in the real effort task was used as a measure of the subject's ability, which is a potential correlate of dishonest behavior.[15] Third, the moral costs associated with lying and stealing can be lower when earned income is at stake (Gravert, 2013). Fourth, the dictator game at the beginning of the experiment allowed us to control for other-regarding preferences while looking at the correlates and causes of lying

[13]See Figures A9 and A10 in Appendix A for screenshots.

[14]In Gneezy et al. (2018), the lying decision was also observed by the experimenter, but the extrinsic benefits of lying did not vary with the treatment.

[15]Gill et al. (2013) is one work where ability at the real effort task was found to correlate with lying. However, in their study the benefit of lying did not vary, and the experimenter was not able to differentiate between maximal and partial lying.

behavior.[16] Fifth, we are able to see whether and to what extent maximal and partial lying in the main part of the experiment corresponds to lying in different setting — the die roll game. Finally, each subject was given multiple opportunities to lie.

Our main research goal was to determine how the intrinsic cost of lying varied with the magnitude of the lie — in particular, whether the marginal cost of lying was positive and increasing. For that purpose, we varied the benefit of lying. We also manipulated several other characteristics of the game, both in order to obtain a greater diversity of settings in which the lying decisions were made, and to test additional hypotheses about the determinants of lying behavior.

First, the extent to which income is attributed to effort or luck varies significantly both across individuals and across countries (Alesina and Angeletos, 2005), and has also been shown to associated with lying. This heterogeneity was introduced in the "Shock" treatment, where in each period two subjects in each group were randomly selected to receive a 1300 ECU bonus, and were told whether they received the bonus after the real effort task, but prior to declaring income. A connection between the manner in which income is earned and lying was previously investigated by Schurr and Ritov (2016), who found that lying is more likely for earned income. However, their experiment involved lying on an unrelated die game task that is not well suited to differentiate between maximal and partial lying; in contrast, in our case we were able to measure the extent of the lie with each decision, while varying the amount of unearned income at stake.[17]

Second, the design of our experiment allowed for the remuneration to be different across subjects, as income inequality is known to vary significantly across countries (Atkinson and Piketty, 2007). In the "Status" treatment, we induced wage inequality by varying the amount of income that subjects earned from the real effort task. In each group, two subjects earned 100 ECU for each successful addition, and two subjects earned 200 ECU (these roles were assigned at the beginning of the experiment, remained fixed throughout the first 10 periods, and were

[16] In our experiment, lying reduces the welfare of the subject's other three group members (thus, the lies are "selfish black lies", in Erat and Gneezy (2012) terminology). Potentially, this complicates our analysis, as some of the previous results find a positive association between honesty and altruism (Cappelen et al., 2013; Sheremeta and Shields, 2013; Maggian and Villeval, 2016), although there is also evidence of no relationship between the two (Kerschbamer et al., 2016).

[17] In a related experiment, Gravert (2013) found that earned income contributed to unethical behavior.

reassigned for the following 10 periods). This treatment was also highly valuable in allowing us to look at the extent to which the effort supplied by the subjects at the real effort task was affected by the rewards.

Third, in the "Non-fixed" treatment, the subjects were rematched every period to avoid strategic interaction. In that treatment, we also measured how accurately a subject was able to rank her performance at the real effort task, relative to the other subjects in her group. Before the beginning of the first period, each subject was also asked to rank her performance in the period relative to the other three group members, receiving 100 ECU if the prediction is correct. The same question was also asked before the beginning of one of the other 9 periods, and at the end of an another period.[18]

Finally, in the U.K. several more sessions are run under slightly different rules. In two "Dead-weight loss" sessions, only 30% of the deducted income was redistributed to the subjects. A higher incidence and/or magnitude of lying in this treatment would indicate that honest behavior is at least partly driven by other-regarding motives, instead of by the preference for honest behavior as such. In four "Redistribution" sessions, the two worst performers each received 35% of the public good and two top performers received 15%, increasing the potential impact of other-regarding preferences. A total of three U.K. sessions also included higher deduction rates (40% or 50%). Including or excluding these sessions does not affect the overall results. One "Redistribution" session was also conducted in Russia. The number of subjects in each treatment and for each deduction rate is shown in Table 1. The complete list of sessions is given in Table A1.

	Baseline[19]	Status	Shock	Non-fixed	
Deduction 10%	9 (148)	3 (56)	3 (48)	9 (156)	24 (408)
Deduction 20%	8 (128)	4 (60)	3 (56)	6 (96)	21 (340)
Deduction 30%	4 (72)	3 (52)	3 (52)	6 (88)	16 (264)
Deduction 40%	2 (44)				2 (44)
Deduction 50%	1 (24)				1 (24)
	24 (416)	10 (168)	9 (156)	21 (340)	64 (1080)

Table 1: Number of sessions (with number of subjects in parenthesis) for each treatment.

[18]See Figures A15, A16, and A17 in Appendix A for screenshots.

[19]Including deadweight loss and redistribution treatments.

3 Results

Lying behavior. Our primary goal is to investigate how the incidence of corner solutions to the problem of choosing the magnitude of lying responds to changes in the benefits of lying. Hence we categorize all decisions as either full honesty (when the subject declares the entire income), maximal lying (when the income declared by the individual is exactly zero), and partial lying, which corresponds to all other decisions.

As Table 2 indicates, most of the individuals made similar lying decisions over the 10 periods of the experiment. Almost 26.9% of the participants declared 0% of their income in all 10 periods; a further 14.6% declared their entire income in every period, and 13.8% of the subjects always declared above 0% but below 100% of their income. A total of 70.3% of the subjects made one of these three decisions (lied maximally, lied partially, or were honest) in at least 9 periods, and 78% made the same one choice in at least 8 periods.

	Chile	Russia	U.K.	Total
Always declare 0%	7.14	20.3	42.1	26.9
Declare 0% in at least 8 periods	12.3	28.1	52.0	34.9
Always declare above 0%, but below 100%	11.7	27.7	8.1	13.8
Declare above 0%, but below 100% in at least 8 periods	25.0	41.4	13.8	23.6
Always declare 100%	31.2	3.1	10.2	14.6
Declare 100% in a least 8 periods	39.3	7.0	13.8	19.5

Table 2: Observed lying behavior

We label the subjects who lied maximally, lied partially, or were honest over at least 8 periods as consistent maximal liars, consistent partial liars, and consistently honest subjects. In each country, the share of subjects whose observed behavior did not fall into any of these three categories was small, and the share of subjects who made all three types of decisions was even smaller — 11.8% in Chile, 8.6% in Russia, and 6.7% in the U.K.

There were significant cross-country differences in lying. In Chile the modal behavior was honest; in Russia it was partial lying, and in the U.K. maximal lying was modal. The differences in the distribution of the three types of observed behavior (consistent maximal lying, consistent partial lying, consistent honesty, and the residual category) between the countries were highly significant[20]; Figure C1 in Appendix C shows the frequency with which subjects in each country lied partially, lied maximally, or were honest.

The higher overall level of honesty among Chilean subjects may have been be due to the fact that most of the experimental sessions in Chile were conducted at the Universidad de Santiago, where students come from more modest socio-economic backgrounds than at either Higher School of Economics in Russia or Oxford University in the U.K. [21] However, the distribution of lying behaviors among the subjects recruited at the Universidad de Santiago was not different from that among the subjects recruited at Universidad del Desarrollo, where the subject pool was more similar to those in Russia and the U.K. (Chi-squared test, $p = 0.4586$, Univ. de Santiago $n = 224$, Univ. del Desarrollo $n = 84$).

Consistent lying behavior. In Figure 1 we report the estimation of a multinomial logit model where the dependent variable is the subject's type of observed behavior (one of the three lying types in Table 2). For ease of interpretation, all multinomial logit tables present the average marginal effects of variables on the probability of being a certain type, keeping other variables for each observation at their observed values.

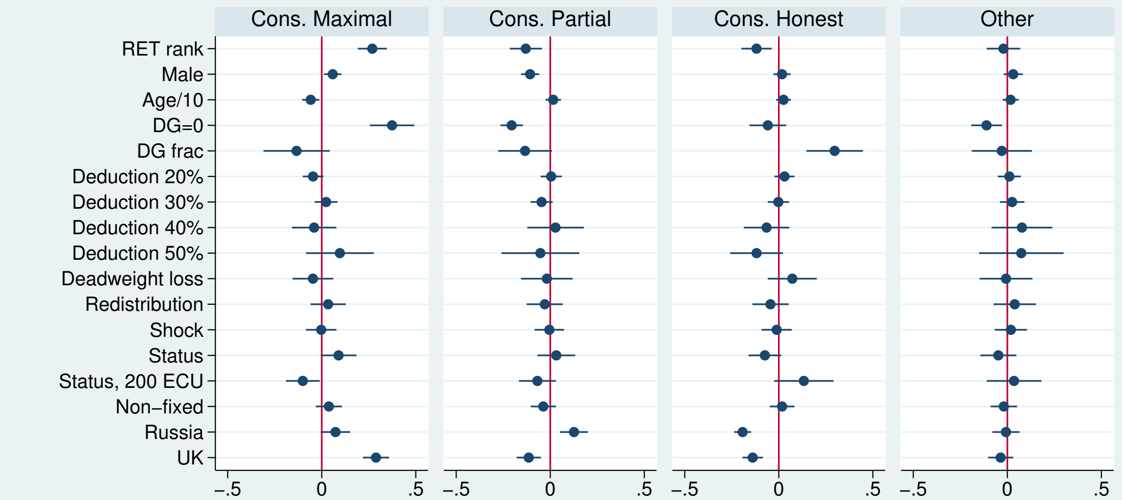
We find that the magnitude of lying does not increase with the deduction rate; in fact, it appears to be quite inelastic with respect to the benefits of lying. The subject was more likely to be a consistent maximal liar if the deduction rate was 30% rather than 20% ($p = 0.0242$ on the Wald test), and more likely to be consistently honest if the deduction rate was 20% rather than 50% ($p = 0.0442$), but all other pairwise comparisons between deduction treatments produced no significant differences.[22] In Column 5 of Table C1, we regress the average magnitude of partial lying for subjects who lied partially over at least 8 periods; similarly, the deduction rates largely have no effect on this value. At the same time, neither the deduction rates, nor other experimental conditions affected the performance and income of the subjects (see Section B1).

Compared with the baseline treatment, the rematching of the subjects between periods and

[20]Pairwise comparisons between countries using the Chi-squared test yielded $p < 0.0001$. This result would not change if we employ a different categorization of behavior (for example, defining consistent maximal liars as those who made 0% declarations in all 10 periods, and define other categories similarly).

[21]See Belot et al. (2015) on subject pool composition and choices in standard economic games.

[22]See Table C1 for the values of the coefficients. We will obtain similar results if we adopt a different classification of subject behavior, and consider whether the subject was a maximal liar, a partial liar, or honest, in every period of the game (Table C2).



The graph reports average marginal effects and 95% confidence intervals for multinomial logistic regression. The dependent variable is whether the subject is a consistent maximal liar, consistent partial liar, is consistently honest, or none of those. Robust standard errors. RET rank is the national rank, between 0 and 1, of subject's national performance at the real effort task. RET Deviation is the difference between actual number of correct additions and one predicted from subject and period FE. DG frac is the fraction of the 1000 ECU donated in the dictator game.

Figure 1: Marginal effects of experimental conditions and individual covariates on the type of lying behavior

the introduction of unearned income had no effect on lying over the 10 periods. In the Status treatment, subjects who earned 100 ECU (rather than 200 ECU) per period were more likely to be consistent maximal liars, and less likely to be consistently honest. As we would expect from Table 2, there were strong country effects, with consistent maximal lying (even controlling for Dictator Game donation and RET performance) more likely in Russia and, especially, in the U.K. At the same time, partial cheating is more likely in Chile than in the U.K. (and overall most likely in Russia).

Maximal lying was clearly favored by high ability individuals. This is consistent with previous research (Schurr and Ritov, 2016; Vincent and Kouchaki, 2015; Duch and Solaz, 2017) demonstrating a correlation between ability, or success, and lying. We find that subject's ability is positively correlated specifically with maximal lying, and negatively correlated with both partial lying and honest choices. The average marginal effect of RET rank (which varies between 0 and 1) on the probability of lying maximally in at least 8 periods is 0.269. People who made a 0 donation on the Dictator Game (compared with a small, but positive donation) were more likely to be consistent maximal liars, less likely to be consistent partial liars, and no more or less likely to be consistently honest.

There are two other pieces of evidence suggesting that ability is correlated with maximal and partial lying. First, very small, but positive, declarations were more prevalent among low-performance subjects than among their high-performance counterparts (see Appendix B2). Second, lying was also linked to expected performance on the RET. In the first period of the Non-Fixed treatment, as much as 47.8% of subjects who expected to rank first were consistent maximal liars, compared with 25.4% of the subjects expecting to rank second, 17.2% of the subjects expecting to rank third, and 17.2% of those who expect to rank last.[23] Subjects expecting to rank first or second in the first period were more likely to have lied maximally in that period ($p = 0.0007$ on two-sided Fisher's exact test), but were not more or less likely to have lied partially ($p = 0.6318$).[24]

The lying decision. Our next goal is to assess the robustness of these results with a specification that allows us to estimate the likelihood of choosing one of the three different lying behaviors in each round of the experiment. In the first three columns of Table 3 we estimate a multinomial logit models with a trichtonomous dependent variable: where the subject in each period could declare 0% of income, declared 100%, or declared some intermediate amount. The "Others" category does not exist, as these models estimate the choice, in each period, of one of the three lying behaviors. There were 1,071 subjects, each making 10 income reporting decisions – hence 10,710 decisions in total.

Once again, we do not find that lying increases with the deduction rate. The estimated probability of lying maximally was actually lower when the deduction rate was 20%, compared with 10%, as well as with 30%, deduction rates. In Appendix C, Table C5 reports separate country results for this model. We see that this nonlinearity was driven entirely by one country, Chile, while in Russia, maximal lying was not responsive to the deduction rate, and in the UK, the only effect that we find is that the likelihood of maximal lying was slightly higher for 30% deduction rate, compared with 10% deduction rate. The probability of declaring the full amount of income was largely not affected by the deduction rate in Russia and the UK, and

[23]See Table C3. In the table we also report the average actual rank in Period 1. The subjects were able to predict their rank with some accuracy; subjects who expected to rank better had higher average rank.

[24]Similarly, subjects who expected to rank first or second prior to one of the other 9 periods were more likely to have lied maximally in that period ($p = 0.0711$ on two-sided Fisher's exact test), but were not more or less likely to have lied partially in the same period ($p = 0.1874$).

	All countries						All countries	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.284***	(0.0358)	-0.112***	(0.0383)	-0.172***	(0.0379)	0.0756	(0.0628)
RET deviation	-0.00112	(0.00150)	0.00401**	(0.00180)	-0.00289*	(0.00155)	0.00370	(0.00291)
Male	0.0643***	(0.0214)	-0.0899***	(0.0220)	0.0256	(0.0215)	0.0502	(0.0363)
Age	-0.00590***	(0.00192)	0.00270	(0.00192)	0.00321*	(0.00176)	0.00316	(0.00303)
Period	0.0172***	(0.00131)	-0.0102***	(0.00139)	-0.00700***	(0.00119)	-0.0152***	(0.00204)
DG=0	0.330***	(0.0486)	-0.253***	(0.0307)	-0.0772*	(0.0426)	-0.0651	(0.0598)
DG frac	-0.182**	(0.0761)	-0.144**	(0.0681)	0.326***	(0.0703)	0.282***	(0.103)
Deduction 20%	-0.0434*	(0.0252)	0.0202	(0.0263)	0.0232	(0.0248)	-0.000828	(0.0363)
Deduction 30%	0.0287	(0.0279)	-0.0321	(0.0272)	0.00344	(0.0264)	-0.00482	(0.0426)
Deduction 40%	-0.0196	(0.0543)	0.0614	(0.0594)	-0.0418	(0.0534)	0.184*	(0.0955)
Deduction 50%	0.0934	(0.0740)	0.0122	(0.0853)	-0.106	(0.0686)	-0.279***	(0.0689)
Deadweight loss	-0.0597	(0.0509)	-0.0292	(0.0601)	0.0889	(0.0589)	-0.0313	(0.117)
Redistribution	0.0582	(0.0429)	-0.0126	(0.0427)	-0.0456	(0.0433)	-0.00202	(0.0747)
Russia	0.107***	(0.0329)	0.116***	(0.0328)	-0.222***	(0.0227)	-0.0136	(0.0418)
UK	0.302***	(0.0299)	-0.139***	(0.0299)	-0.163***	(0.0258)	-0.0787	(0.0492)
Shock	0.0108	(0.0375)	0.000712	(0.0384)	-0.0115	(0.0393)	-0.0334	(0.0448)
Shock, yes	-0.0104	(0.0216)	0.0339	(0.0255)	-0.0235	(0.0232)	-0.0118	(0.0316)
Status	0.0658	(0.0442)	0.000721	(0.0464)	-0.0665	(0.0408)	-0.0436	(0.0534)
Status, 200 ECU	-0.0739	(0.0472)	-0.0396	(0.0532)	0.113*	(0.0623)	0.0497	(0.0634)
Non-fixed	0.0227	(0.0313)	-0.0457	(0.0318)	0.0230	(0.0303)	0.0390	(0.0507)
Constant							0.241**	(0.103)
Observations	10718		10718		10718		2391	
Log pseudolikelihood	-8993.9415		-8993.9415		-8993.9415			
R^2							0.1025	
D20=D30	0.00955		0.0644		0.474		0.920	
D20=D40	0.662		0.485		0.223		0.0404	
D20=D50	0.0656		0.925		0.0651		0.00000834	
D30=D40	0.389		0.123		0.405		0.0511	
D30=D50	0.391		0.610		0.123		0.0000761	
D40=D50	0.177		0.606		0.427		0.00000152	
Russia=UK	2.13e-10		1.09e-17		0.0259		0.171	

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 3: Determinants of lying, by period

in Chile that probability was actually lower for a 20% deduction rate, compared with 10%. Likewise, we cannot say that the magnitude of partial lying was increasing with the deduction rate; there was no such effect in Chile and Russia, while in the UK the magnitude of partial lying was higher for 50% deduction rate, and lower for 40% deduction rate, compared with 10% deduction rate.

Table C1 suggests that most subjects had either very low or very high intrinsic costs of lying and hence over the range of lying costs in our game they lied virtually all the time or were always honest. However, the coefficient on *Period* in Table 3, suggests lying might change over the course of the game – in particular, the probability of maximal lying appears to be higher in later periods.

There are two reasons why this may be true. First, lying is path dependent. Table 4 introduces controls for the previous period's decision. The period effect on maximal lying was actually negative in Table 4, with the probability of maximal lying decreasing by 0.13% each period, once the previous period's decisions are controlled for — this compares with a 1.72% per period increase in Table 3. The individual country results presented in the Appendix, Table C8, indicate this was the case for Chile and the UK, while in Russia the effect of period on maximal lying was not significant. The probability of partial lying, conditional on previous period's decision, did not change with time in Russia and the U.K., and decreased in Chile and in the combined sample.

	All countries						**All countries**	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.0510***	(0.00990)	-0.0254*	(0.0133)	-0.0256**	(0.0117)	0.0182	(0.0184)
RET deviation	-0.00298*	(0.00160)	0.00424**	(0.00214)	-0.00126	(0.00178)	0.00266	(0.00304)
Male	0.0152***	(0.00542)	-0.0265***	(0.00751)	0.0114*	(0.00653)	0.00921	(0.0105)
Age	-0.00169***	(0.000582)	0.000549	(0.000657)	0.00114**	(0.000505)	0.00122	(0.000780)
Period	-0.00131*	(0.000708)	-0.00168*	(0.000880)	0.00299***	(0.000742)	0.00130	(0.00112)
DG=0	0.0531***	(0.0135)	-0.0674***	(0.0184)	0.0143	(0.0161)	-0.00800	(0.0152)
DG frac	-0.0397**	(0.0167)	-0.0374	(0.0232)	0.0770***	(0.0222)	0.0665**	(0.0305)
Deduction 20%	-0.00715	(0.00627)	0.000680	(0.00860)	0.00647	(0.00751)	-0.00692	(0.0101)
Deduction 30%	0.00881	(0.00699)	-0.0172*	(0.00955)	0.00839	(0.00826)	-0.00936	(0.0131)
Deduction 40%	-0.00158	(0.0134)	0.0156	(0.0216)	-0.0140	(0.0187)	0.00171	(0.0309)
Deduction 50%	0.0307	(0.0223)	-0.00720	(0.0330)	-0.0235	(0.0264)	-0.0803***	(0.0160)
Deadweight loss	-0.0108	(0.0147)	-0.0124	(0.0219)	0.0232	(0.0165)	-0.0192	(0.0317)
Redistribution	0.0176	(0.0111)	-0.0152	(0.0165)	-0.00242	(0.0145)	0.0166	(0.0217)
Russia	0.0117	(0.00850)	0.0267**	(0.0117)	-0.0384***	(0.0107)	-0.00952	(0.0123)
UK	0.0502***	(0.00919)	-0.0279**	(0.0108)	-0.0223***	(0.00850)	-0.00931	(0.0143)
Shock	0.00634	(0.0123)	-0.0144	(0.0155)	0.00811	(0.0145)	-0.00101	(0.0145)
Shock, yes	-0.0178	(0.0156)	0.0457**	(0.0210)	-0.0278	(0.0179)	-0.0241	(0.0181)
Status	0.0136	(0.0114)	0.00132	(0.0157)	-0.0150	(0.0138)	-0.0129	(0.0148)
Status, 200 ECU	-0.0229*	(0.0127)	-0.00621	(0.0183)	0.0291*	(0.0167)	0.0144	(0.0181)
Non-fixed	0.0123	(0.00768)	-0.0171*	(0.0103)	0.00476	(0.00886)	-0.00629	(0.0147)
L.Declared 0%	0.770***	(0.0207)	-0.232***	(0.0165)	-0.538***	(0.0132)	-0.413***	(0.0481)
L.Declared 1-99%	0.0279***	(0.00983)	0.447***	(0.0124)	-0.475***	(0.00776)	-0.502***	(0.0363)
L.Partial cheat	-0.107***	(0.0167)	-0.0538***	(0.0192)	0.161***	(0.0174)	0.792***	(0.0224)
L.Dec. others, 1000	-0.00853***	(0.00202)	0.00711***	(0.00257)	0.00142	(0.00212)	0.0103***	(0.00340)
Constant							0.485***	(0.0443)
Observations	9647		9647		9647		2173	
Log pseudolikelihood	-3770.977		-3770.977		-3770.977			
R^2							0.6547	
D20=D30	0.0251		0.0659		0.820		0.845	
D20=D40	0.674		0.488		0.276		0.772	
D20=D50	0.0899		0.811		0.260		7.83e-08	
D30=D40	0.451		0.136		0.241		0.730	
D30=D50	0.332		0.765		0.236		0.0000279	
D40=D50	0.173		0.534		0.754		0.00538	
Russia=UK	0.00000125		0.00000157		0.123		0.986	

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 4: Determinants of lying in periods 2-10, previous action

Subject decisions were highly dependent on past actions, and if a subject declared 0% in the previous period, she was 60.0% to 81.1% more likely, depending on the country, to have made a zero declaration this period (compared with a 100% declaration in the previous period), and was 35.9%-58.5% less likely to have declared 100%. The effect of partial lying in the previous period depended on how much income was declared; with lower declarations leading to higher probability of maximal lying and lower probability of honest behavior in the following period.

Second, income declared by the other group members in the previous period also had a significant effect on lying. In Table 4 we include the coefficient for the total income declared by the other three group members in the previous period (at the end of each period, the subject can deduce this value, because he is informed about the redistribution from the group, and the deduction rate is the same for all group members). Every additional 1000 ECU of income declared by other group members decreased the probability of maximal lying by 0.85% (alternatively, the probability of maximal lying decreased by 1.18% for each standard deviation increase in declared income), and this increased the probability of partial lying by 0.71% (or 0.99% for each standard deviation increase).

In order to estimate the effect of group member declarations over 10 periods, we predict whether the subject lied maximally, lied partially, or was honest for periods 2-10.[25] When predicting the individual's choice for each of periods 3-10, we use the predicted choice in the previous period as lagged own choice. We make two extreme counterfactual assumptions about the declarations of the other group members. First, we assume that they declare nothing in each period. Second, we assume that the other group members declared 100% of their income in each period. We also make the prediction using actual declarations of each subject's group members. Table 5 reports the aggregate outcome of these estimations, repeated over 1000 iterations (the distributions of these frequencies for 50 iterations are also reported in Appendix C, Figure C3).

We see that for Chile, lying behavior is stable in the sense that it is not conditional on the behavior of other group members. The estimated shares of maximal liars, partial liars, and honest subjects in period 10 change by less than 4% if the other group members always report zero incomes, compared with them always reporting their entire incomes. This is less true with respect to the UK; there, the probability that a given individual will be a maximal liar in period 10 is estimated to drop by just under 17% if all other individuals in his group always behave honestly, compared with lying maximally in every period. Finally, in Russia lying is strongly conditional on the behavior of other group members; having honest group members makes one much more likely to be a partial liar, and much less likely to be a maximal liar, compared with the group members declaring zero income.

Random assignment to income shocks and differential wages had no significant affect on

[25] We use models identical to ones in Appendix Table C8, with the exception that we do not include the coefficient for the magnitude of partial lying in the past period.

	Assumption about declarations of other group members	Maximal lying	Partial lying	Honest
Chile	Actual declarations	.203 (.021)	.328 (.02)	.469 (.028)
	Declared 0% in each period	.185 (.02)	.334 (.028)	.481 (.032)
	Declared 100% in each period	.216 (.026)	.32 (.024)	.464 (.027)
	Actual behavior in period 10	.211	.328	.461
Russia	Actual declarations	.463 (.022)	.408 (.02)	.129 (.018)
	Declared 0% in each period	.616 (.026)	.286 (.025)	.098 (.016)
	Declared 100% in each period	.111 (.02)	.69 (.025)	.199 (.025)
	Actual behavior in period 10	.469	.395	.137
UK	Actual declarations	.652 (.015)	.182 (.015)	.166 (.016)
	Declared 0% in each period	.688 (.017)	.16 (.015)	.152 (.014)
	Declared 100% in each period	.523 (.02)	.267 (.019)	.21 (.016)
	Actual behavior in period 10	.657	.177	.165

For each country, each of the rows 1-3 corresponds to the result of 1000 estimations, and reports the mean and standard deviation of the prevalence of maximal lying, partial lying, and honest behavior in Period 10. The fourth row reports the actual frequencies in Period 10.

Table 5: Predicted and actual behavior in Period 10

lying. The effect of earning 200 ECU in the Status treatment on maximal cheating, reported in Table 3, was confined to only one country — the UK. The receipt of unearned income in the Shock treatment had an effect on first-period lying in Chile (Table C9); it made lying in the first period more likely. Otherwise, its effect on either the likelihood of maximal and partial lying, or on the magnitude of partial lying was either nonexistent or not consistent across countries and model specifications.

All estimated models strongly confirm, in all countries, the positive association between subject ability and maximal lying. The average marginal effect of RET rank (which varies between 0 and 1) on the probability of maximal lying in a given period is between 0.178 and 0.368. The association becomes smaller if one takes into account previous period's decision, but is large, between 0.147 and 0.331, in period 1 (these coefficients are reported in Table 6 and Table C9 in Appendix C).

Moreover, most importantly, this relationship is not driven by unexpectedly high or low levels of performance in a given period, but by the subject's average ability across all periods.[26]

Subjects effort in the RET appear to be supplied inelastically, as RET performance was

[26] In each period, we calculate the difference between the subject's actual performance at the RET task, and the performance predicted from subject and period fixed effects. We find that the coefficient for RET deviation was largely not significant.

	All countries						All countries	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.238***	(0.0396)	-0.0677	(0.0489)	-0.171***	(0.0456)	0.0742	(0.0811)
RET deviation	0.0114*	(0.00670)	0.00749	(0.00802)	-0.0189**	(0.00778)	-0.0179	(0.0120)
Male	0.0617***	(0.0239)	-0.0729***	(0.0281)	0.0112	(0.0261)	-0.00118	(0.0461)
Age	-0.00255	(0.00225)	0.00302	(0.00264)	-0.000470	(0.00226)	-0.00220	(0.00397)
DG=0	0.391***	(0.0601)	-0.267***	(0.0433)	-0.124**	(0.0493)	-0.0640	(0.0846)
DG frac	-0.0228	(0.0899)	-0.184*	(0.0951)	0.207**	(0.0825)	0.263*	(0.135)
Deduction 20%	-0.0345	(0.0279)	0.0469	(0.0336)	-0.0124	(0.0300)	0.0320	(0.0458)
Deduction 30%	0.00202	(0.0304)	0.0378	(0.0362)	-0.0398	(0.0316)	0.0554	(0.0564)
Deduction 40%	-0.0446	(0.0585)	0.0906	(0.0789)	-0.0460	(0.0708)	0.482***	(0.101)
Deduction 50%	-0.0221	(0.0629)	0.114	(0.102)	-0.0924	(0.0855)	-0.0752	(0.160)
Deadweight loss	-0.0633	(0.0543)	-0.0436	(0.0698)	0.107	(0.0667)	0.0427	(0.174)
Redistribution	0.00354	(0.0434)	0.0557	(0.0560)	-0.0592	(0.0533)	-0.150**	(0.0706)
Russia	0.0956**	(0.0423)	0.259***	(0.0455)	-0.354***	(0.0253)	0.127**	(0.0539)
UK	0.255***	(0.0352)	-0.0758*	(0.0404)	-0.179***	(0.0318)	-0.0263	(0.0609)
Shock	0.00653	(0.0515)	-0.0419	(0.0589)	0.0353	(0.0572)	-0.0366	(0.0608)
Shock, yes	0.0241	(0.0641)	-0.00218	(0.0749)	-0.0219	(0.0676)	0.0992	(0.0843)
Status	0.0549	(0.0496)	-0.0283	(0.0562)	-0.0266	(0.0555)	-0.0912	(0.0776)
Status, 200 ECU	-0.0161	(0.0532)	-0.0429	(0.0655)	0.0589	(0.0726)	0.131	(0.0957)
Non-fixed	-0.00469	(0.0350)	-0.0547	(0.0406)	0.0594	(0.0380)	0.0504	(0.0633)
Constant							0.292**	(0.135)
Observations	1071		1071		1071		218	
Log pseudolikelihood	-895.7424		-895.7424		-895.7424			
R^2							0.1549	
D20=D30	0.247		0.808		0.410		0.668	
D20=D40	0.866		0.579		0.635		0.00000644	
D20=D50	0.848		0.513		0.355		0.501	
D30=D40	0.444		0.513		0.932		0.0000760	
D30=D50	0.712		0.462		0.547		0.423	
D40=D50	0.775		0.842		0.657		0.00148	
Russia=UK	0.00000541		6.10e-18		2.99e-08		0.00866	

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 6: Determinants of lying in period 1

independent from experimental conditions (see Appendix B1). At the same time, subject ability has a negative effect on the likelihood of partial lying, and no effect on the magnitude of partial lying.[27]

Similarly, a subject who made a zero donation in the Dictator Game was more likely to lie maximally in a given round, compared with a subject who donated some positive amount (in all countries and all specifications), and was less likely to lie partially (in Russia and the U.K., in all specifications). At the same time, a subject who donated a positive amount was more likely to make a 100% declaration, compared with a subject who donated a smaller amount; this association was present in every country.

Males were less likely than females to be partial liars in both Russia and the U.K. However, the effect of gender on maximal lying was present in the U.K. only. The effect of age on either type of lying was only observed in the U.K. In Tables C10 and C11 we introduce additional individual-level controls. We find that interpersonal trust, risk preferences, and income have no effect on lying that would be consistent across national contexts; at the same time, individuals

[27]In Table C12 we replace the subject's RET rank and the period's deviation with the subject's performance in the nonpaying practice period, and find that performance in the practice period is predictive of maximal lying in later periods.

who expressed less support for various forms of opportunistic behavior were less likely to be maximal liars.[28] Our main results — that deduction rates have no effect on lying, and that subject performance is associated with more maximal lying — hold if we consider males and females separately (Table C6).

There was no correlation between the magnitude of partial lying in each period and different experimental treatments. At the same time, there was significant within-subject variation in the magnitude of partial lying. If a consistent partial liar declared a positive amount (but less then 100%) of income, he or she was only 24.4% likely to have declared the same amount of income in the next period (this figure increased to 41.1% if the subject's performance in the RET task was the same in the two periods). The magnitude of partial lying was higher in Russia and, especially, in the U.K. — countries where the subjects were also more likely to consistently declare 0% of their income. However, while the partial liars were heterogeneous in the fraction of income they declared, efforts to explain this heterogeneity were not successful.[29]

Lying and the die roll game At the end of the experimental sessions, we presented our subjects with an additional opportunity to lie at a standard die-rolling game.[30] Our expectation was lying in the main part of the experiment should predict behavior in the die-tolling game. Figure 2 reported die rolls, depending on the individual's behavior in the main part of the experiment.

Our expectation was that the maximal liars would be more likely than other behavioral types to report 6; partial liars more likely to report 5; while the decisions by honest subjects would reflect the expected unbiased distribution. Our results for consistent maximal liars are as expected — they had a 64.4% probability of reporting 6 on the die roll, compared with 36.2% for consistently honest subjects ($p < 0.0001$ on the two-tailed Fischer's exact test). Consistent maximal liars were also less likely to report 2 or 5 ($p = 0.0344$ and $p = 0.0359$ on the two-sided Fischer's exact test) than consistently honest subjects.

[28]See Table C13 for the composition of the civicness index used in the regression.

[29]The only individual-level covariate that was significant in more than one country was self-reported ideology: In Russia and the UK, subjects who reported to be leftist declared a larger share of income.

[30]A total of 444 subjects played the die roll game; the sessions where the die roll game was included in the experiment are given in Table A1.

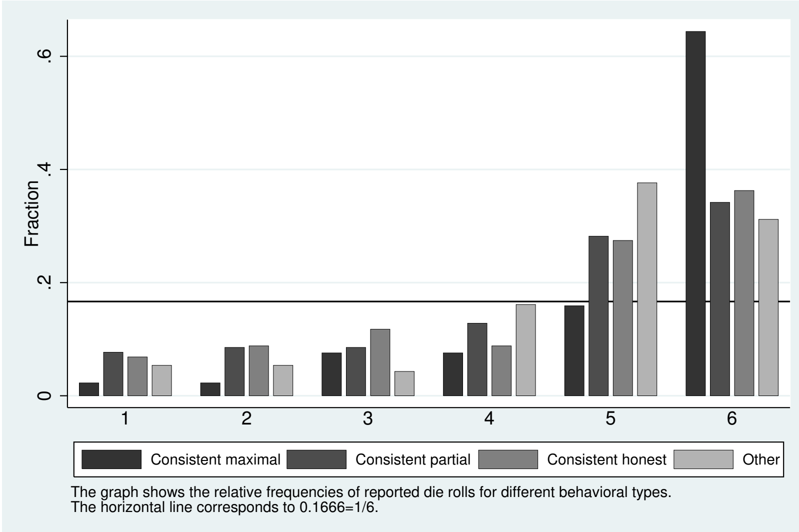


Figure 2: Lying and the Die Roll Result.

We do less well predicting partial lying and honesty. There was lying in the die roll game even by the subjects who were consistently honest in the main part of the experiment. The 102 honest subjects from the lying game reported 5 and 6 as much as 30 and 40 times, respectively. That was significantly more often than 16.6% of the time which corresponds to truthful reporting ($p = 0.0042$ and $p < 0.0001$, one-side binomial test). The results did not change much if we consider the 73 subjects who were honest in every period of the experiment; they reported 5 and 6 after the die roll 20 and 27 times, respectively ($p = 0.0281$ and $p = 0.0005$, one-side binomial test).

Numbers reported by the consistent partial liars were not lower or higher than those reported by consistently honest subjects (Wilcoxon-Mann-Withney ranksum test Prob$> |z| = 0.8420$, consistently honest subjects $n = 102$, consistent partial liars $n = 117$). Similarly, there was also no difference between subjects who were completely honest in every period, and those who partially lied in every period (Wilcoxon-Mann-Withney ranksum test Prob$> |z| = 0.8202$, completely honest subjects $n = 73$, partial liars in every period $n = 62$).[31] In particular, consistent partial liars were no more likely than honest subjects to report 5 — the choice associated with partial lying ($p = 1.0000$ on the two-tailed Fisher's exact test).[32]

[31]Chi-squared tests also fails to reject the hypothesis that the distributions of reported numbers are different, with $p = 0.89$ and $p = 0.4102$, respectively.

[32]In Table C4 we report the results of the logistic regressions for the six reported die roll values. The dependent variables are dummy variables for individual types (with the baseline category being honest subjects). For consistent partial liars, we also account for the average fraction of income declared. We find that maximal liars

We obtain similar results for the digital version of the die game, when the die was rolled on the screen and the actual as well as reported die rolls were recorded.[33] The digital die roll game allowed us to record the instances of maximal lying, when the subject rolled the value between 1 and 4, and reported 6, and partial lying (not reporting either 6 or the actual value, if the latter was between 1 and 4; the frequencies of these behaviors are recorded in Table C14). Consistent maximal liars were more likely to lie maximally on the digital die task than either consistent partial liars or consistently honest subjects ($p = 0.0007$ and $p = 0.0026$ on the respective two-sided Fisher's exact tests), and not more or less likely to lie partially ($p = 0.5894$ and $p = 1.000$ the respective two-sided Fisher's exact tests). At the same time, consistent partial liars and consistently honest subjects were not more or less likely to either lie maximally or lie partially at the digital die game ($p = 0.7835$ and $p = 0.7696$ on the respective two-sided Fisher's exact tests).[34]

One of our core expectations is confirmed here: we see high levels of maximal lying in the die-rolling game by subjects we classify as maximal liars in the main part of the experiment. However, the subjects we classified as consistently honest lied more than we expected in the die-rolling game, and the numbers that they reported were not different from those reported by consistent partial lying.

This may be true for two reasons. First, the lying costs in the main part of the experiment may potentially have been higher than in the die roll game. This might be true because the subjects who lied may have experienced additional discomfort as their decisions were observed by the experimenter.[35] One's maximal lying was also evident to a member of one's group if the other three group members also lied maximally. Hence, a subject who was honest or lied partially in the main part of the experiment may have lied maximally in the die roll game. This

---

are more likely, than honest subjects, to report 6 and are also less likely to report 1. Partial liars are no more or less likely to report any of the values than honest subjects, regardless of the average amount that they declared.

[33] The distribution of reported rolls for this part of the experiment is shown on Figure C4 in Appendix C. Predictably, a smaller share of subjects, 29.1%, reported 6 on the digital die game, compared with 43% of the subjects who reported 6 when the actual die was rolled and the outcome was not observed by the experimenter.

[34] The subjects who lied maximally in every period were more likely to lie maximally at the digital die task than those who either lied partially in every period, or were honest in every period ($p = 0.0002$ and $p < 0.0001$ on the respective two-sided Fisher's exact tests), and not more or less likely to lie partially ($p = 0.3036$ and $p = 0.4857$, respectively). There was no difference in the incidence of either non-maximal lying ($p = 0.1474$) or maximal lying ($p = 1.0000$) on the digital die task between those who lied partially in every period in the main part of the experiment, and those who were honest in every period.

[35] In Gneezy et al. (2018) experiment, subjects lied more when their choices were not observed by the experimenter.

could also be true due to altruistic concerns, as lying in the main game was costly for other participants.[36] Second, lying thresholds can be contingent on the context and the nature of the cheating decision. Hence, in one game an individual may have had a zero lying threshold and behaved honestly, while in another she had a positive lying threshold and chose to lie partially, and vice versa. This is consistent with the findings that the size of the lying threshold is sensitive to context and framing (Mazar et al., 2008; Gino and Ariely, 2016).

Reaction Time In our experiment, we measured the time subjects took to make their income declaration decisions. Recent studies have found that reaction time is correlated with lying, but both positive and negative relationships were reported.[37] We find that partial lying was associated with much greater reaction time ($t = 12.73$, sd=18.63, $n = 3455$) than either honest declarations ($t = 10.52$, sd=22.21, $n = 2793$) or maximal lying ($t = 4.31$, sd=7.72, $n = 4464$). The empirical distributions of reaction time for 100% declarations dominated the distribution for 0% declarations, but was dominated by the distribution of response times for intermediate declarations (Figure 3; this is also true for each individual country, see Figure C5 in Appendix C).

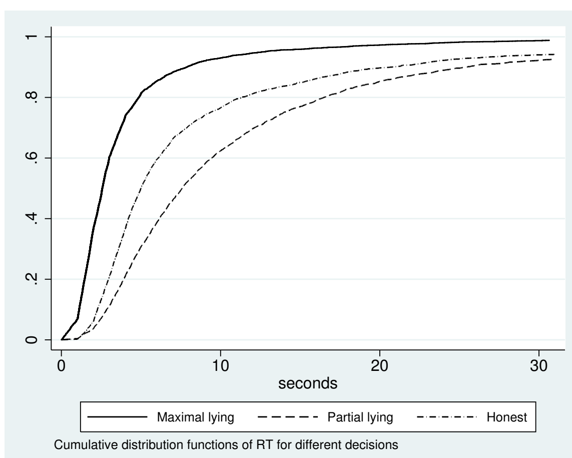


Figure 3: Cumulative distributions of reaction times for different declarations

[36]In our game, honest decisions involve more redistribution to the subject's group members. However, Dictator Game behavior is also predictive of lying in the die roll game, where altruistic concerns are absent. Subjects who donated 0 in the Dictator Game have, on average, reported 6 after the die roll 65.8% of the time, compared with 38.5% of the time for subjects who donated more than 0. This difference was significant in Russia and the U.K. ($p = 0.0407$ and $p = 0.0029$ for two-sided Fisher's exact test).

[37]Deviations from self-interested lying have been shown to require reflection and hence higher reaction times (Shalvi et al., 2012; Gino et al., 2011; Tabatabaeian et al., 2015). However, other experiments have found that honesty is a quick natural response (Foerster et al., 2013; Verschuere and Shalvi, 2014; Levine, 2014).

In Table C17 in Appendix C, we regress the log reaction time for each decision on individual and treatment controls. In Model 1 we control for the individual's choice, while in Model 2 we also control for the choice made in the previous period, and find that an honest declaration is a much quicker decision than a partial lie. In Model 3 we control for all possible combinations of decisions made in this and previous periods, as well as for decisions made in Period 1. We find that in Period 1, it took more time to declare 100% of the income than to lie maximally, but less time than to lie partially ($p < 0.0001$ on both comparisons); a similar nonlinear relationship between the magnitude of the lie and reaction time was present if the subject was honest in the previous period, while a repeated maximal lie took less time than any other type of decision.[38] We obtain similar results by estimating parametric survival-time models, assuming exponential (Table C18) and Weibull (Table C19) distributions of reaction time.

The U-shaped relationship between the magnitude of the lie and reaction time suggests two possibilities. First, partial lying necessarily involves a choice from a broad range of alternatives, and hence involves more reflection than either a honest choice or a maximal lie. Second, both noncooperation and honesty can be heuristic responses (Rand et al., 2014; Verschuere and Shalvi, 2014), while partial lie involves decision conflict and is slower.

4 Discussion

Individuals lie on a regular basis in their everyday lives, and for many people lying is associated with intrinsic costs that increase with the degree to which the truth is distorted. The goal of this work was to learn more about the nature of these costs. For this goal, we observed over 1,000 individuals from the U.K., Russia and Chile making over 10,000 lying decisions in a public goods game with earned income. We implemented treatments aimed at varying the benefit of lying, as well as several other characteristics of the game, such as whether there was earned as well as unearned income.

We find that both maximal lying (when the subjects maximized their monetary gain) and

[38] The experimental conditions had some effect on the reaction time. Once the individual's choices are controlled for, the deduction rates and the benefit of lying had no effect; however, the reaction time was higher in the Shock treatment, especially if the subject received unearned income it that period. The reaction time decreased with periods, was shorter for individuals with higher ability at the RET task, and was longer for males and subjects who made higher donations in the dictator game.

partial lying were common, as well as honest behavior, and lying was not responsive to externally imposed benefits. This is not consistent with the marginal cost of lying increasing in the magnitude of the lie (in which case one would expect the magnitude of partial lies and/or the incidence of maximal lie to increase with the benefits of lying).

We offer an alternative explanation that partial lying is a result of some subjects have lying thresholds; the intrinsic costs of lying for such individuals are low when the magnitude of the lie is below the threshold. Our experiments suggest that such thresholds are heterogeneous both across individuals and across individual decisions, but are unaffected by extrinsic benefits and other experimental conditions.[39]

These thresholds may be shaped by the concerns about one's social identity; social identity theory argues that people derive intrinsic payoffs from belonging to one or another social category (Akerlof and Kranton, 2000; Bénabou and Tirole, 2011). When the magnitude of lying falls below a threshold value individuals are able to maintain a positive self-image and therefore avoid any intrinsic costs of lying Gino and Ariely (2016). Individuals may also care about whether their actions are perceived by other people as dishonest, which may cause partial lying (Gneezy et al., 2018).

We demonstrate that partial lies and maximal lies are distinct phenomena. First, we observe subjects making multiple potential lying decisions, and find that individuals either lie maximally most of the time, or lie partially most of the time, with relatively few individuals doing a lot of both. In two countries out of three, the individual's choice whether to lie maximally, lie partially, or be honest was not conditional, or was only weakly conditional, on the lying of other individuals in the four-member group.

Second, there are individual characteristics that distinguish between maximal liars on one hand, and partial liars and honest individuals on the other. As has been pointed out elsewhere (Duch and Solaz, 2017), ability is correlated with lying. Our findings are more nuanced. High-ability individuals are indeed more likely to be maximal liars. However, low ability is positively

[39]This finding is contrary to Gibson et al. (2013) who conclude that the likelihood of lying will vary continuously with the costs and benefits. However, our experiment is different in several important respects. First, we explicitly vary the benefits of lying by assigning subjects to treatments with different deduction rates. In the Status treatment, we also manipulate the amount of income that individuals earn through the real effort task, while in the Shock treatment subjects who receive the bonus have high exogenous costs of not lying. Second, the lying decisions are made with respect to the individual's earned income. Finally, our design involves subjects making repeated decisions.

associated not only with honest behavior, but with partial lying as well.

At the same time, partial lies vary both within and between subjects, while efforts to account for this variation were not particularly successful. Of particular interest is the fact that variables that account for lying strategies (maximal, partial and honest) do not explain variations in the magnitude of partial lies, and people who tend to engage in near-maximal lying do not share the same characteristics as those who tend to lie to the maximal extent.[40] A similar pattern is present when we look at other-regarding preferences. Individuals who made zero donations in the Dictator Game were more likely to be maximal liars and less likely to be partial liars, compared with individuals who donated some positive amount. At the same time, an individual who made a positive donation was more likely to be an honest type, compared with an individual who made a smaller or no donation.

Third, our observations are consistent with the assumption that individuals who lie maximally have very small or zero intrinsic costs of lying. Otherwise, maximal lying should have been less prevalent for lower deduction rates, as some of the individuals with higher intrinsic costs of lying would prefer not to lie maximally when the deduction rate is low. Instead, maximal lying (as well as honest behavior and partial lying) was equally prevalent among all deduction rates in our experiment.

Finally, it requires a high reaction time in order to arrive at a partial lying decision, while both honest choices and, especially, maximal lies involve relatively short reaction time. The long reaction time might suggest that partial lying reflects a preference for maintaining one's positive social identify while at the same time uncertainty about precisely how big a lie would be consistent with such a goal.

Both partial and maximal lying occurred in all three of the different national subject pools — the U.K. Chile and Russia. Moreover, several of the above patterns that characterize lying are present in all three countries: reaction time is lower for maximal lies and honest decisions than for partial lies; ability is positively correlated with maximal lying and negatively — with partial lies and honesty; people who tend to lie maximally in the public goods game behave similarly in the die tossing game.

[40]In Table C10 we look at partial lying involving very small declarations of earnings (such as between 1 and 50 ECUs). Even at these extremes we observe that low ability subjects are more likely to engage in partial lying.

National context, though, is not irrelevant. All three countries in our study exhibit these same three distinct behaviors although their distribution within each country is quite different. In Chile the modal behavior was predominantly honest — 40 percent of subjects reported 100 percent of their earnings. In Russia honest behavior was least common, while in the U.K. we saw the highest concentration of maximal liars. Why they differed is an important puzzle that is beyond the scope of these data but is the focus of our ongoing research.

As we pointed out earlier, the economic costs of lying are enormous. An important challenge then is simply designing mechanisms for reducing lying both in the public and private sectors. The point of departure should be a good understanding of the lying mechanism. We make some modest contributions in this respect. Our experimental results suggest that modifying the extrinsic costs of not lying may have little effect. This is simply the case because many in the population will lie maximally regardless of the stakes; at the same time, the threshold for partial lying is also not likely to be affected by the extrinsic costs of lying.

Are there appeals to intrinsic motivations that might resonate with the types of lying behavior that we identify in the population? Possibly, although our efforts were not particularly successful in this regard. Treatments that manipulated the relationship between effort and income, how income is redistributed and deadweight loss had little effect on lying behavior. We find some evidence that subjects who observed their group members declare a large amount of incomes were less likely to lie maximally. Nevertheless, the effect was present and strong only in one country — Russia.

Our experimental results illustrate that the distribution of lying strategies can vary quite significantly across national, and perhaps other, contexts. Policies, and the investments necessary, for addressing lying in contexts where honest behavior or partial lying is predominant will differ significantly from those populated primarily by maximal liars. Efforts to address lying must therefore begin by estimating the distribution of lying strategies in the population of interest. The challenge for future research will be to build on our insights into the heterogeneity of lying behavior in order to understand what moderates lying in the population.

References

Abeler, J., Becker, A., and Falk, A. (2014). Representative evidence on lying costs. *Journal of Public Economics*, 113(Supplement C):96 – 104.

Abeler, J., Nosenzo, D., and Raymond, C. (2017). Preferences for truth-telling. Manuscript.

Agosta, S., Pezzoli, P., and Sartori, G. (2013). How to detect deception in everyday life and the reasons underlying it. *Applied Cognitive Psychology*, 27(2):256–262.

Akerlof, G. A. and Kranton, R. E. (2000). Economics and identity. *The Quarterly Journal of Economics*, 115(3):715–753.

Alesina, A. and Angeletos, G.-M. (2005). Fairness and redistribution. *American Economic Review*, 95(4):960–980.

Algan, Y., Cahuc, P., and Sangnier, M. (2016). Trust and the welfare state: The twin peaks curve. *The Economic Journal*, 126(593):861–883.

Andreoni, J. and Miller, J. (2002). Giving according to garp: An experimental test of the consistency of preferences for altruism. *Econometrica*, 70(2):737–753.

Association of Certified Fraud Examiners (2016). Report to the nations: On occupational fraud and abuse. `https://www.acfe.com/rttn2016/docs/2016-report-to-the-nations.pdf`.

Atkinson, A. B. and Piketty, T. (2007). *Top incomes over the twentieth century: a contrast between continental european and english-speaking countries*. OUP Oxford.

Becker, G. S. (1968). Crime and Punishment: An Economic Approach. *Journal of Political Economy*, 76(2):169–217.

Belot, M., Duch, R., and Miller, L. (2015). A comprehensive comparison of students and non-students in classic experimental games. *Journal of Economic Behavior and Organization*, 113:26–33.

Bénabou, R. and Tirole, J. (2011). Identity, morals, and taboos: Beliefs as assets. *The Quarterly Journal of Economics*, 126(2):805–855.

Berwick, D. and Hackbarth, A. (2012). Eliminating waste in us health care. *JAMA*, 307(14):1513–1516.

Blanco, M., Engelmann, D., and Normann, H. T. (2011). A within-subject analysis of other-regarding preferences. *Games and Economic Behavior*, 72(2):321 – 338.

Cappelen, A. W., Konow, J., Sorensen, E. O., and Tungodden, B. (2013). Just luck: An experimental study of risk-taking and fairness. *American Economic Review*, 103(4):1398–1413.

Cohn, A., Fehr, E., and Marechal, M. A. (2014). Business culture and dishonesty in the banking industry. *Nature*, 516:86–89.

Duch, R. and Solaz, H. (2017). Who is cheating and why? Working Paper. Nuffield College Centre for Experimental Social Sciences, University of Oxford.

Erat, S. and Gneezy, U. (2012). White lies. *Management Science*, 58(4):723–733.

Fischbacher, U. (2007). z-tree: Zurich toolbox for ready-made economic experiments. *Experimental Economics*, 10:171–78.

Fischbacher, U. and Follmi-Heusi, F. (2013). Lies in disguise: An experimental study of cheating. *Journal of the European Economic Association*, 11(3):525–547.

Fischbacher, U. and Gachter, S. (2010). Social preferences, beliefs, and the dynamics of free riding in public goods experiments. *American Economic Review*, 100(1):541–56.

Foerster, A., Pfister, R., Schmidts, C., Dignath, D., and Kunde, W. (2013). Honesty saves time (and justifications). *Frontiers in psychology*, 4:473.

Fosgaard, T. R., Hansen, L. G., and Piovesan, M. (2013). Separating will from grace: An experiment on conformity and awareness in cheating. *Journal of Economic Behavior & Organization*, 93:279 – 284.

Gächter, S. and Schulz, J. F. (2016). Intrinsic honesty and the prevalence of rule violations across societies. *Nature*, 531:496–499.

Gibson, R., Tanner, C., and Wagner, A. F. (2013). Preferences for truthfulness: Heterogeneity among and within individuals. *American Economic Review*, 103(1):532–548.

Gill, D., Prowse, V., and Vlassopoulos, M. (2013). Cheating in the workplace: An experimental study of the impact of bonuses and productivity. *Journal of Economic Behavior & Organization*, 96:120 – 134.

Gino, F. and Ariely, D. (2016). *Dishonesty explained: What leads moral people to act immorally.* Guilford Publications.

Gino, F., Krupka, E. L., and Weber, R. A. (2013). License to cheat: Voluntary regulation and ethical behavior. *Management Science*, 59(10):2187–2203.

Gino, F., Schweitzer, M. E., Mead, N. L., and Ariely, D. (2011). Unable to resist temptation: How self-control depletion promotes unethical behavior. *Organizational Behavior and Human Decision Processes*, 115(2):191 – 203.

Gneezy, U. (2005). Deception: The role of consequences. *American Economic Review*, 95(1):384–394.

Gneezy, U., Kajackaite, A., and Sobel, J. (2018). Lying aversion and the size of the lie. *American Economic Review*, 108(2):419–53.

Gneezy, U., Rockenback, B., and Serra-Garcia, M. (2013). Measuring lying aversion. *Journal of Economic Behavior & Organization*, 93:293–300.

Gravert, C. (2013). How luck and performance affect stealing. *Journal of Economic Behavior & Organization*, 93:301 – 304.

Hilbig, B. E. and Hessler, C. M. (2013). What lies beneath: How the distance between truth and lie drives dishonesty. *Journal of Experimental Social Psychology*, 49(2):263 – 266.

Holt, C. A. and Laury, S. K. (2002). Risk aversion and incentive effects. *American Economic Review*, 92:1644–1655.

Hurkens, S. and Kartik, N. (2009). Would i lie to you? on social preferences and lying aversion. *Experimental Economics*, 12:180–192.

Jacobsen, C., gaard, T. R., and Pascual-Ezama, D. (2017). Why do we lie? a practical guide to the dishonesty literature. *Journal of Economic Surveys*, pages n/a–n/a.

Kerschbamer, R., Neururer, D., and Sutter, M. (2016). Insurance coverage of customers induces dishonesty of sellers in markets for credence goods. *Proceedings of the National Academy of Sciences*, 113(27):7454–7458.

Konovalov, A. and Krajbich, I. (2017). Revealed indifference: Using response times to infer preferences. https://ssrn.com/abstract=3024233.

Levine, T. R. (2014). Truth-default theory (tdt): A theory of human deception and deception detection. *Journal of Language and Social Psychology*, 33(4):378–392.

Lohse, T., Simon, S. A., and Konrad, K. A. (2018). Deception under time pressure: Conscious decision or a problem of awareness? *Journal of Economic Behavior & Organization*, 146:31 – 42.

M. DePaulo, B., A. Kashy, D., E. Kirkendol, S., M. Wyer, M., and Epstein, J. (1996). Lying in everyday life. 70:979–95.

Maggian, V. and Villeval, M. C. (2016). Social preferences and lying aversion in children. *Experimental Economics*, 19(3):663–685.

Mazar, N., Amir, O., and Ariely, D. (2008). The dishonesty of honest people: A theory of self-concept maintenance. *Journal of Marketing Research*, 45(6):633–644.

Mazar, N. and Zhong, C.-B. (2010). Do green products make us better people? *Psychological Science*, 21(4):494–498.

Monin, B. and T. Miller, D. (2001). Moral credentials and the expression of prejudice. 81:33–43.

Pruckner, G. J. and Sausgruber, R. (2013). Honesty on the streets: A field study on newspaper purchasing. *Journal of the European Economic Association*, 11(3):661–679.

Rand, D. G., Peysakhovich, A., Kraft-Todd, G. T., Newman, G. E., Wurzbacher, O., Nowak, M. A., and Greene, J. D. (2014). Social heuristics shape intuitive cooperation. *Nature Communications*, 5:3677 EP –.

Rosenbaum, S., Billinger, S., and Stieglitz, N. (2014). Lets be honest: A review of experimental evidence of honesty and truth-telling. *Journal of Economic Psychology*, 45:181–196.

Rubinstein, A. (2007). Instinctive and cognitive reasoning: A study of response times. *The Economic Journal*, 117(523):1243–1259.

Sachdeva, S., Iliev, R., and Medin, D. L. (2009). Sinning saints and saintly sinners: The paradox of moral self-regulation. *Psychological Science*, 20(4):523–528.

Schurr, A. and Ritov, I. (2016). Winning a competition predicts dishonest behavior. *Proceedings of the National Academy of Sciences*.

Shalvi, S., Eldar, O., and Bereby-Meyer, Y. (2012). Honesty requires time (and lack of justifications). *Psychological Science*, 23(10):1264–1270. PMID: 22972904.

Shalvi, S., Gino, F., Barkan, R., and Ayal, S. (2015). Self-serving justifications: Doing wrong and feeling moral. *Current Directions in Psychological Science*, 24(2):125–130.

Sheremeta, R. M. and Shields, T. W. (2013). Do liars believe? beliefs and other-regarding preferences in sender???receiver games. *Journal of Economic Behavior & Organization*, 94:268 – 277.

Tabatabaeian, M., Dale, R., and Duran, N. D. (2015). Self-serving dishonest decisions can show facilitated cognitive dynamics. *Cognitive Processing*, 16(3):291–300.

Verschuere, B. and Shalvi, S. (2014). The truth comes naturally! does it? *Journal of Language and Social Psychology*, 33(4):417–423.

Vincent, L. and Kouchaki, M. (2015). Creative, rare, entitled, and dishonest: How commonality of creativity in one's group decreases an individual's entitlement and dishonesty. *Academy of Management Journal*.

Volk, S., Thoni, C., and Ruigrok, W. (2012). Temporal stability and psychological foundations of cooperation preferences. *Journal of Economic Behavior & Organization*, 81(2):664 – 676.

Appendix A Experiment design

#	Country	Treatment	Tax rate	Subjects	Risk	Die	Note
1	U.K.	Baseline	10	24	Yes	No	
2	U.K.	Baseline	20	24	Yes	No	
3	U.K.	Baseline	30	24	Yes	No	
4	U.K.	Baseline	40	24	Yes	No	
5	U.K.	Baseline	50	24	Yes	No	
6	U.K.	Status	10	24	Yes	No	
7	U.K.	Status	20	12	Yes	No	
8	U.K.	Status	20	16	Yes	No	
9	U.K.	Status	30	20	Yes	No	
10	U.K.	Baseline	10	24	Yes	No	30% of deductions go to two top performers
11	U.K.	Baseline	20	20	Yes	No	30% of deductions go to two top performers
12	U.K.	Baseline	30	20	Yes	No	30% of deductions go to two top performers
13	U.K.	Baseline	40	20	Yes	No	30% of deductions go to two top performers
14	U.K.	Baseline	10	24	Yes	No	Only 30% of deductions are redistributed
15	U.K.	Baseline	20	20	Yes	No	Only 30% of deductions are redistributed
16	U.K.	Shock	10	16	Yes	No	100 ECU per answer+1300 ECU bonus
17	U.K.	Shock	20	20	Yes	No	100 ECU per answer+1300 ECU bonus
18	U.K.	Shock	30	20	Yes	No	100 ECU per answer+1300 ECU bonus
19	Chile	Shock	10	16	Yes	No	150 ECU per answer+1300 ECU bonus
20	Chile	Shock	20	20	Yes	No	150 ECU per answer+1300 ECU bonus, 8 observations invalid
21	Chile	Shock	30	16	Yes	No	150 ECU per answer+1300 ECU bonus
22	Chile	Status	10	16	Yes	No	
23	Chile	Status	20	16	Yes	No	
24	Chile	Status	30	16	Yes	No	
25	Chile	Baseline	10	12	Yes	No	
26	Chile	Baseline	20	12	Yes	No	
27	Chile	Baseline	30	12	Yes	No	
28	U.K.	Non-fixed	10	16	Yes	Yes	
29	U.K.	Non-fixed	10	16	Yes	Yes	
30	U.K.	Non-fixed	10	16	Yes	Yes	
31	U.K.	Non-fixed	10	12	Yes	Yes	
32	U.K.	Non-fixed	20	12	Yes	Yes	
33	U.K.	Non-fixed	30	16	Yes	Yes	
34	Chile	Non-fixed	10	20	Yes	Yes	
35	Chile	Non-fixed	20	20	Yes	Yes	
36	Chile	Non-fixed	30	20	Yes	Yes	
37	Chile	Non-fixed	10	16	Yes	Yes	
38	Chile	Non-fixed	20	12	Yes	Yes	
39	Chile	Non-fixed	30	8	Yes	Yes	
40	U.K.	Baseline	10	16	Yes	Yes	
41	U.K.	Non-fixed	20	16	Yes	Yes	
42	U.K.	Non-fixed	30	12	Yes	Yes	
43	Chile	Non-fixed	10	20	Yes	Yes	Universidad del Desarrollo
44	Chile	Non-fixed	10	24	Yes	Yes	Universidad del Desarrollo
45	Chile	Non-fixed	20	20	Yes	Yes	Universidad del Desarrollo
46	Chile	Non-fixed	30	20	Yes	Yes	Universidad del Desarrollo
47	Russia	Baseline	10	8	Yes	No	
48	Russia	Baseline	10	8	Yes	No	
49	Russia	Baseline	10	16	Yes	No	
50	Russia	Baseline	10	16	Yes	No	
51	Russia	Baseline	20	16	Yes	No	
52	Russia	Baseline	20	16	Yes	No	
53	Russia	Baseline	20	8	Yes	No	
54	Russia	Baseline	20	12	Yes	No	30% of deductions go to two top performers
55	Russia	Shock	10	16	Yes	Yes	100 ECU per answer+1300 ECU bonus
56	Russia	Shock	20	16	Yes	Yes	100 ECU per answer+1300 ECU bonus
57	Russia	Status	10	16	Yes	Yes	
58	Russia	Status	20	16	Yes	Yes	
59	Russia	Status	30	16	Yes	Yes	
60	Russia	Baseline	30	16	Yes	Yes	
61	Russia	Shock	30	16	Yes	Yes	100 ECU per answer+1300 ECU bonus
62	Russia	Non-fixed	10	16	Yes	Yes	
63	Russia	Non-fixed	20	16	Yes	Yes	
64	Russia	Non-fixed	30	12	Yes	Yes	

Table A1: List of sessions

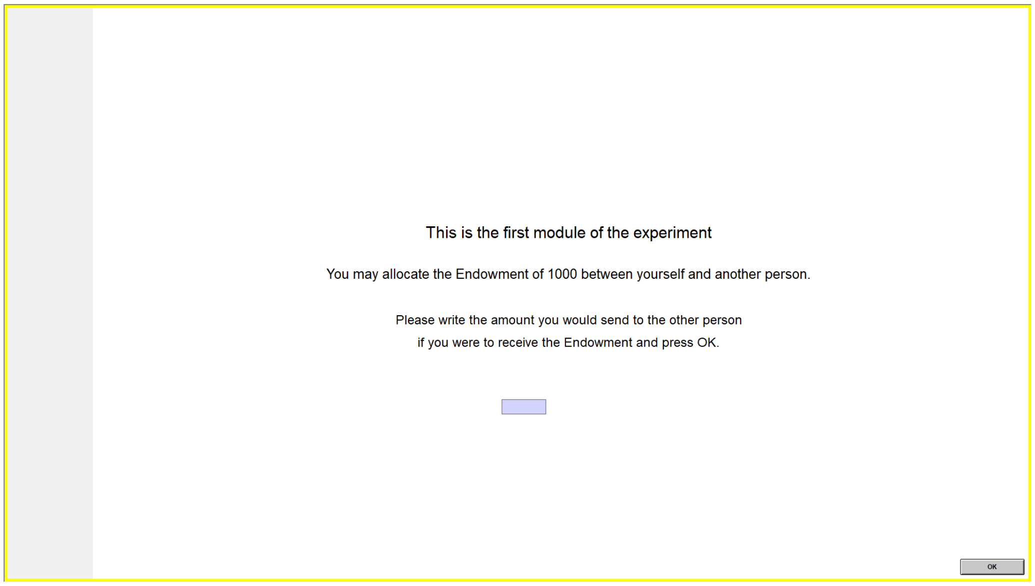


Figure A1: Dictator Game

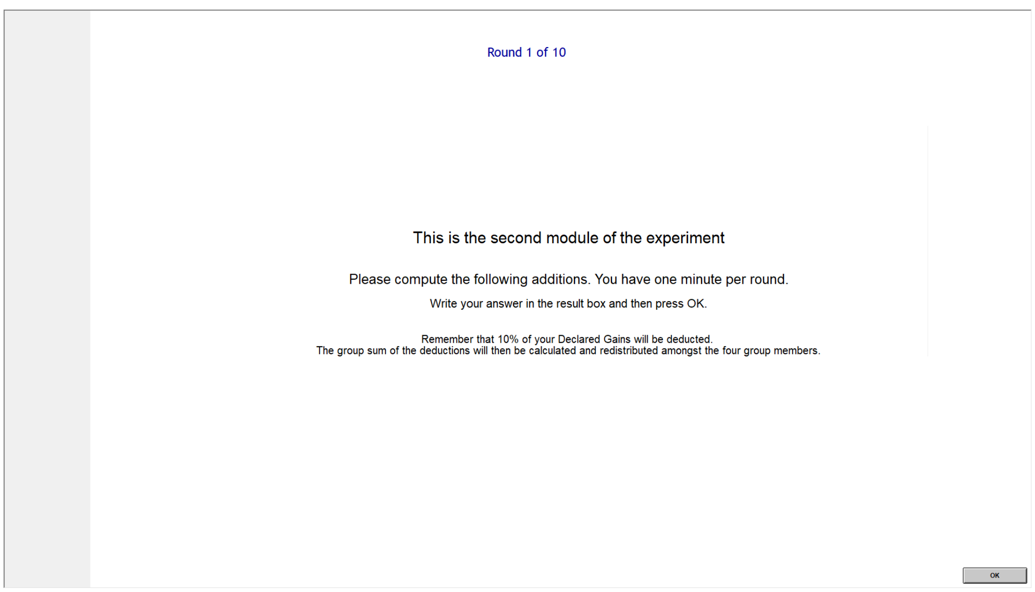


Figure A2: On-screen instructions for real effort task, U.K.

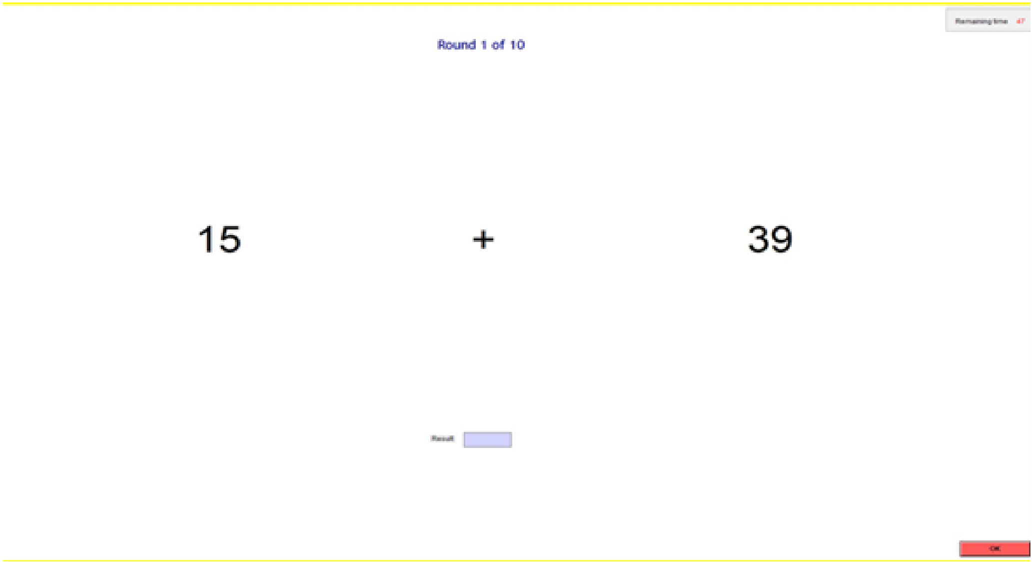


Figure A3: Real effort task, U.K.

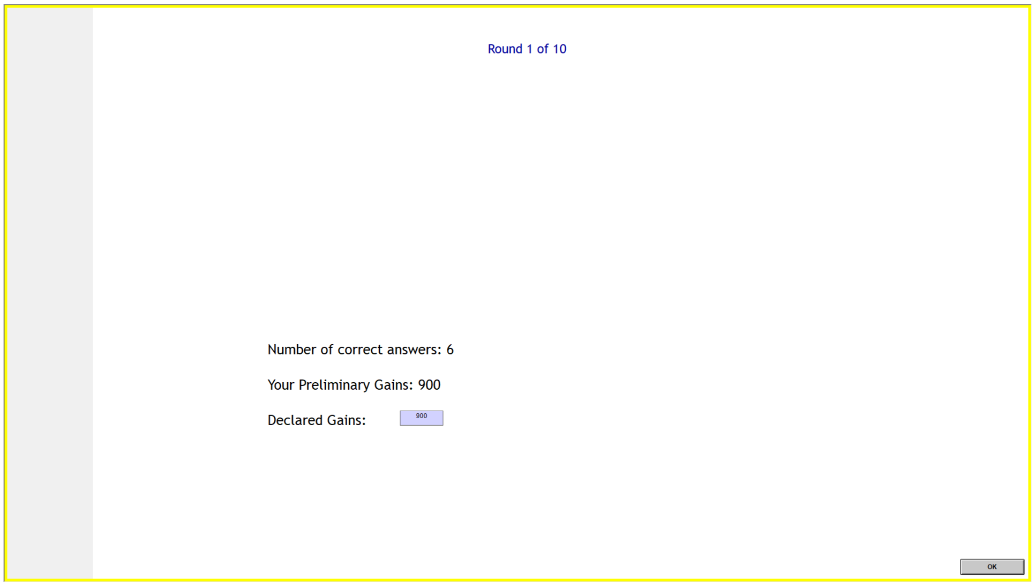


Figure A4: Declaration of gains following real effort task, U.K.

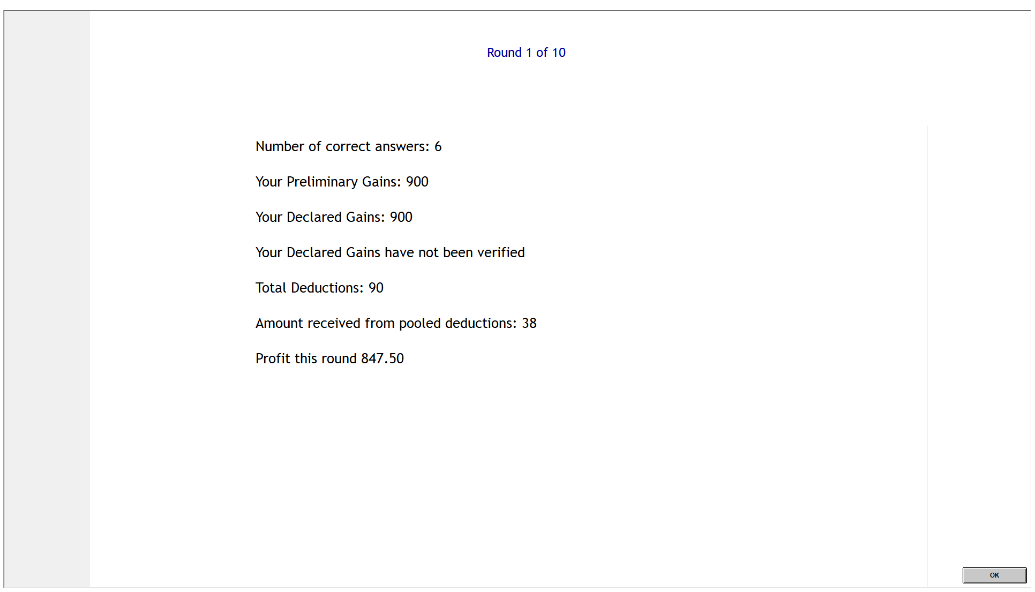


Figure A5: Results following declaration of gains, U.K.

NUFFIELD CENTER FOR EXPERIMENTAL SOCIAL SCIENCES

Module 2:

a) This module consists of 10 rounds. At the beginning of the module participants are randomly assigned to groups of four. You won't know the identity of the other group members. The composition of each group will remain unchanged.

b) In each one-minute round you will be asked to compute a series of additions. Your *Preliminary Gains* depend on how many correct answers you provide. You will get **150 ECUs** for each correct answer.

c) At the end of each round, once you have received information concerning your *Preliminary Gains*, you will be asked to declare these gains. In this module **10%** of these *Declared Gains* will then be deducted from your *Preliminary Gains*.

d) In each round there is a certain probability that your *Declared Gains* will be compared with your actual *Preliminary Gains* in order to verify these two amounts correspond. In this module this probability is **0%.**

e) If this verification finds a discrepancy between the *Preliminary* and *Declared* gains an extra amount will be deducted from your *Preliminary Gains*. In this module this amount will correspond to **50%** of the observed discrepancy. In addition, the regular deduction of **10%** will apply to the *Preliminary Gains* and not to the declared amount.

f) Deductions applying to the four group members will then be pooled and equally distributed amongst those members.

g) Your profits are calculated and displayed at the end of each round in the following manner:

Profit = Preliminary Gains – Deduction from the Declared Gains – Potential deductions due to discrepancy + Group amount

h) At the end of the module one round will be chosen at random, and your earnings will be based on your profit of that round at the exchange rate **300ECUs = 1 £**

i) You will be informed of your earnings for this module at the end of the experiment.

Figure A6: Printed instructions, RET and declaration stage

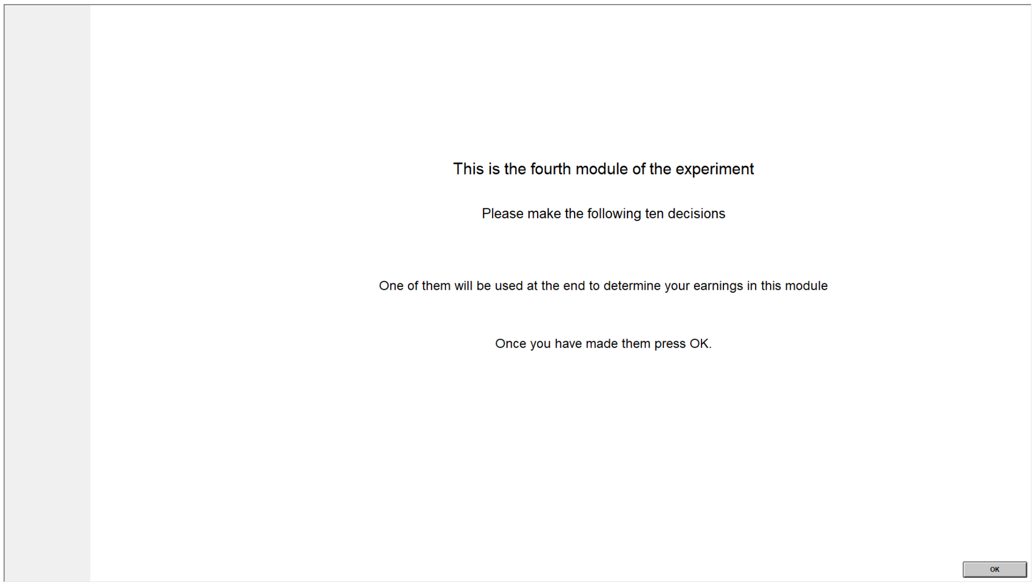


Figure A7: On-screen instructions Risk Aversion questions

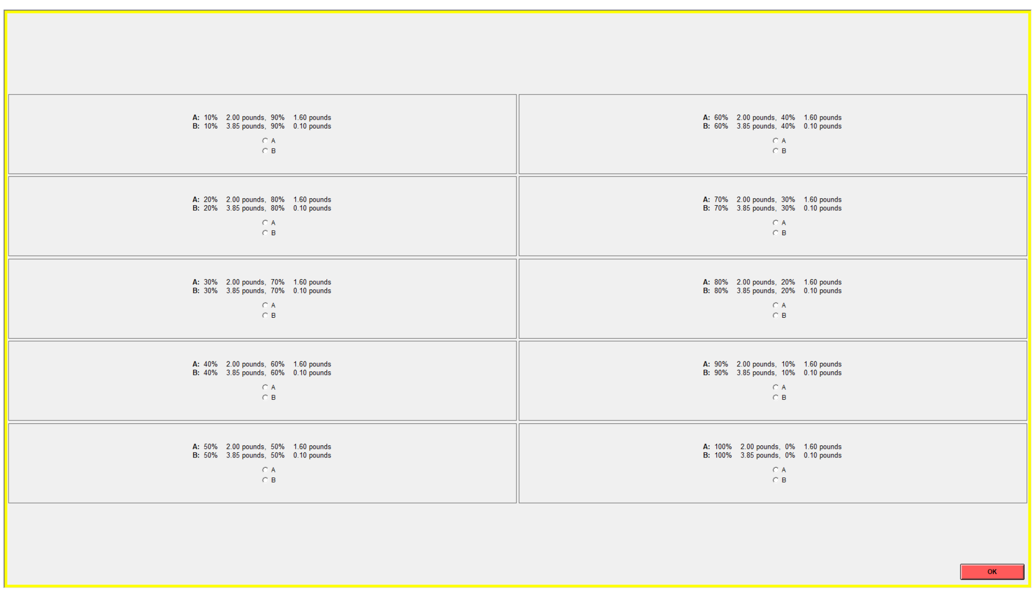


Figure A8: Risk aversion questions

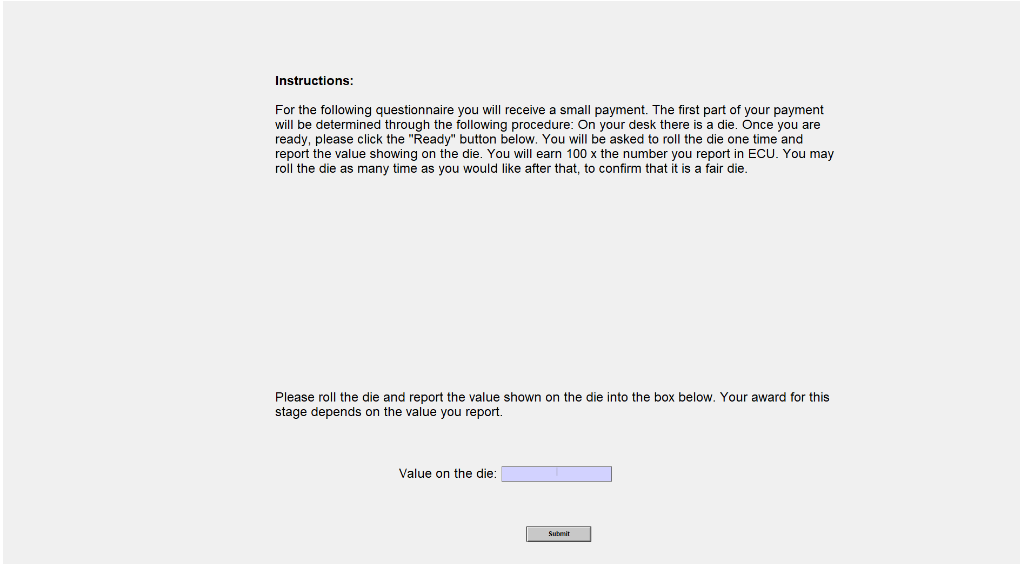


Figure A9: The real die game

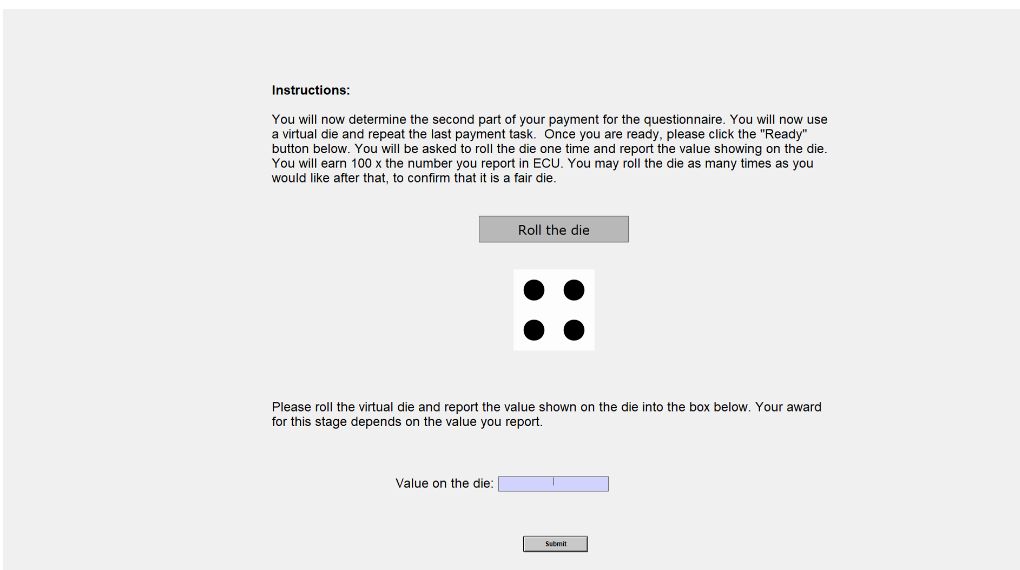


Figure A10: The virtual die game

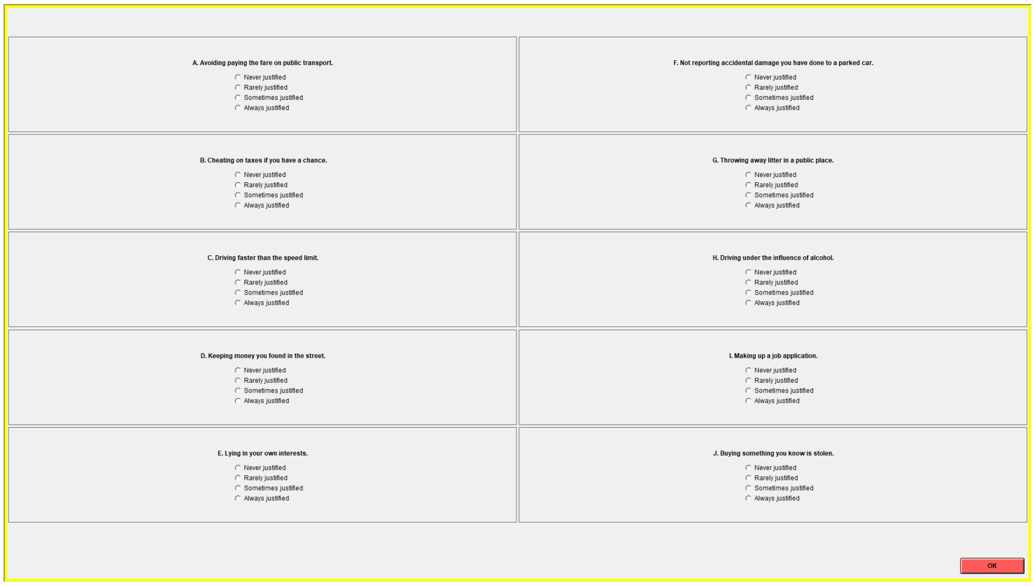


Figure A11: Post-experiment questionnaire, civicness questions

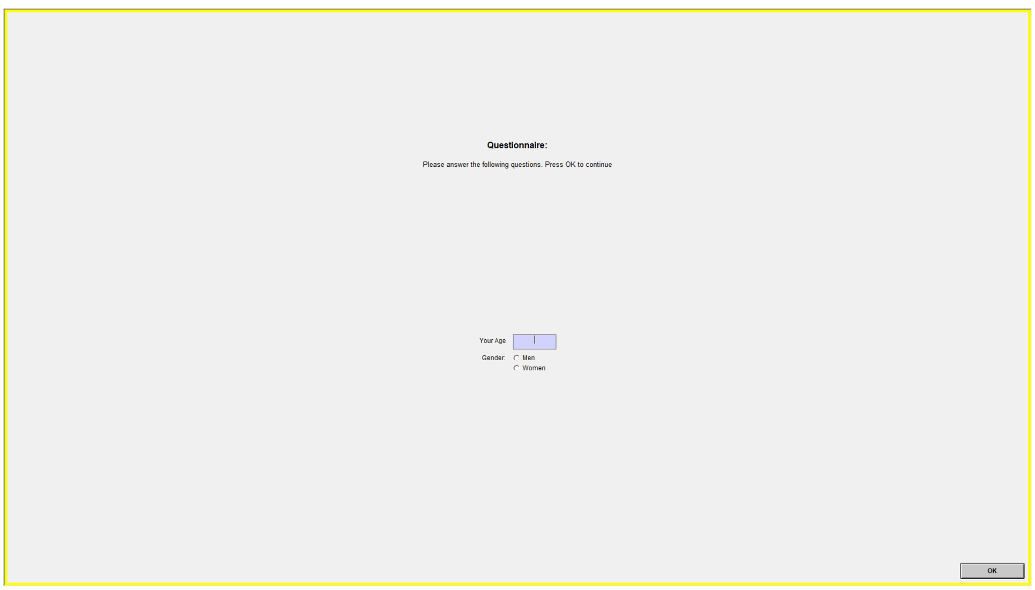


Figure A12: Post-experiment questionnaire, age and gender questions

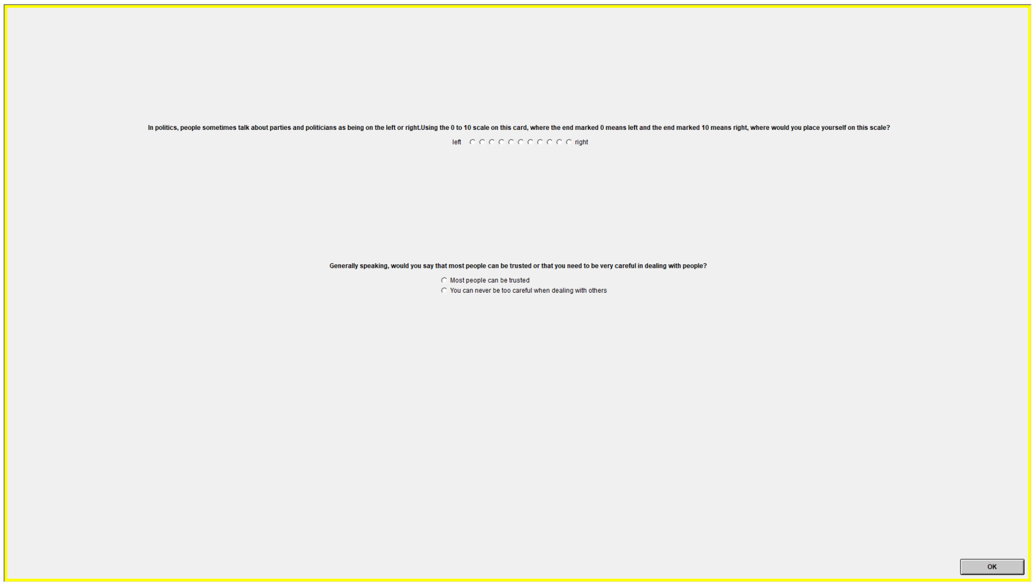


Figure A13: Post-experiment questionnaire, trust and political self-identification questions

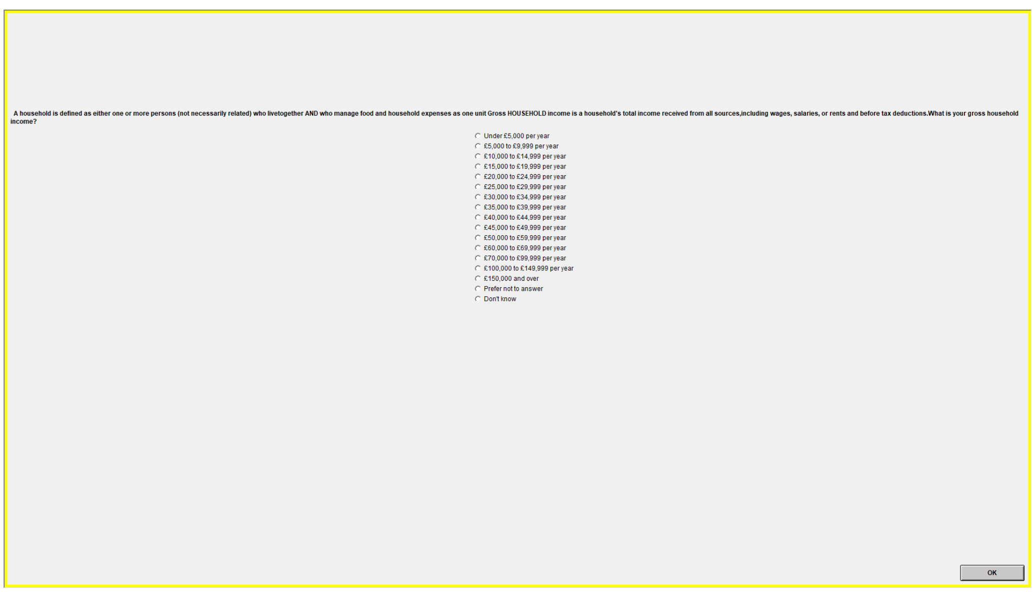


Figure A14: Post-experiment questionnaire, income question

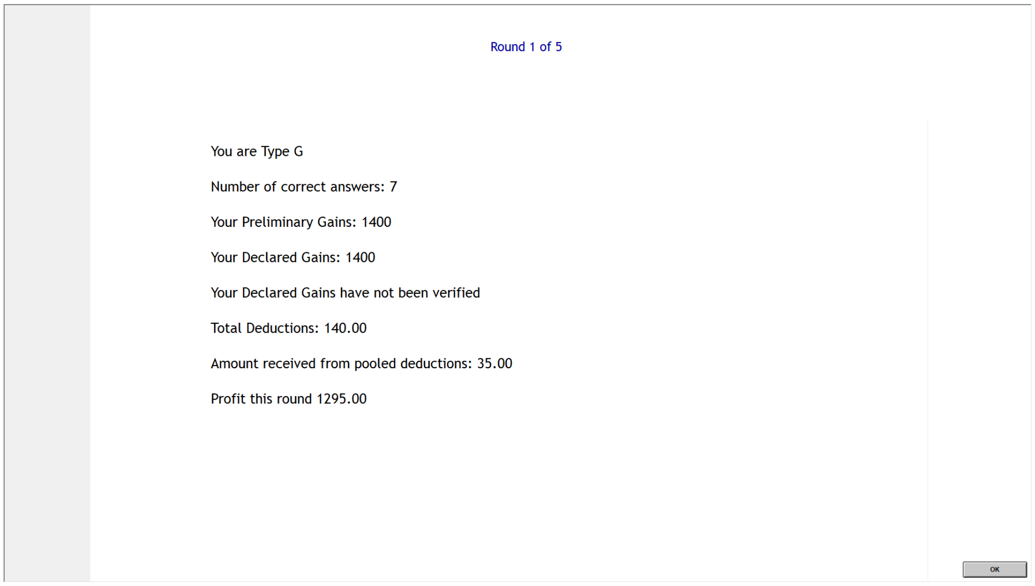


Figure A15: Results following declaration of gains, status treatment, U.K.

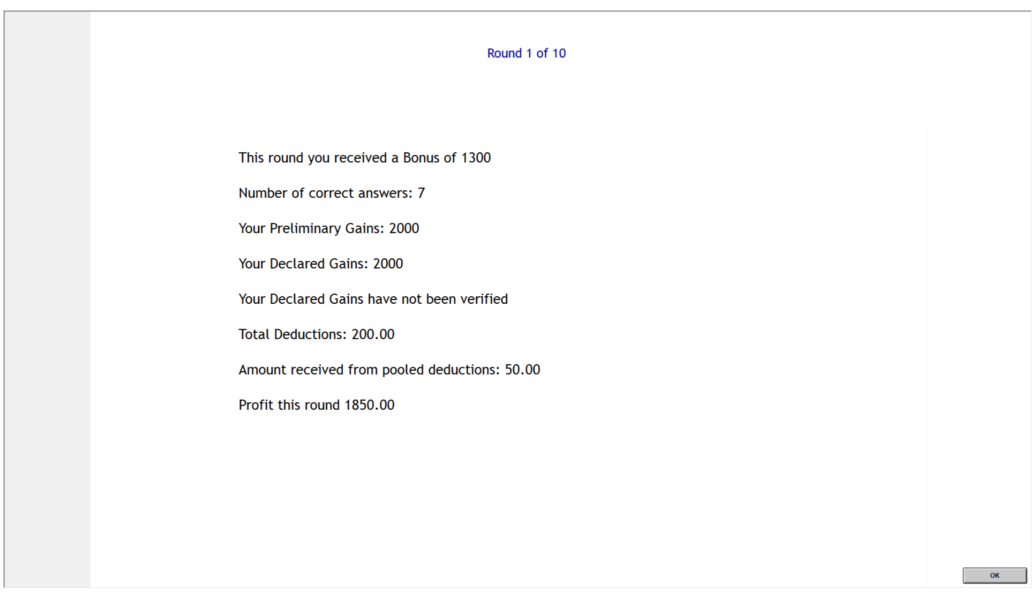


Figure A16: Results following declaration of gains, shock treatment, U.K.

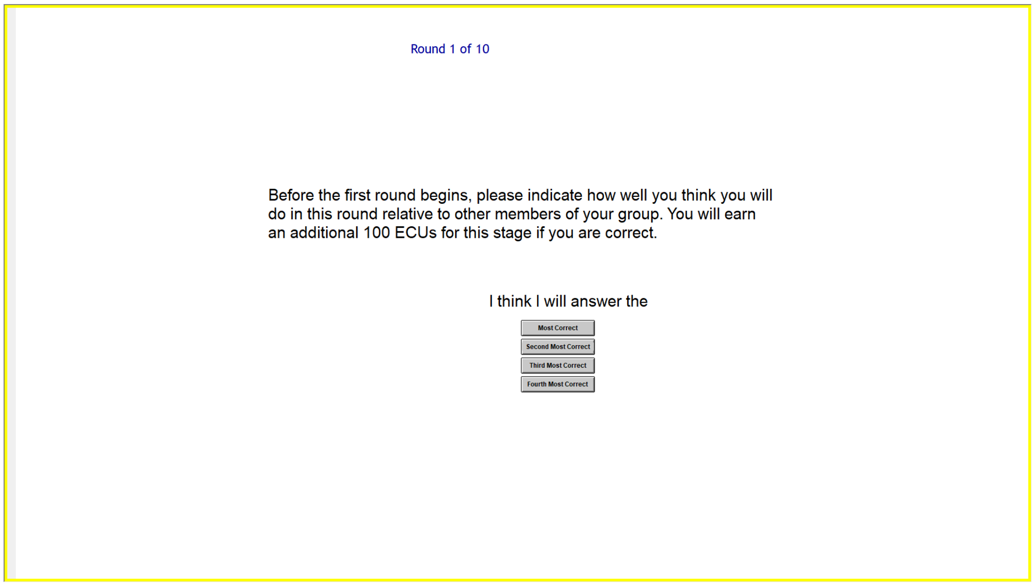


Figure A17: Performance prediction before the real effort task, non-fixed treatment, U.K.

Appendix B Supplemental analysis.

B1 Performance at the real-effort task.

Here, we look at the determinants of performance at the real effort task. In both Russia and the U.K., the experiment was carried out at elite universities (Higher School of Economics and Oxford, respectively), while in Chile 15/19 sessions were held at the more inclusive Universidad de Santiago and the remaining 4 sessions were held at the elite Universidad del Desarrollo. This is reflected in performance: subjects, on average, complete 8.29 (sd=2.43) additions in Chile, 11.25 (sd=2.59) in Russia, and 11.85 (sd=3.89) in the U.K. All differences between countries are significant ($p = 0.0069$ for two-tailed Welch t-test comparing average performance in Russia and the U.K., and $p < 0.0001$ for all other pairwise comparisons; the distributions of subject performance are plotted on Figure B1).

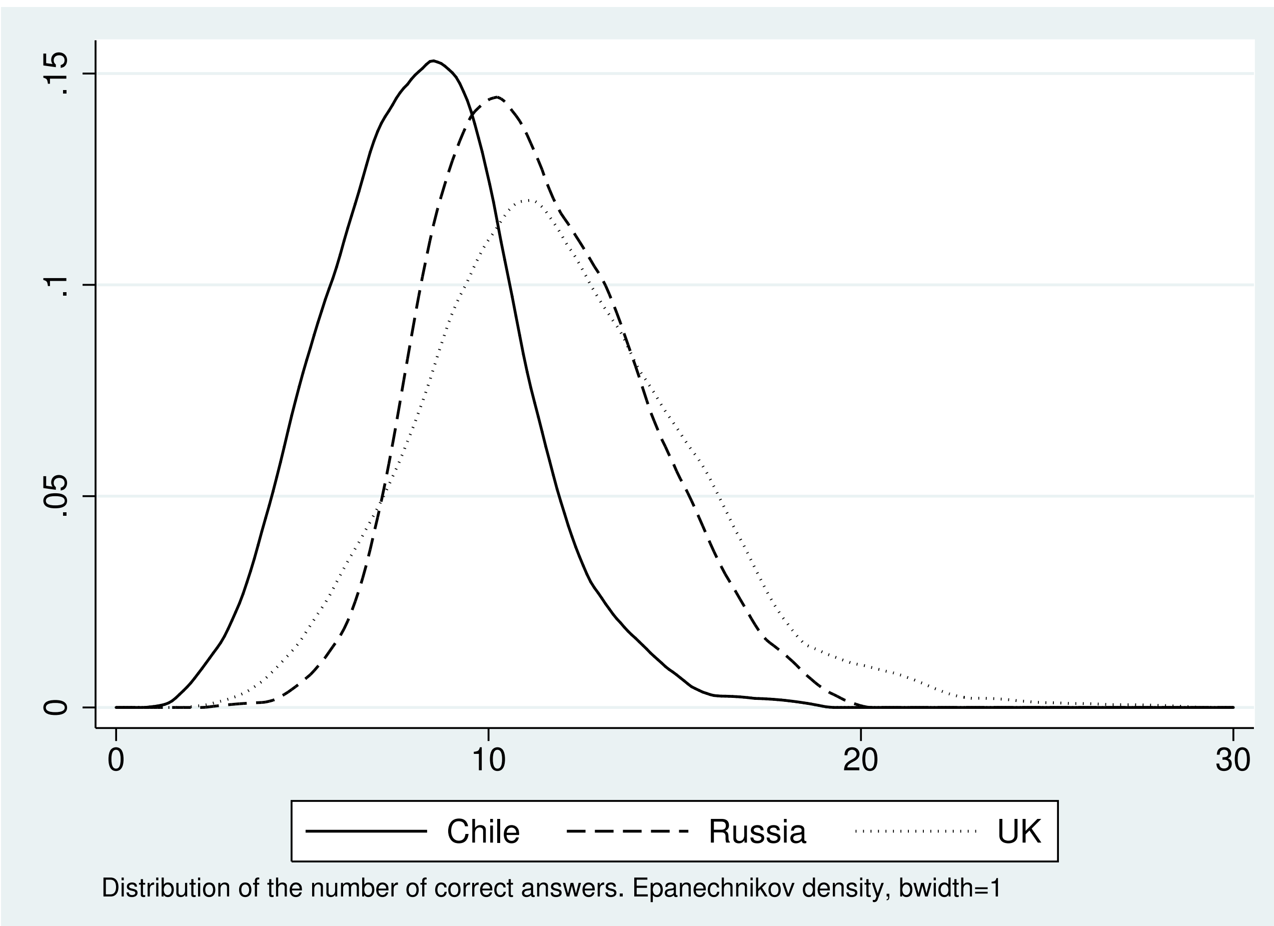


Figure B1: Distribution of average performance by country

In Table B1 we provide the results of OLS regressions of subject's average performance. The regression include control variables for Civicness (see Algan et al. (2016)), calculated as the normalized first principle component based on ten survey questions regarding the justifiability of certain types of unethical behaviors, such as not paying for public transport (Table C13 has specific question wording). Trust is measured using a standard social capital question on how much a person can trust others. Following Holt and Laury (2002), the Safe choices variable is an additive index of ten lottery choices (selecting between two payment options) with increasing probabilities of earning the largest payment options. Ideology is measured using an 11-point Left-Right self-placement scale. Income is a self reported survey question on family income, where higher categories reflect higher income levels, and categories are country specific (see Figures A11-A14 in Appendix A).

In Russia and the U.K., the Dictator Game donations are negatively associated with the subsequent RET performance, while male subjects rank significantly higher in every country, other individual-level covariates are generally not significant.

	Chile		Russia		UK		All	
Male	1.647***	(0.322)	1.457***	(0.309)	1.197***	(0.365)	1.361***	(0.203)
Age	-0.0545*	(0.0290)	-0.0246	(0.0404)	-0.0978***	(0.0199)	-0.0960***	(0.0150)
DG=0	0.258	(0.900)	0.217	(0.462)	0.0349	(0.674)	0.403	(0.367)
DG above 0	0.000458	(0.00100)	-0.00214**	(0.000952)	-0.00316**	(0.00135)	-0.00189***	(0.000644)
Deduction 20%	0.270	(0.359)	0.435	(0.323)	-0.460	(0.463)	0.146	(0.231)
Deduction 30%	-0.0456	(0.387)	0.0141	(0.466)	-0.130	(0.461)	0.0121	(0.254)
Deduction 40%					0.0666	(1.182)	0.447	(1.043)
Deduction 50%					1.182	(0.867)	1.055	(0.678)
Deadweight loss					2.652***	(0.804)	2.253***	(0.628)
Redistribution					1.176	(0.758)	0.838*	(0.507)
Russia							2.430***	(0.278)
UK							3.106***	(0.311)
Shock	0.534	(0.551)	0.385	(0.467)	1.846***	(0.711)	0.839***	(0.310)
Status	1.084*	(0.569)	0.644	(0.587)	1.434*	(0.748)	0.841**	(0.358)
Status, 200 ECU	-0.797	(0.618)	0.0535	(0.775)	0.740	(0.836)	0.121	(0.465)
Non-fixed	1.710***	(0.495)	1.152***	(0.431)	0.173	(0.638)	0.699**	(0.275)
Civicness	0.131	(0.166)	-0.229	(0.147)	-0.348*	(0.189)	-0.209**	(0.0984)
Trust	0.658**	(0.326)	-0.477	(0.319)	-0.635*	(0.370)	-0.273	(0.207)
SafeChoices	-0.0622	(0.0868)	0.0677	(0.0820)	-0.0308	(0.0907)	0.0142	(0.0527)
Ideology	0.0857	(0.0750)	-0.0977	(0.0771)	0.153*	(0.0820)	0.0798*	(0.0465)
Income	-0.248	(0.561)	-0.523	(0.805)	-0.127	(0.530)	-0.122	(0.355)
Constant	7.459***	(1.261)	11.59***	(1.211)	13.46***	(1.231)	9.657***	(0.751)
Observations	234		256		332		822	
R^2	0.220		0.178		0.212		0.326	

OLS regressions. Dependent variable is average performance over 10 rounds. DG frac is the fraction of the 1000 ECU donated in the dictator game. Norms is the social norms index (see Table C13). SafeChoices if the number (0-10) of safe choices on the lottery task. Income is the number of the individual's income bracket, rescaled between 0 and 1 (for Chile and the UK), and the individual's perceived income decile, rescaled between 0 and 1 (for Russia).

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table B1: Determinants of subject's average performance.

Experimental treatments generally did not have any effect on average performance of the subjects. Importantly, in the Status treatment, subjects earning 200 ECU per correct answer performed no better than subjects who earned only 100 ECU; this would not have been the case if the subjects were facing an increased marginal cost of effort. Similarly, the deduction rate did not have any effect on performance at the real-effort task — despite the fact that it did not affect the amount of lying.

In Table B2 we regress the number of correct answers in a given period on a set of treatment, individual, and period-level covariates. Performance increases with time, improving every period by an average of 0.14 correct answers over periods 2-10 indicating some potential learning effects. Performance is largely unaffected by either previous period's windfall income in the shock treatment (although the coefficient is negative and significant in the combined dataset), or by the income declared by the group members in the previous period.

	Chile		Russia		UK		All	
Male	1.601***	(0.316)	1.489***	(0.304)	1.222***	(0.361)	1.349***	(0.202)
Age	-0.0523*	(0.0289)	-0.0235	(0.0414)	-0.0972***	(0.0198)	-0.0952***	(0.0150)
Period	0.155***	(0.0155)	0.164***	(0.0165)	0.107***	(0.0151)	0.138***	(0.00868)
DG=0	0.281	(0.861)	0.228	(0.449)	0.0729	(0.664)	0.447	(0.366)
DG above 0	0.000439	(0.000982)	-0.00221**	(0.000933)	-0.00309**	(0.00134)	-0.00184***	(0.000643)
Deadweight loss					2.389***	(0.796)	2.173***	(0.627)
Redistribution					1.120	(0.741)	0.782	(0.504)
Russia							2.453***	(0.288)
UK							3.089***	(0.326)
Shock	0.494	(0.572)	0.606	(0.494)	1.947***	(0.744)	0.963***	(0.330)
L.Shock=Yes	-0.172	(0.292)	-0.452*	(0.264)	-0.400	(0.317)	-0.342*	(0.177)
Status	1.045*	(0.572)	0.752	(0.557)	1.409*	(0.736)	0.845**	(0.357)
Status, 200 ECU	-0.763	(0.622)	-0.0396	(0.748)	0.767	(0.817)	0.103	(0.466)
Non-fixed	1.640***	(0.489)	1.231***	(0.424)	0.0286	(0.630)	0.666**	(0.274)
L.Dec. others, 1000	0.0850	(0.0861)	-0.213*	(0.112)	0.172	(0.111)	0.0201	(0.0672)
Civicness	0.125	(0.166)	-0.240*	(0.142)	-0.348*	(0.188)	-0.217**	(0.0989)
Trust	0.642**	(0.321)	-0.516	(0.322)	-0.674*	(0.364)	-0.273	(0.207)
SafeChoices	-0.0710	(0.0856)	0.0526	(0.0791)	-0.0417	(0.0892)	0.00575	(0.0521)
Ideology	0.0898	(0.0729)	-0.0855	(0.0737)	0.169**	(0.0805)	0.0875*	(0.0464)
Income	-0.249	(0.546)	-0.607	(0.783)	-0.243	(0.521)	-0.169	(0.354)
Constant	6.508***	(1.254)	11.08***	(1.209)	12.76***	(1.231)	8.921***	(0.780)
Observations	2106		2304		2988		7398	
R^2	0.173		0.158		0.181		0.271	

OLS regressions. Dependent variable is parformance in a round. Standard errors are clustered by subject. DG frac is the fraction of the 1000 ECU donated in the dictator game. Norms is the social norms index (see Table C13). SafeChoices if the number (0-10) of safe choices on the lottery task. Income is the number of the individual's income bracket, rescaled between 0 and 1 (for Chile and the UK), and the individual's perceived income decile, rescaled between 0 and 1 (for Russia).
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table B2: Determinants of subject's performance, periods 2-10.

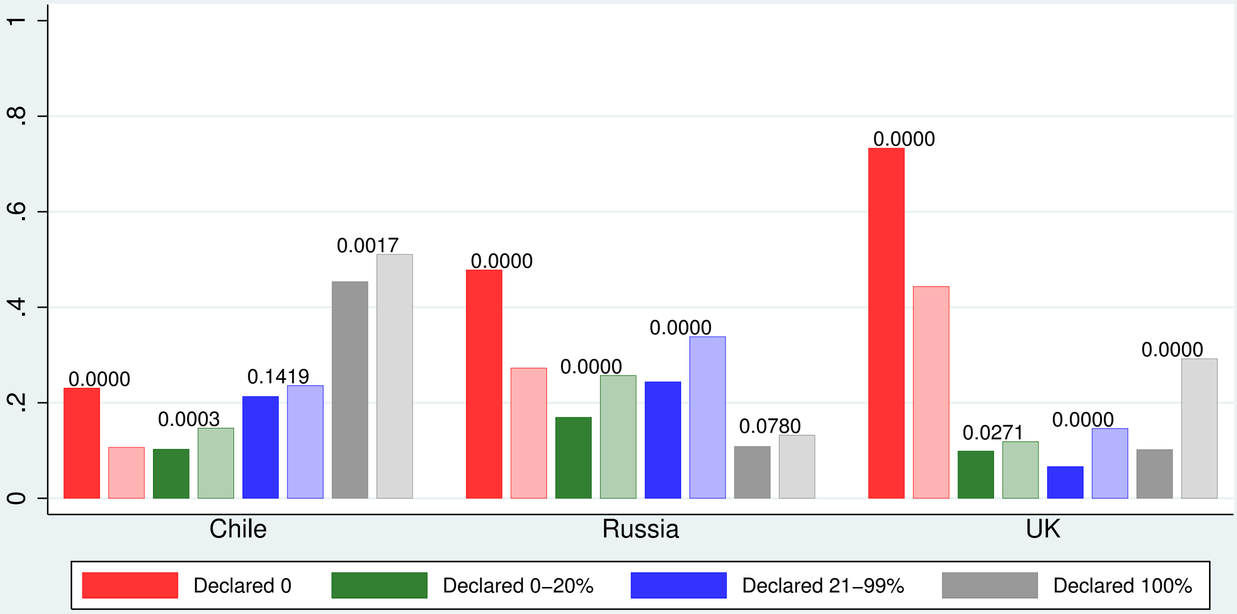
Importantly, performance is not negatively associated with civicness. In fact, in Russia and the UK this association is positive. This makes it less likely that the observed association between maximal lying and performance is due to the fact that some subjects participate in the experiment only to earn money, and are more willing to both cheat and exert effort at the real-effort task. In Russia, in the post-experiment survey we also asked a number of questions about trusting behavior — whether the person lends money or belongings or keeps the door open; in **?** this was a significant predictor of trustworthy behavior in experiments, but in our study these questions ware not associated with either higher or lower performance at the real effort task (Table C16). Maximal lying was also positively associated with performance in a non-incentivized practice period (Table C12).

B2 Near-maximal lying

In our experiments, subjects sometimes declared positive, but very small amounts of income. We believe that most of such "near-maximal" lying is not a chance variation from maximal lying, but driven by the same concerns as partial lying in general — such as finding justification for self-serving behavior (Gino and Ariely, 2016). This conjecture can be analyzed by comparing the prevalence of partial, maximal, and near-maximal lying among different population groups. Of interest here is whether near-maximal liars tend to share population characteristics with maximal liars or, alternatively, resemble partial liars. Our take on the latter outcome is that near-maximal lying is a form of partial lying – and that stopping short of maximal lying provides subjects with a self-serving justification for their behavior.

Previously, we found that subject ability is positively correlated with maximal lying. In Figure B2 we report the fraction of declarations that were classified as maximal lying, limited lying, and near-maximal, defined as being above 0% and at or below 20% of the earnings. In all three countries, near-maximal lying was more prevalent among subjects with below-median performance ($p = 0.0003$, $p < 0.0001$, and $p = 0.0271$ on the Fisher's exact test in Chile, Russia, and the U.K.).

This result persists if we consider increasingly strict definitions of near-maximal lying. In Table C20 in Appendix Appendix A, we compare the prevalence of small but positive declarations (such as 1-90 ECU, 1-80 ECU, all the way down to 1 ECU) among high and low performance subjects. We find that in all three countries high performers are less likely to engage in near-maximal lying, even if we only consider the declarations as small as between 1 and 30 ECU. In Russia, 1 ECU was declared on 26 occasions, 19 of them by low performers — a difference significant at $p = 0.0282$. Looking at other correlates yields similar results:



Distribution of declarations by subject performance. Dark shades correspond to subjects with average RET performance above national median, light shapes – to subjects below median. Above each bar we report p–values for two–sided Fischer's exact test comparing the prevalence of each declaration for two types of subjects.

Figure B2: Prevalence of lying depending on subject performance

Near-maximal lying is more prevalent among females (Table C21) and those who made positive donations in the Dictator game (Table C22).

Appendix C Supplemental tables and figures.

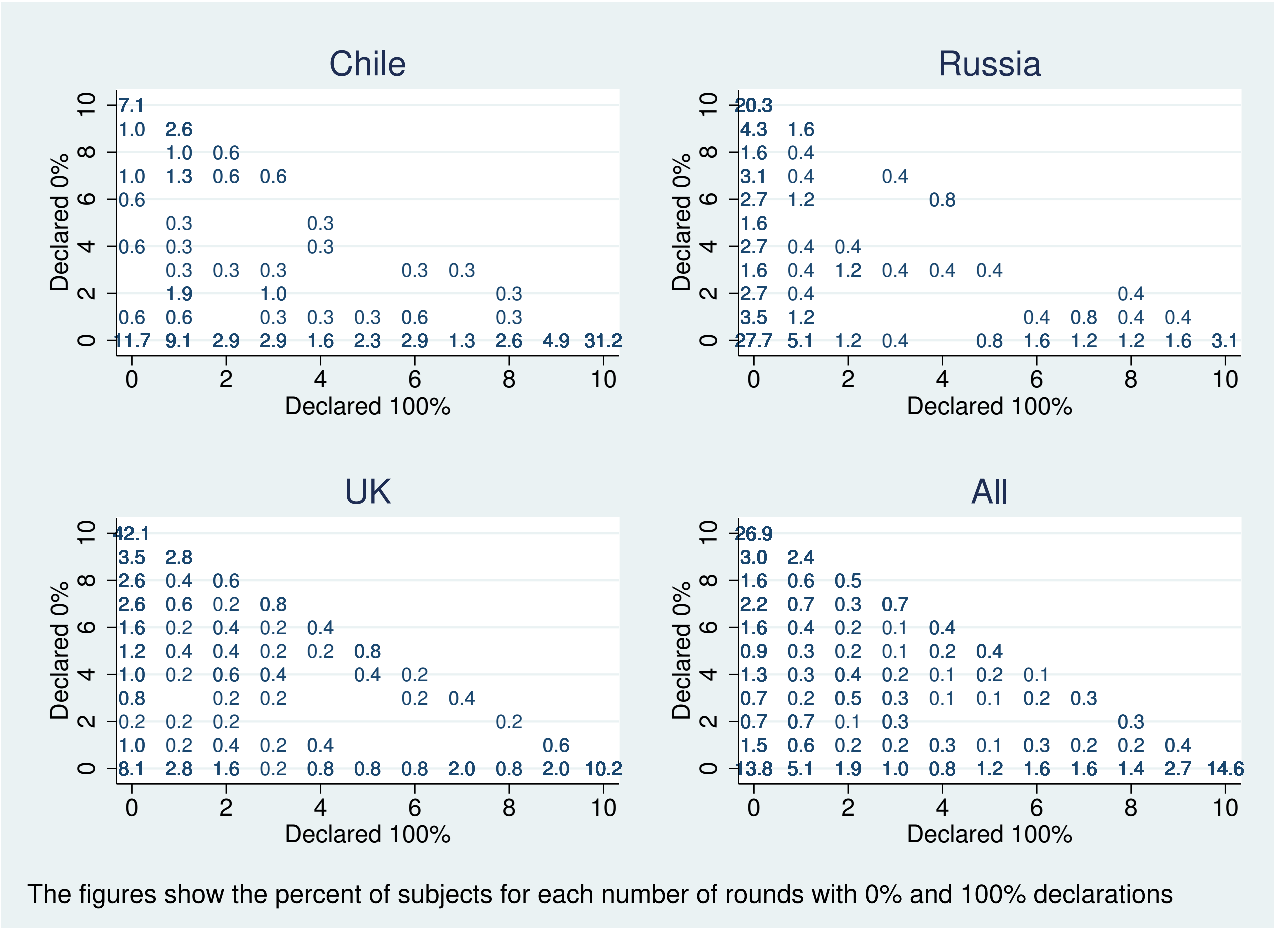


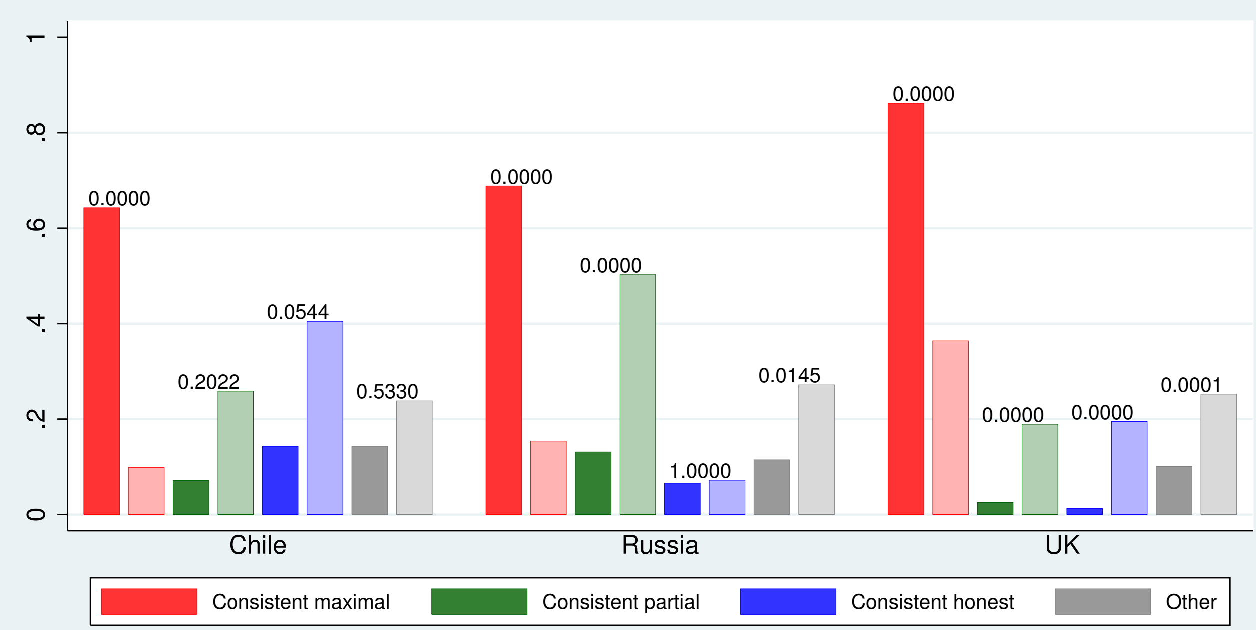
Figure C1: Frequency of cheating decisions by country. Axis show number of periods.

	Mlogit, average marginal effects								OLS	
	Consistent maximal		Consistent partial		Consistently honest		Other		Partial lying	
RET rank	0.269***	(0.0395)	-0.130***	(0.0436)	-0.118***	(0.0409)	-0.0206	(0.0456)	0.0717	(0.0620)
Male	0.0584**	(0.0238)	-0.107***	(0.0246)	0.0174	(0.0233)	0.0312	(0.0258)	0.0543	(0.0370)
Age	-0.00584**	(0.00232)	0.00158	(0.00209)	0.00252	(0.00200)	0.00175	(0.00218)	0.00298	(0.00334)
DG=0	0.374***	(0.0604)	-0.205***	(0.0305)	-0.0583	(0.0497)	-0.111***	(0.0415)	-0.0733	(0.0858)
DG frac	-0.134	(0.0898)	-0.134*	(0.0727)	0.297***	(0.0765)	-0.0293	(0.0816)	0.277**	(0.117)
Deduction 20%	-0.0462	(0.0281)	0.00487	(0.0286)	0.0304	(0.0270)	0.0109	(0.0312)	-0.00538	(0.0383)
Deduction 30%	0.0232	(0.0310)	-0.0462	(0.0301)	-0.00235	(0.0288)	0.0253	(0.0333)	-0.00507	(0.0438)
Deduction 40%	-0.0404	(0.0603)	0.0279	(0.0765)	-0.0650	(0.0617)	0.0776	(0.0823)	0.173	(0.105)
Deduction 50%	0.0963	(0.0919)	-0.0524	(0.105)	-0.118*	(0.0717)	0.0743	(0.115)	-0.288	(0.187)
Deadweight loss	-0.0468	(0.0552)	-0.0180	(0.0701)	0.0717	(0.0665)	-0.00695	(0.0718)	-0.0173	(0.116)
Redistribution	0.0339	(0.0476)	-0.0292	(0.0491)	-0.0442	(0.0491)	0.0394	(0.0576)	0.00445	(0.0782)
Shock	-0.00271	(0.0413)	-0.00493	(0.0400)	-0.0113	(0.0410)	0.0189	(0.0437)	-0.0411	(0.0546)
Status	0.0896*	(0.0485)	0.0321	(0.0512)	-0.0739*	(0.0444)	-0.0478	(0.0488)	-0.0471	(0.0628)
Status, 200 ECU	-0.101**	(0.0460)	-0.0683	(0.0500)	0.133*	(0.0805)	0.0358	(0.0739)	0.0483	(0.0793)
Non-fixed	0.0381	(0.0353)	-0.0370	(0.0341)	0.0177	(0.0334)	-0.0188	(0.0358)	0.0343	(0.0481)
Russia	0.0733*	(0.0399)	0.126***	(0.0377)	-0.192***	(0.0229)	-0.00712	(0.0371)	-0.0174	(0.0438)
UK	0.289***	(0.0354)	-0.114***	(0.0328)	-0.139***	(0.0277)	-0.0354	(0.0340)	-0.0756	(0.0478)
Constant									0.169	(0.112)
Observations	1072		1072		1072		1072		253	
Log pseudolikelihood	-1163.3435		-1163.3435		-1163.3435		-1163.3435			
R^2									0.1130	
D20=D30	0.0242		0.104		0.278		0.671		0.995	
D20=D40	0.924		0.763		0.126		0.412		0.0890	
D20=D50	0.120		0.590		0.0442		0.580		0.132	
D30=D40	0.306		0.344		0.326		0.524		0.101	
D30=D50	0.430		0.954		0.124		0.671		0.136	
D40=D50	0.179		0.513		0.553		0.980		0.0257	
Russia=UK	3.74e-10		1.37e-12		0.0543		0.416		0.216	

The first four columns report are average marginal effects for multinomial logistic regression (the dependent variable is whether the subject is a consistent maximal liar, consistent partial liar, is consistently honest, or none of those). The fifth column reports OLS regression, the dependent variable is the fraction of income declared, averaged across all rounds where the subject lied partially, for all subjects who lied partially in at least 8 rounds. Robust standard errors. RET rank is the national rank, between 0 and 1, of subject's national performance at the real effort task. RET Deviation is the difference between actual number of correct additions and one predicted from subject and period FE. DG frac is the fraction of the 1000 ECU donated in the dictator game.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table C1: Determinants of lying



Distribution of behavior types by dictator game donations. Dark shades correspond to subjects with DG=0, light shapes – to subjects with DG>0. Above each bar we report p−values for two−sided Fischer's exact test comparing the prevalence of each behavior for subjects who made zero DG donations with the prevalence for subjects who made nonzero donations.

Figure C2: Distributions of behavior by Dictator Game donations.

	Mlogit, average marginal effects								OLS	
	Consistent maximal		Consistent partial		Consistently honest		Other		Partial lying	
RET rank	0.194^{***}	(0.0382)	-0.0349	(0.0350)	-0.0903^{**}	(0.0375)	-0.0687	(0.0527)	0.156^{*}	(0.0812)
Male	0.0719^{***}	(0.0230)	-0.0832^{***}	(0.0204)	-0.0178	(0.0212)	0.0291	(0.0305)	0.0186	(0.0469)
Age	-0.00366	(0.00231)	-0.00119	(0.00250)	0.00140	(0.00177)	0.00346	(0.00307)	0.00131	(0.00405)
DG=0	0.364^{***}	(0.0625)	-0.122^{***}	(0.0239)	-0.0787^{**}	(0.0386)	-0.163^{***}	(0.0590)	-0.0337	(0.0988)
DG frac	-0.0495	(0.0897)	-0.104^{*}	(0.0591)	0.215^{***}	(0.0688)	-0.0621	(0.101)	0.214	(0.148)
Deduction 20%	-0.0298	(0.0272)	0.0219	(0.0236)	0.0237	(0.0245)	-0.0159	(0.0360)	0.0326	(0.0455)
Deduction 30%	-0.00434	(0.0287)	-0.0362	(0.0248)	0.00272	(0.0258)	0.0378	(0.0382)	-0.00419	(0.0576)
Deduction 40%	-0.0170	(0.0569)	-0.0762	(0.0464)	-0.0765	(0.0492)	0.170^{**}	(0.0803)	0.125	(0.182)
Deduction 50%	0.0138	(0.0618)	0.00129	(0.0871)	-0.0615	(0.0766)	0.0465	(0.118)	-0.192	(0.174)
Deadweight loss	-0.0381	(0.0513)	-0.0195	(0.0539)	0.0715	(0.0676)	-0.0140	(0.0857)	-0.155	(0.129)
Redistribution	0.00132	(0.0404)	-0.0108	(0.0385)	-0.00986	(0.0535)	0.0194	(0.0637)	0.00222	(0.0879)
Shock	-0.000408	(0.0388)	-0.0231	(0.0293)	0.0228	(0.0410)	0.000719	(0.0514)	-0.0465	(0.0646)
Status	0.0678	(0.0474)	0.00101	(0.0381)	-0.0213	(0.0461)	-0.0474	(0.0622)	0.00257	(0.0716)
Status, 200 ECU	-0.0334	(0.0493)	-0.0110	(0.0427)	0.0860	(0.0692)	-0.0416	(0.0796)	0.0151	(0.0880)
Non-fixed	-0.00118	(0.0334)	-0.0672^{**}	(0.0268)	0.0333	(0.0324)	0.0350	(0.0435)	0.0597	(0.0572)
Russia	0.0706^{*}	(0.0417)	0.0911^{**}	(0.0358)	-0.165^{***}	(0.0188)	0.00344	(0.0459)	0.0276	(0.0511)
UK	0.259^{***}	(0.0357)	-0.0533^{*}	(0.0288)	-0.103^{***}	(0.0237)	-0.103^{**}	(0.0410)	-0.0976	(0.0600)
Constant									0.132	(0.127)
Observations	1072		1072		1072		1072		148	
Log pseudolikelihood	-1083.0225		-1083.0225		-1083.0225		-1083.0225			
R^2									0.1645	
D20=D30	0.383		0.0245		0.440		0.174		0.518	
D20=D40	0.825		0.0439		0.0481		0.0223		0.616	
D20=D50	0.487		0.813		0.269		0.598		0.200	
D30=D40	0.827		0.422		0.123		0.112		0.499	
D30=D50	0.773		0.671		0.413		0.942		0.295	
D40=D50	0.684		0.411		0.865		0.360		0.195	
Russia=UK	8.36e-09		0.00000192		0.00903		0.00978		0.0199	

The first four columns report average marginal effects for multinomial logistic regression (the dependent variable is whether the subject was a maximal liar, partial liar, or honest, in all 10 rounds). Robust standard errors. The fifth column reports OLS regression, the dependent variable is the fraction of income declared, averaged across all rounds, for subjects who lied partially in every round. RET rank is the national rank, between 0 and 1, of subject's national performance at the real effort task. RET Deviation is the difference between actual number of correct additions and one predicted from subject and period FE. DG frac is the fraction of the 1000 ECU donated in the dictator game.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table C2: Determinants of lying, alternative categorization of subject behavior

	Predicted rank in Period 1			
	1	2	3	4
Consistent maximal	43	35	17	5
	47.8%	25.4%	17.2%	17.2%
Consistent partial	12	31	26	7
	13.3%	22.5%	26.3%	24.1%
Consistent honest	21	42	32	9
	23.3%	30.4%	32.3%	31.0%
Other	14	30	24	8
	15.6%	21.7%	23.2%	27.6%
Total	90	138	99	29
Mean rank within one's group, period 1 (sd)	2.03 (1.06)	2.49 (1.01)	2.74 (1.07)	3.21 (1.01)
p-value for two-tailed Welch t-test	0.0016	0.0681	0.0350	

Table C3: Predicted rank and actual rank in the first period and prevalence of cheating behaviors. Comparisons are of average group rank of subjects with a given predicted rank, and the average group rank of subjects with the next predicted rank. All other pairwise comparisons are significant at $p < 0.001$.

	1	2	3	4	5	6
Type: Consistent maximal liar	-0.0733*	-0.0623	-0.0235	0.0157	-0.133**	0.205***
	(0.0394)	(0.0409)	(0.0370)	(0.0496)	(0.0653)	(0.0636)
Type: Consistent partial liar	0.0535	-0.00417	-0.0798	-0.00329	0.00863	0.0301
	(0.0367)	(0.0411)	(0.0547)	(0.0617)	(0.0821)	(0.0899)
Av. fraction, partial liars	-0.0932	0.0376	0.111	0.103	0.00353	-0.208
	(0.0737)	(0.0655)	(0.0865)	(0.0965)	(0.144)	(0.166)
Type: Other	-0.0105	-0.0188	-0.0773*	0.0752*	0.0855	-0.0783
	(0.0309)	(0.0327)	(0.0455)	(0.0447)	(0.0592)	(0.0694)
Russia	-0.0204	-0.0647**	-0.00562	-0.0186	0.00988	0.0974*
	(0.0291)	(0.0311)	(0.0334)	(0.0356)	(0.0515)	(0.0571)
UK	0.0321	-0.0459	-0.0201	-0.0792*	-0.0408	0.154***
	(0.0281)	(0.0315)	(0.0350)	(0.0428)	(0.0569)	(0.0585)
Observations	444	444	444	444	444	444
LL	-86.6587	-93.8448	-120.3585	-147.9447	-247.7718	-280.3446

Logistic regression, marginal coefficients. Individual controls not shown. Average fraction declared is shown for partial liars

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table C4: Logit regression of die roll values

	Chile						Chile	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.214***	(0.0664)	-0.127	(0.0792)	-0.0866	(0.0876)	0.0176	(0.136)
RET deviation	-0.00261	(0.00235)	0.00421	(0.00359)	-0.00160	(0.00354)	0.0132**	(0.00637)
Male	0.0563	(0.0380)	-0.0163	(0.0477)	-0.0400	(0.0512)	0.112*	(0.0615)
Age	0.00188	(0.00254)	-0.00680*	(0.00388)	0.00492	(0.00460)	0.00204	(0.00549)
Period	0.00929***	(0.00185)	0.000908	(0.00258)	-0.0102***	(0.00262)	-0.00311	(0.00394)
DG=0	0.406***	(0.146)	-0.215**	(0.0876)	-0.191	(0.141)	-0.00608	(0.105)
DG frac	-0.0695	(0.126)	-0.276**	(0.132)	0.346**	(0.160)	0.268	(0.228)
Deduction 20%	-0.0839**	(0.0378)	-0.0770	(0.0512)	0.161***	(0.0561)	-0.0173	(0.0706)
Deduction 30%	0.0230	(0.0397)	-0.0903*	(0.0477)	0.0673	(0.0550)	0.0680	(0.0747)
Shock	0.105	(0.127)	0.0413	(0.103)	-0.146	(0.0931)	0.172*	(0.0932)
Shock, yes	0.0111	(0.0277)	0.00132	(0.0441)	-0.0124	(0.0427)	-0.0118	(0.0603)
Status	0.161	(0.153)	0.0183	(0.114)	-0.179*	(0.108)	0.0263	(0.118)
Status, 200 ECU	-0.0607	(0.0664)	-0.0816	(0.0910)	0.142	(0.110)	0.137	(0.123)
Non-fixed	0.155*	(0.0826)	-0.129	(0.0798)	-0.0258	(0.0771)	0.139	(0.0952)
Constant							0.0821	(0.210)
Observations	3078		3078		3078		718	
Log pseudolikelihood	-2831.1669		-2831.1669		-2831.1669			
R^2							0.0893	
D20=D30	0.0140		0.810		0.129		0.180	
	Russia						Russia	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.178**	(0.0780)	-0.0899	(0.0812)	-0.0877	(0.0642)	0.212**	(0.0894)
RET deviation	0.000840	(0.00364)	0.00711*	(0.00384)	-0.00795***	(0.00296)	0.00184	(0.00381)
Male	0.0413	(0.0456)	-0.149***	(0.0466)	0.107***	(0.0343)	0.0190	(0.0516)
Age	-0.0189	(0.0129)	0.0166	(0.0106)	0.00231	(0.00497)	0.00199	(0.00400)
Period	0.0189***	(0.00287)	-0.0225***	(0.00295)	0.00362*	(0.00205)	-0.0233***	(0.00304)
DG=0	0.302***	(0.104)	-0.356***	(0.0754)	0.0540	(0.0754)	-0.0634	(0.0805)
DG frac	-0.281	(0.188)	0.0648	(0.155)	0.216**	(0.100)	0.231	(0.148)
Deduction 20%	-0.0837	(0.0513)	0.116**	(0.0530)	-0.0327	(0.0349)	-0.00475	(0.0534)
Deduction 30%	-0.00652	(0.0638)	0.0408	(0.0635)	-0.0343	(0.0381)	-0.0686	(0.0646)
Redistribution	0.0388	(0.0802)	-0.0103	(0.0877)	-0.0286	(0.0758)	0.0563	(0.122)
Shock	0.0101	(0.0735)	-0.0625	(0.0652)	0.0524	(0.0636)	-0.0931*	(0.0559)
Shock, yes	-0.0150	(0.0430)	0.0318	(0.0414)	-0.0168	(0.0325)	0.0108	(0.0437)
Status	-0.0248	(0.0895)	-0.0309	(0.0955)	0.0557	(0.0703)	-0.0400	(0.0594)
Status, 200 ECU	0.0208	(0.104)	-0.0540	(0.111)	0.0332	(0.0906)	0.00632	(0.0853)
Non-fixed	0.0342	(0.0729)	-0.127*	(0.0668)	0.0931	(0.0577)	0.00744	(0.0839)
Constant							0.291**	(0.112)
Observations	2560		2560		2560		1012	
Log pseudolikelihood	-2100.0405		-2100.0405		-2100.0405			
R^2							0.1421	
D20=D30	0.225		0.237		0.971		0.315	
	UK						UK	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.368***	(0.0493)	-0.0665	(0.0475)	-0.301***	(0.0522)	0.0118	(0.124)
RET deviation	-0.00114	(0.00212)	0.00223	(0.00239)	-0.00109	(0.00189)	-0.00425	(0.00523)
Male	0.0857***	(0.0319)	-0.120***	(0.0276)	0.0343	(0.0286)	-0.0165	(0.0707)
Age	-0.00729***	(0.00236)	0.00474**	(0.00208)	0.00255	(0.00205)	0.00154	(0.00415)
Period	0.0210***	(0.00206)	-0.0106***	(0.00195)	-0.0104***	(0.00162)	-0.0157***	(0.00323)
DG=0	0.348***	(0.0511)	-0.233***	(0.0332)	-0.115***	(0.0426)	0.0303	(0.111)
DG frac	-0.134	(0.102)	-0.207**	(0.0883)	0.340***	(0.0982)	0.481*	(0.250)
Deduction 20%	0.0150	(0.0393)	0.0306	(0.0358)	-0.0456	(0.0303)	0.0535	(0.0768)
Deduction 30%	0.0699*	(0.0406)	-0.0469	(0.0343)	-0.0230	(0.0357)	0.0871	(0.105)
Deduction 40%	-0.000970	(0.0645)	0.0634	(0.0594)	-0.0625	(0.0457)	0.202*	(0.108)
Deduction 50%	0.100	(0.0771)	0.0118	(0.0741)	-0.112**	(0.0472)	-0.307***	(0.104)
Deadweight loss	-0.0937	(0.0631)	0.00492	(0.0560)	0.0887	(0.0569)	-0.0983	(0.133)
Redistribution	0.0491	(0.0520)	-0.0148	(0.0440)	-0.0342	(0.0440)	-0.130	(0.108)
Shock	0.00231	(0.0604)	-0.0262	(0.0550)	0.0239	(0.0567)	-0.200**	(0.0904)
Shock, yes	-0.0351	(0.0390)	0.0823*	(0.0452)	-0.0472	(0.0287)	-0.0442**	(0.0220)
Status	0.140**	(0.0658)	-0.0589	(0.0635)	-0.0807	(0.0549)	-0.0969	(0.149)
Status, 200 ECU	-0.151*	(0.0820)	0.000806	(0.0958)	0.150	(0.115)	-0.0369	(0.138)
Non-fixed	-0.0326	(0.0474)	0.0529	(0.0437)	-0.0203	(0.0378)	-0.0452	(0.106)
Constant							0.224	(0.152)
Observations	5080		5080		5080		661	
Log pseudolikelihood	-3793.7996		-3793.7996		-3793.7996			
R^2							0.1920	
D20=D30	0.206		0.0410		0.556		0.687	
D20=D40	0.809		0.571		0.719		0.132	
D20=D50	0.284		0.800		0.189		0.000685	
D30=D40	0.288		0.0672		0.427		0.368	
D30=D50	0.703		0.438		0.106		0.00408	
D40=D50	0.239		0.519		0.389		0.00000483	

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table C5: Determinants of lying in each period, by country

	All countries, females						**All countries, females**	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.285***	(0.0511)	-0.155**	(0.0610)	-0.129**	(0.0602)	0.116	(0.0813)
RET deviation	-0.00474**	(0.00222)	0.00763***	(0.00291)	-0.00288	(0.00244)	0.000461	(0.00346)
Age	-0.00830**	(0.00335)	0.00233	(0.00376)	0.00597**	(0.00292)	0.00683*	(0.00396)
Period	0.0161***	(0.00195)	-0.00962***	(0.00218)	-0.00649***	(0.00183)	-0.0170***	(0.00260)
DG=0	0.406***	(0.0758)	-0.364***	(0.0399)	-0.0420	(0.0718)	-0.0555	(0.0672)
DG frac	-0.198*	(0.105)	-0.164	(0.119)	0.363***	(0.122)	0.272**	(0.136)
Deduction 20%	-0.0532	(0.0334)	-0.0112	(0.0405)	0.0644*	(0.0376)	-0.0212	(0.0491)
Deduction 30%	0.0108	(0.0380)	-0.0470	(0.0418)	0.0362	(0.0396)	-0.0391	(0.0515)
Deduction 40%	-0.00443	(0.0845)	0.0248	(0.113)	-0.0204	(0.113)	0.222*	(0.127)
Deduction 50%	0.126	(0.121)	0.116	(0.124)	-0.241***	(0.0400)	-0.219***	(0.0760)
Deadweight loss	-0.108*	(0.0566)	0.145	(0.100)	-0.0376	(0.0904)	0.0149	(0.138)
Redistribution	0.0402	(0.0605)	0.0633	(0.0753)	-0.104	(0.0702)	0.0248	(0.0925)
Russia	0.0556	(0.0479)	0.243***	(0.0512)	-0.299***	(0.0322)	0.0142	(0.0557)
UK	0.203***	(0.0468)	-0.0600	(0.0484)	-0.142***	(0.0368)	-0.0778	(0.0598)
Shock	-0.0181	(0.0506)	0.110*	(0.0661)	-0.0915	(0.0568)	-0.0939*	(0.0556)
Shock, yes	-0.0273	(0.0249)	0.0188	(0.0378)	0.00850	(0.0344)	0.0342	(0.0382)
Status	-0.0143	(0.0589)	0.148**	(0.0751)	-0.133**	(0.0607)	-0.0217	(0.0654)
Status, 200 ECU	-0.0528	(0.0593)	-0.0901	(0.0782)	0.143*	(0.0865)	0.0269	(0.0702)
Non-fixed	-0.0627	(0.0464)	0.0778	(0.0563)	-0.0151	(0.0502)	0.0659	(0.0671)
Constant							0.154	(0.139)
Observations	4790		4790		4790		1453	
Log pseudolikelihood	-3882.7852		-3882.7852		-3882.7852			
R^2							0.1223	
D20=D30	0.0822		0.417		0.489		0.719	
D20=D40	0.559		0.747		0.443		0.0423	
D20=D50	0.134		0.312		3.27e-09		0.00528	
D30=D40	0.860		0.530		0.616		0.0381	
D30=D50	0.339		0.195		0.000000195		0.0157	
D40=D50	0.356		0.576		0.0612		0.000781	
Russia=UK	0.000350		7.08e-11		0.0000678		0.109	

	All countries, males						**All countries, males**	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.273***	(0.0553)	-0.0640	(0.0550)	-0.209***	(0.0551)	0.147	(0.126)
RET deviation	0.00201	(0.00223)	0.000198	(0.00244)	-0.00221	(0.00217)	0.0118**	(0.00512)
Age	-0.00394	(0.00244)	0.00230	(0.00227)	0.00164	(0.00226)	0.00102	(0.00485)
Period	0.0169***	(0.00188)	-0.0121***	(0.00193)	-0.00479***	(0.00165)	-0.0104***	(0.00349)
DG=0	0.239***	(0.0685)	-0.153***	(0.0462)	-0.0863	(0.0549)	-0.00555	(0.102)
DG frac	-0.250**	(0.120)	-0.00612	(0.0874)	0.256***	(0.0926)	0.375	(0.226)
Deduction 20%	-0.0688*	(0.0389)	0.0606	(0.0380)	0.00827	(0.0368)	-0.0158	(0.0724)
Deduction 30%	0.0253	(0.0410)	-0.0181	(0.0363)	-0.00726	(0.0371)	0.0179	(0.0815)
Deduction 40%	-0.209	(0.145)	0.190	(0.190)	0.0185	(0.168)	-0.0406	(0.254)
Deduction 50%	0.00178	(0.0892)	-0.0262	(0.107)	0.0245	(0.109)	-0.374**	(0.152)
Deadweight loss	-0.0580	(0.0808)	-0.145**	(0.0601)	0.203**	(0.0857)	-0.312*	(0.162)
Redistribution	0.0753	(0.0789)	-0.0879	(0.0643)	0.0126	(0.0828)	-0.122	(0.286)
Russia	0.133***	(0.0428)	0.00637	(0.0384)	-0.139***	(0.0352)	-0.0690	(0.0659)
UK	0.379***	(0.0413)	-0.206***	(0.0372)	-0.173***	(0.0380)	-0.0758	(0.124)
Shock	0.00513	(0.0553)	-0.0659	(0.0417)	0.0607	(0.0576)	0.0155	(0.0803)
Shock, yes	0.00470	(0.0320)	0.0382	(0.0312)	-0.0429	(0.0281)	-0.0704	(0.0487)
Status	0.122**	(0.0609)	-0.124**	(0.0501)	0.00167	(0.0585)	-0.150	(0.115)
Status, 200 ECU	-0.0905	(0.0743)	0.0362	(0.0774)	0.0543	(0.0855)	0.190	(0.146)
Non-fixed	0.0884*	(0.0454)	-0.145***	(0.0376)	0.0567	(0.0454)	-0.00571	(0.0939)
Constant							0.286	(0.204)
Observations	4968		4968		4968		791	
Log pseudolikelihood	-4062.9836		-4062.9836		-4062.9836			
R^2							0.1318	
D20=D30	0.0253		0.0351		0.696		0.660	
D20=D40	0.335		0.489		0.952		0.926	
D20=D50	0.446		0.429		0.885		0.00747	
D30=D40	0.111		0.271		0.877		0.819	
D30=D50	0.795		0.940		0.773		0.0120	
D40=D50	0.206		0.305		0.975		0.292	
Russia=UK	6.45e-08		7.45e-08		0.410		0.958	

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table C6: Determinants of lying in each period, by gender

	Baseline						Baseline	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.343***	(0.0815)	-0.143	(0.0934)	-0.199**	(0.0808)	0.133	(0.150)
RET deviation	-0.00452	(0.00364)	0.00779*	(0.00425)	-0.00326	(0.00362)	-0.000131	(0.00431)
Male	-0.0325	(0.0460)	0.0161	(0.0517)	0.0164	(0.0423)	0.0554	(0.0649)
Age	-0.00576	(0.00465)	0.00417	(0.00479)	0.00159	(0.00297)	-0.0242***	(0.00867)
Period	0.0172***	(0.00301)	-0.0155***	(0.00319)	-0.00176	(0.00265)	-0.0195***	(0.00345)
DG=0	0.317***	(0.116)	-0.204*	(0.105)	-0.113	(0.0689)	-0.166	(0.107)
DG frac	-0.0826	(0.226)	-0.0186	(0.200)	0.101	(0.149)	0.180	(0.200)
Deduction 20%	-0.176***	(0.0590)	0.128*	(0.0679)	0.0479	(0.0611)	-0.0460	(0.0725)
Deduction 30%	-0.0140	(0.0780)	0.0558	(0.0811)	-0.0419	(0.0532)	-0.0261	(0.0949)
Deduction 50%	-0.0178	(0.0916)	0.112	(0.118)	-0.0947	(0.0686)	-0.629***	(0.104)
Russia	0.225***	(0.0593)	0.0916	(0.0729)	-0.317***	(0.0554)	0.0197	(0.0780)
UK	0.492***	(0.0854)	-0.349***	(0.0883)	-0.143***	(0.0537)	0.334***	(0.113)
Constant							0.823***	(0.265)
Observations	2039		2039		2039		616	
Log pseudolikelihood	-1557.6086		-1557.6086		-1557.6086			
R^2							0.2292	
D20=D30	0.0594		0.427		0.167		0.807	
D20=D50	0.121		0.903		0.108		0.00000727	
D30=D50	0.961		0.606		0.477		0.00000102	
Russia=UK	0.000216		1.47e-08		0.00261		0.00673	

	Status						Status	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.169**	(0.0782)	0.0778	(0.0952)	-0.247**	(0.0977)	0.0947	(0.123)
RET deviation	0.00306	(0.00358)	0.000836	(0.00441)	-0.00390	(0.00362)	0.00944	(0.00629)
Male	0.121**	(0.0528)	-0.155***	(0.0546)	0.0336	(0.0503)	-0.0141	(0.0922)
Age	-0.00324	(0.00285)	0.000354	(0.00540)	0.00288	(0.00453)	0.00657	(0.0192)
Period	0.0130***	(0.00302)	-0.00981***	(0.00325)	-0.00322	(0.00290)	-0.0151***	(0.00525)
DG=0	0.390***	(0.0998)	-0.316***	(0.0651)	-0.0741	(0.0853)	0.144	(0.0941)
DG frac	-0.0492	(0.155)	-0.0884	(0.175)	0.138	(0.175)	0.485*	(0.246)
Deduction 20%	-0.0506	(0.0639)	-0.0111	(0.0669)	0.0617	(0.0642)	-0.163**	(0.0688)
Deduction 30%	0.0120	(0.0579)	-0.0396	(0.0636)	0.0276	(0.0625)	-0.164**	(0.0787)
Status, 200 ECU	-0.0624	(0.0496)	-0.0209	(0.0523)	0.0833*	(0.0502)	0.100	(0.0633)
Russia	0.131**	(0.0667)	0.0435	(0.0661)	-0.174***	(0.0538)	0.0107	(0.0913)
UK	0.427***	(0.0700)	-0.251***	(0.0602)	-0.176***	(0.0580)	-0.0709	(0.0853)
Constant							0.131	(0.518)
Observations	1680		1680		1680		410	
Log pseudolikelihood	-1250.743		-1250.743		-1250.743			
R^2							0.1857	
D20=D30	0.274		0.627		0.551		0.993	
Russia=UK	0.0000197		0.0000162		0.984		0.367	

	Shock						Shock	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.275**	(0.117)	0.0694	(0.125)	-0.344***	(0.128)	0.0881	(0.116)
RET deviation	0.00570	(0.00431)	0.000496	(0.00442)	-0.00620	(0.00386)	0.00949	(0.00714)
Male	0.0376	(0.0562)	-0.116**	(0.0587)	0.0782	(0.0563)	0.0482	(0.0818)
Age	-0.00195	(0.00391)	0.00583	(0.00420)	-0.00387	(0.00454)	0.00179	(0.00429)
Period	0.0184***	(0.00399)	-0.0132***	(0.00396)	-0.00521*	(0.00279)	-0.0128**	(0.00551)
DG=0	0.386***	(0.107)	-0.385***	(0.0577)	-0.00135	(0.103)	-0.00325	(0.0891)
DG frac	-0.0691	(0.170)	-0.508***	(0.152)	0.577***	(0.172)	0.487*	(0.254)
Deduction 20%	-0.187***	(0.0631)	0.0882	(0.0699)	0.0987	(0.0676)	0.0946	(0.0892)
Deduction 30%	-0.000775	(0.0593)	0.0183	(0.0682)	-0.0175	(0.0656)	0.0179	(0.0748)
Shock, yes	-0.0153	(0.0220)	0.0360	(0.0260)	-0.0207	(0.0225)	0.0105	(0.0308)
Russia	0.144**	(0.0611)	0.0388	(0.0675)	-0.183***	(0.0510)	-0.157*	(0.0828)
UK	0.345***	(0.0743)	-0.235***	(0.0701)	-0.111*	(0.0620)	-0.302***	(0.0861)
Constant							0.226	(0.175)
Observations	1480		1480		1480		378	
Log pseudolikelihood	-1172.2173		-1172.2173		-1172.2173			
R^2							0.3317	
D20=D30	0.00149		0.313		0.0695		0.443	
Russia=UK	0.00427		0.0000108		0.228		0.0111	

	Non-fixed						Non-fixed	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.246***	(0.0651)	-0.165**	(0.0716)	-0.0814	(0.0799)	0.136	(0.154)
RET deviation	-0.00593**	(0.00264)	0.00677*	(0.00359)	-0.000845	(0.00321)	0.0122*	(0.00669)
Male	0.161***	(0.0395)	-0.110***	(0.0418)	-0.0508	(0.0460)	0.0251	(0.0880)
Age	-0.00959**	(0.00390)	-0.00272	(0.00451)	0.0123**	(0.00507)	-0.00899	(0.0116)
Period	0.0145***	(0.00213)	-0.00525**	(0.00259)	-0.00923***	(0.00238)	-0.0130***	(0.00421)
DG=0	0.233**	(0.110)	-0.175**	(0.0687)	-0.0580	(0.105)	0.321*	(0.192)
DG frac	-0.411***	(0.136)	0.0670	(0.118)	0.344**	(0.142)	0.261	(0.304)
Deduction 20%	-0.0396	(0.0425)	-0.0537	(0.0461)	0.0933*	(0.0497)	0.0139	(0.0825)
Deduction 30%	0.0174	(0.0479)	-0.0920**	(0.0435)	0.0746	(0.0549)	0.106	(0.0928)
Russia	0.0466	(0.0652)	0.174***	(0.0656)	-0.221***	(0.0569)	-0.0795	(0.101)
UK	0.199***	(0.0469)	-0.0152	(0.0435)	-0.184***	(0.0465)	-0.0257	(0.0976)
Constant							0.495*	(0.258)
Observations	3159		3159		3159		640	
Log pseudolikelihood	-2831.0427		-2831.0427		-2831.0427			
R^2							0.0671	
D20=D30	0.240		0.432		0.742		0.399	
Russia=UK	0.0311		0.00519		0.583		0.637	

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table C7: Determinants of lying in each period, by treatment

	Chile						Chile	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.0381**	(0.0167)	-0.0412	(0.0282)	0.00317	(0.0265)	-0.000701	(0.0459)
RET deviation	-0.00139	(0.00285)	0.00482	(0.00471)	-0.00343	(0.00405)	0.00920	(0.00675)
Male	0.0177*	(0.00940)	0.00452	(0.0157)	-0.0222	(0.0151)	0.0345	(0.0229)
Age	-0.0000183	(0.000749)	-0.00180	(0.00142)	0.00182	(0.00134)	0.00180	(0.00209)
Period	-0.00167	(0.00120)	-0.00419**	(0.00190)	0.00586***	(0.00177)	0.000421	(0.00240)
DG=0	0.0598**	(0.0297)	-0.0549	(0.0559)	-0.00488	(0.0544)	0.0130	(0.0403)
DG frac	-0.0256	(0.0283)	-0.0611	(0.0509)	0.0867*	(0.0506)	0.0500	(0.0774)
Deduction 20%	-0.0214*	(0.0112)	-0.0196	(0.0187)	0.0410**	(0.0180)	0.00274	(0.0250)
Deduction 30%	0.00815	(0.0106)	-0.0379**	(0.0184)	0.0297*	(0.0173)	0.00844	(0.0288)
Shock	0.0207	(0.0271)	-0.00440	(0.0336)	-0.0163	(0.0340)	0.0500	(0.0437)
Shock, yes	0.00501	(0.0233)	0.0393	(0.0397)	-0.0443	(0.0392)	-0.0456	(0.0357)
Status	0.0373	(0.0313)	0.00390	(0.0354)	-0.0412	(0.0345)	0.0123	(0.0414)
Status, 200 ECU	-0.0222	(0.0208)	-0.0139	(0.0347)	0.0361	(0.0358)	0.0362	(0.0427)
Non-fixed	0.0490**	(0.0223)	-0.0382	(0.0246)	-0.0108	(0.0212)	0.0296	(0.0358)
L.Declared 0%	0.740***	(0.0398)	-0.182***	(0.0329)	-0.557***	(0.0175)	-0.404***	(0.0877)
L.Declared 1-99%	0.0610***	(0.0160)	0.621***	(0.0224)	-0.682***	(0.0154)	-0.443***	(0.0533)
L.Partial cheat	-0.122***	(0.0263)	-0.0990**	(0.0399)	0.221***	(0.0414)	0.768***	(0.0441)
L.Dec. others, 1000	0.00192	(0.00300)	0.000194	(0.00561)	-0.00212	(0.00547)	0.00815	(0.00789)
Constant							0.400***	(0.0853)
Observations	2771		2771		2771		659	
Log pseudolikelihood	-1281.6994		-1281.6994		-1281.6994			
R^2							0.5985	
D20=D30	0.0108		0.345		0.534		0.824	

	Russia						Russia	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.0468*	(0.0265)	-0.00937	(0.0299)	-0.0374	(0.0233)	0.0515*	(0.0275)
RET deviation	-0.00471	(0.00407)	0.00955**	(0.00431)	-0.00484	(0.00329)	-0.000422	(0.00404)
Male	0.0168	(0.0147)	-0.0649***	(0.0178)	0.0480***	(0.0144)	-0.000816	(0.0149)
Age	-0.00390	(0.00353)	0.00430	(0.00346)	-0.000405	(0.00228)	0.000835	(0.00105)
Period	0.000365	(0.00172)	-0.00198	(0.00182)	0.00161	(0.00124)	0.00114	(0.00191)
DG=0	0.0600**	(0.0299)	-0.107***	(0.0396)	0.0467	(0.0328)	-0.0142	(0.0234)
DG frac	-0.107**	(0.0484)	0.0329	(0.0523)	0.0744*	(0.0448)	0.0576	(0.0518)
Deduction 20%	-0.0183	(0.0160)	0.0332*	(0.0186)	-0.0148	(0.0147)	-0.0140	(0.0155)
Deduction 30%	-0.00757	(0.0187)	0.0179	(0.0223)	-0.0103	(0.0166)	-0.0205	(0.0198)
Redistribution	-0.00143	(0.0294)	-0.00816	(0.0425)	0.00960	(0.0397)	0.0322	(0.0413)
Shock	0.0107	(0.0298)	-0.0293	(0.0306)	0.0186	(0.0259)	-0.0219	(0.0199)
Shock, yes	-0.0343	(0.0376)	0.0422	(0.0354)	-0.00789	(0.0244)	-0.0160	(0.0302)
Status	-0.00280	(0.0259)	-0.0102	(0.0320)	0.0130	(0.0215)	-0.0220	(0.0167)
Status, 200 ECU	-0.00696	(0.0325)	-0.0194	(0.0396)	0.0264	(0.0295)	0.00988	(0.0203)
Non-fixed	0.0190	(0.0209)	-0.0479**	(0.0242)	0.0289	(0.0202)	-0.0171	(0.0241)
L.Declared 0%	0.600***	(0.0629)	-0.241***	(0.0529)	-0.359***	(0.0276)	-0.310***	(0.0887)
L.Declared 1-99%	-0.00935	(0.0287)	0.495***	(0.0339)	-0.486***	(0.0234)	-0.414***	(0.0753)
L.Partial cheat	-0.165***	(0.0432)	0.0165	(0.0441)	0.149***	(0.0337)	0.778***	(0.0395)
L.Dec. others, 1000	-0.0294***	(0.00695)	0.0259***	(0.00695)	0.00344	(0.00438)	0.0125**	(0.00545)
Constant							0.402***	(0.0871)
Observations	2304		2304		2304		912	
Log pseudolikelihood	-998.6708		-998.6708		-998.6708			
R^2							0.6443	
D20=D30	0.588		0.516		0.805		0.758	

	UK						UK	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.0525***	(0.0130)	-0.00963	(0.0170)	-0.0428***	(0.0154)	0.0164	(0.0275)
RET deviation	-0.00306	(0.00208)	0.00126	(0.00274)	0.00180	(0.00227)	0.00152	(0.00594)
Male	0.0136*	(0.00732)	-0.0311***	(0.00985)	0.0175**	(0.00844)	-0.00442	(0.0147)
Age	-0.00160**	(0.000648)	0.000790	(0.000675)	0.000805	(0.000523)	0.000890	(0.000985)
Period	-0.00240**	(0.00101)	0.000674	(0.00114)	0.00173*	(0.00100)	0.00250	(0.00159)
DG=0	0.0611***	(0.0184)	-0.0529***	(0.0198)	-0.00828	(0.0168)	0.00923	(0.0233)
DG frac	-0.0137	(0.0226)	-0.0582**	(0.0275)	0.0719***	(0.0269)	0.107*	(0.0613)
Deduction 20%	0.00449	(0.00882)	-0.000395	(0.0118)	-0.00409	(0.01000)	-0.00433	(0.0188)
Deduction 30%	0.0188*	(0.00997)	-0.0240*	(0.0126)	0.00517	(0.0109)	-0.000167	(0.0248)
Deduction 40%	0.00232	(0.0135)	0.0143	(0.0194)	-0.0166	(0.0166)	-0.00144	(0.0311)
Deduction 50%	0.0326	(0.0217)	-0.00660	(0.0276)	-0.0260	(0.0219)	-0.0742***	(0.0274)
Deadweight loss	-0.0154	(0.0136)	-0.00792	(0.0184)	0.0234	(0.0144)	-0.0240	(0.0305)
Redistribution	0.0116	(0.0113)	-0.0138	(0.0160)	0.00220	(0.0140)	-0.00523	(0.0249)
Shock	-0.00357	(0.0139)	-0.0262	(0.0227)	0.0298	(0.0205)	-0.0207	(0.0196)
Shock, yes	-0.0210	(0.0174)	0.0591	(0.0391)	-0.0380	(0.0319)	-0.0117	(0.0158)
Status	0.0229	(0.0173)	-0.0157	(0.0234)	-0.00720	(0.0215)	-0.00206	(0.0293)
Status, 200 ECU	-0.0298	(0.0182)	0.00699	(0.0273)	0.0228	(0.0247)	-0.0286	(0.0368)
Non-fixed	-0.00201	(0.0106)	0.00583	(0.0140)	-0.00382	(0.0121)	-0.0155	(0.0242)
L.Declared 0%	0.811***	(0.0243)	-0.226***	(0.0194)	-0.585***	(0.0227)	-0.569***	(0.0765)
L.Declared 1-99%	0.0182	(0.0138)	0.312***	(0.0165)	-0.330***	(0.00958)	-0.656***	(0.0578)
L.Partial cheat	-0.0744***	(0.0216)	-0.0620***	(0.0239)	0.136***	(0.0211)	0.803***	(0.0416)
L.Dec. others, 1000	-0.00539**	(0.00245)	0.00567*	(0.00303)	-0.000274	(0.00250)	0.00591	(0.00582)
Constant							0.624***	(0.0645)
Observations	4572		4572		4572		602	
Log pseudolikelihood	-1417.4159		-1417.4159		-1417.4159			
R^2							0.7286	
D20=D30	0.144		0.0746		0.437		0.832	
D20=D40	0.866		0.429		0.449		0.924	
D20=D50	0.183		0.818		0.317		0.0191	
D30=D40	0.226		0.0493		0.211		0.970	
D30=D50	0.521		0.534		0.180		0.0355	
D40=D50	0.155		0.466		0.692		0.0407	

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table C8: Determinants of lying in periods 2-10, previous action, by country

	Chile						Chile	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.159***	(0.0609)	-0.0790	(0.100)	-0.0801	(0.106)	0.00259	(0.165)
RET deviation	0.0133	(0.0105)	-0.0163	(0.0161)	0.00304	(0.0180)	-0.0565*	(0.0326)
Male	0.00247	(0.0321)	-0.0400	(0.0576)	0.0376	(0.0599)	-0.0235	(0.0785)
Age	0.00405	(0.00288)	-0.00270	(0.00506)	-0.00135	(0.00590)	-0.00766	(0.00596)
DG=0	0.656***	(0.120)	-0.213***	(0.0705)	-0.444***	(0.109)	-0.205	(0.194)
DG frac	0.224*	(0.119)	-0.255	(0.174)	0.0308	(0.187)	0.446	(0.329)
Deduction 20%	-0.0146	(0.0356)	-0.0767	(0.0602)	0.0913	(0.0657)	-0.0912	(0.102)
Deduction 30%	0.0279	(0.0365)	-0.0107	(0.0603)	-0.0172	(0.0651)	0.186*	(0.104)
Shock	-0.149***	(0.0152)	0.112	(0.122)	0.0364	(0.122)	0.153	(0.0964)
Shock, yes	0.787***	(0.0157)	-0.255***	(0.0316)	-0.532***	(0.0332)	0.0435	(0.147)
Status	0.107	(0.175)	-0.0333	(0.109)	-0.0733	(0.165)	-0.214	(0.131)
Status, 200 ECU	-0.000515	(0.0783)	0.0639	(0.128)	-0.0634	(0.141)	0.417***	(0.152)
Non-fixed	0.0794	(0.0711)	-0.122	(0.0848)	0.0427	(0.0936)	0.0813	(0.106)
Constant							0.343	(0.240)
Observations	307		307		307		59	
Log pseudolikelihood	-242.7904		-242.7904		-242.7904			
R^2							0.2649	
D20=D30	0.307		0.314		0.132		0.00571	

	Russia						Russia	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.147*	(0.0866)	-0.156	(0.0971)	0.00906	(0.0652)	0.231*	(0.121)
RET deviation	0.0120	(0.0143)	0.00832	(0.0155)	-0.0203**	(0.00947)	0.00487	(0.0172)
Male	0.0271	(0.0517)	-0.0371	(0.0568)	0.0100	(0.0383)	0.0137	(0.0701)
Age	-0.00628	(0.00914)	0.00376	(0.00920)	0.00252	(0.00397)	-0.00611	(0.00792)
DG=0	0.383***	(0.130)	-0.375***	(0.117)	-0.00802	(0.0576)	-0.0537	(0.131)
DG frac	-0.0834	(0.233)	-0.0132	(0.220)	0.0965	(0.102)	0.233	(0.194)
Deduction 20%	-0.0935*	(0.0540)	0.0744	(0.0619)	0.0191	(0.0404)	0.0536	(0.0673)
Deduction 30%	-0.0810	(0.0611)	0.0922	(0.0706)	-0.0112	(0.0423)	-0.0313	(0.0921)
Redistribution	-0.0245	(0.109)	0.113	(0.109)	-0.0880***	(0.0175)	-0.111	(0.0920)
Shock	0.0784	(0.0940)	-0.188*	(0.106)	0.110	(0.0967)	-0.0865	(0.0966)
Shock, yes	0.00283	(0.0978)	-0.000858	(0.111)	-0.00197	(0.0645)	0.190	(0.125)
Status	-0.0196	(0.0840)	-0.0952	(0.107)	0.115	(0.0958)	-0.0478	(0.0970)
Status, 200 ECU	0.0519	(0.110)	-0.0561	(0.121)	0.00417	(0.0702)	0.0477	(0.150)
Non-fixed	0.0297	(0.0838)	-0.117	(0.0919)	0.0869	(0.0753)	0.0470	(0.108)
Constant							0.432**	(0.182)
Observations	256		256		256		100	
Log pseudolikelihood	-183.4509		-183.4509		-183.4509			
R^2							0.1168	
D20=D30	0.845		0.805		0.468		0.351	

	UK						UK	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.331***	(0.0593)	0.0419	(0.0661)	-0.373***	(0.0627)	0.0385	(0.194)
RET deviation	0.00752	(0.0106)	0.0179	(0.0110)	-0.0255**	(0.0107)	-0.0381	(0.0347)
Male	0.117***	(0.0381)	-0.115***	(0.0382)	-0.00142	(0.0371)	0.0170	(0.116)
Age	-0.00497	(0.00342)	0.00528	(0.00338)	-0.000313	(0.00292)	-0.000703	(0.00725)
DG=0	0.394***	(0.0705)	-0.285***	(0.0482)	-0.109*	(0.0633)	-0.135	(0.150)
DG frac	-0.0645	(0.127)	-0.270**	(0.133)	0.335***	(0.125)	0.366	(0.326)
Deduction 20%	-0.00400	(0.0484)	0.107**	(0.0502)	-0.103**	(0.0403)	0.0862	(0.116)
Deduction 30%	0.0357	(0.0512)	0.0268	(0.0533)	-0.0624	(0.0435)	0.0776	(0.138)
Deduction 40%	-0.0544	(0.0794)	0.149*	(0.0881)	-0.0951	(0.0657)	0.497***	(0.135)
Deduction 50%	-0.0300	(0.0848)	0.167	(0.103)	-0.137**	(0.0667)	-0.0565	(0.206)
Deadweight loss	-0.101	(0.0747)	-0.00887	(0.0766)	0.110	(0.0773)	0.0445	(0.219)
Redistribution	-0.00450	(0.0605)	0.0757	(0.0660)	-0.0712	(0.0549)	-0.214	(0.142)
Shock	-0.0145	(0.0955)	-0.00985	(0.0959)	0.0244	(0.0796)	-0.0768	(0.152)
Shock, yes	-0.0322	(0.118)	0.0492	(0.127)	-0.0170	(0.0956)	-0.113	(0.129)
Status	0.110	(0.0903)	0.00272	(0.0919)	-0.113	(0.0726)	-0.0628	(0.259)
Status, 200 ECU	-0.0791	(0.0982)	-0.137*	(0.0811)	0.216*	(0.127)	0.0177	(0.268)
Non-fixed	-0.0648	(0.0553)	0.0939	(0.0611)	-0.0291	(0.0492)	0.0348	(0.144)
Constant							0.232	(0.230)
Observations	508		508		508		59	
Log pseudolikelihood	-432.2628		-432.2628		-432.2628			
R^2							0.3263	
D20=D30	0.466		0.158		0.397		0.943	
D20=D40	0.547		0.630		0.912		0.00189	
D20=D50	0.774		0.571		0.638		0.528	
D30=D40	0.283		0.180		0.648		0.0111	
D30=D50	0.469		0.197		0.315		0.568	
D40=D50	0.811		0.885		0.632		0.0117	

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table C9: Determinants of lying in period 1, by country

	All countries						All countries	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.262***	(0.0410)	-0.0716	(0.0439)	-0.190***	(0.0425)	0.157**	(0.0711)
RET deviation	-0.0000298	(0.00177)	0.00268	(0.00212)	-0.00265	(0.00177)	0.00527*	(0.00311)
Male	0.0687***	(0.0240)	-0.0866***	(0.0256)	0.0179	(0.0242)	0.0452	(0.0407)
Age	-0.00519**	(0.00204)	0.00330	(0.00211)	0.00189	(0.00192)	0.00630*	(0.00324)
Period	0.0173***	(0.00149)	-0.0122***	(0.00165)	-0.00506***	(0.00134)	-0.0152***	(0.00232)
DG=0	0.293***	(0.0564)	-0.264***	(0.0354)	-0.0289	(0.0501)	-0.104	(0.0768)
DG frac	-0.190**	(0.0898)	-0.0883	(0.0806)	0.278***	(0.0759)	0.322***	(0.116)
Civicness	0.0315***	(0.0120)	-0.00298	(0.0132)	-0.0285**	(0.0141)	0.00367	(0.0198)
Trust	-0.00341	(0.0241)	-0.0113	(0.0257)	0.0147	(0.0242)	-0.0530	(0.0397)
SafeChoices	0.00590	(0.00651)	0.000147	(0.00664)	-0.00604	(0.00637)	-0.0000930	(0.00899)
Ideology	0.00804	(0.00542)	-0.00282	(0.00566)	-0.00522	(0.00585)	-0.0264***	(0.00817)
Income	0.124***	(0.0422)	-0.0510	(0.0465)	-0.0735*	(0.0422)	0.0350	(0.0932)
Deduction 20%	-0.0666**	(0.0277)	0.0373	(0.0303)	0.0293	(0.0280)	-0.0256	(0.0386)
Deduction 30%	0.0126	(0.0304)	-0.0301	(0.0307)	0.0175	(0.0293)	-0.0234	(0.0461)
Deduction 40%	-0.106	(0.0896)	0.00906	(0.113)	0.0967	(0.119)	0.193	(0.231)
Deduction 50%	0.161	(0.0997)	-0.0366	(0.103)	-0.124*	(0.0721)	-0.356***	(0.0810)
Deadweight loss	-0.0564	(0.0632)	-0.0474	(0.0693)	0.104	(0.0710)	-0.107	(0.152)
Redistribution	0.104*	(0.0561)	-0.0229	(0.0534)	-0.0808	(0.0510)	0.0400	(0.0897)
Russia	0.112***	(0.0343)	0.120***	(0.0386)	-0.232***	(0.0293)	0.0241	(0.0537)
UK	0.353***	(0.0362)	-0.153***	(0.0378)	-0.200***	(0.0330)	-0.0129	(0.0820)
Shock	0.0445	(0.0423)	-0.0139	(0.0430)	-0.0306	(0.0428)	-0.0427	(0.0492)
Shock, yes	-0.0175	(0.0223)	0.0354	(0.0273)	-0.0179	(0.0246)	-0.0181	(0.0358)
Status	0.0784	(0.0484)	-0.00212	(0.0520)	-0.0762*	(0.0431)	-0.0649	(0.0572)
Status, 200 ECU	-0.0833	(0.0521)	-0.0539	(0.0574)	0.137**	(0.0676)	0.0463	(0.0758)
Non-fixed	0.0255	(0.0351)	-0.0461	(0.0373)	0.0206	(0.0353)	0.0171	(0.0560)
Constant							0.245*	(0.145)
Observations	8218		8218		8218		1971	
Log pseudolikelihood	-6751.8285		-6751.8285		-6751.8285			
R^2							0.1426	
D20=D30	0.00883		0.0329		0.697		0.961	
D20=D40	0.660		0.800		0.567		0.340	
D20=D50	0.0232		0.480		0.0409		0.0000227	
D30=D40	0.193		0.728		0.499		0.347	
D30=D50	0.143		0.951		0.0570		0.0000533	
D40=D50	0.0420		0.759		0.102		0.0166	
Russia=UK	1.17e-11		1.27e-14		0.339		0.585	

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table C10: Determinants of lying, periods 1-10, more controls

	Chile						**Chile**	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.211***	(0.0742)	-0.0797	(0.0914)	-0.131	(0.0988)	0.103	(0.171)
RET deviation	-0.000978	(0.00304)	0.000656	(0.00412)	0.000322	(0.00393)	0.0171**	(0.00743)
Male	0.0728*	(0.0418)	0.0131	(0.0584)	-0.0860	(0.0603)	0.102	(0.0667)
Age	0.00138	(0.00284)	-0.00635	(0.00432)	0.00497	(0.00476)	0.0140**	(0.00561)
Period	0.00919***	(0.00208)	0.0000963	(0.00314)	-0.00928***	(0.00304)	-0.00129	(0.00468)
DG=0	0.245	(0.154)	-0.266***	(0.0651)	0.0210	(0.168)		
DG frac	-0.109	(0.129)	-0.224	(0.154)	0.333*	(0.175)	0.521**	(0.254)
Civicness	0.0393	(0.0249)	0.0208	(0.0326)	-0.0601*	(0.0358)	0.0143	(0.0412)
Trust	0.0197	(0.0400)	-0.00937	(0.0547)	-0.0103	(0.0606)	-0.105	(0.0696)
SafeChoices	0.00774	(0.0110)	-0.00502	(0.0139)	-0.00272	(0.0153)	-0.0360*	(0.0180)
Ideology	0.00426	(0.00884)	-0.00702	(0.0130)	0.00276	(0.0133)	0.00402	(0.0129)
Income	0.198***	(0.0760)	-0.0156	(0.0958)	-0.182*	(0.105)	-0.470***	(0.139)
Deduction 20%	-0.0971**	(0.0395)	-0.0542	(0.0604)	0.151**	(0.0649)	0.0458	(0.0849)
Deduction 30%	0.0187	(0.0446)	-0.107**	(0.0545)	0.0885	(0.0621)	0.135	(0.0899)
Shock	0.265*	(0.155)	-0.0156	(0.115)	-0.249***	(0.0918)	0.128	(0.0919)
Shock, yes	-0.00141	(0.0238)	0.000342	(0.0478)	0.00107	(0.0436)	0.00665	(0.0674)
Status	0.349**	(0.159)	-0.0627	(0.118)	-0.286***	(0.0907)	-0.0975	(0.135)
Status, 200 ECU	-0.105*	(0.0609)	-0.0817	(0.104)	0.186	(0.116)	0.291*	(0.158)
Non-fixed	0.255***	(0.0936)	-0.103	(0.0871)	-0.152*	(0.0834)	0.135	(0.121)
Constant							0.224	(0.223)
Observations	2338		2338		2338		561	
Log pseudolikelihood	-2093.0449		-2093.0449		-2093.0449			
R^2							0.2215	
D20=D30	0.0153		0.398		0.361		0.228	

	Russia						**Russia**	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.214***	(0.0748)	-0.118	(0.0799)	-0.0958	(0.0621)	0.209**	(0.0901)
RET deviation	0.000708	(0.00366)	0.00718*	(0.00384)	-0.00789***	(0.00297)	0.00186	(0.00377)
Male	0.0166	(0.0454)	-0.120**	(0.0478)	0.104***	(0.0334)	0.0229	(0.0478)
Age	-0.0200	(0.0129)	0.0184*	(0.0107)	0.00160	(0.00478)	0.00630	(0.00416)
Period	0.0189***	(0.00288)	-0.0225***	(0.00295)	0.00362*	(0.00205)	-0.0236***	(0.00303)
DG=0	0.315***	(0.0995)	-0.370***	(0.0749)	0.0555	(0.0723)	-0.0561	(0.0789)
DG frac	-0.187	(0.182)	-0.00970	(0.160)	0.197*	(0.102)	0.229*	(0.130)
Civicness	0.0404*	(0.0211)	-0.0347	(0.0213)	-0.00575	(0.0126)	-0.00851	(0.0258)
Trust	0.0447	(0.0473)	-0.0817*	(0.0483)	0.0370	(0.0344)	-0.0625	(0.0549)
SafeChoices	-0.00469	(0.0120)	0.00703	(0.0119)	-0.00234	(0.00871)	-0.00110	(0.0123)
Ideology	0.0192*	(0.0109)	-0.00523	(0.0108)	-0.0140	(0.00925)	-0.0280**	(0.0114)
Income	0.0756	(0.102)	0.0178	(0.105)	-0.0934	(0.0680)	0.209	(0.130)
Deduction 20%	-0.0767	(0.0506)	0.110**	(0.0522)	-0.0328	(0.0340)	0.000121	(0.0501)
Deduction 30%	0.00109	(0.0639)	0.0298	(0.0642)	-0.0309	(0.0387)	-0.0638	(0.0613)
Redistribution	0.0136	(0.0828)	0.0157	(0.0902)	-0.0293	(0.0773)	0.0468	(0.124)
Shock	0.00530	(0.0762)	-0.0396	(0.0653)	0.0343	(0.0624)	-0.0833	(0.0510)
Shock, yes	-0.0118	(0.0464)	0.0288	(0.0420)	-0.0169	(0.0336)	0.000906	(0.0450)
Status	-0.000330	(0.0900)	-0.0370	(0.0951)	0.0373	(0.0672)	-0.0514	(0.0576)
Status, 200 ECU	0.000980	(0.103)	-0.0143	(0.116)	0.0133	(0.0836)	0.00301	(0.0940)
Non-fixed	0.0197	(0.0665)	-0.105	(0.0649)	0.0854	(0.0539)	-0.000397	(0.0812)
Constant							0.266*	(0.146)
Observations	2560		2560		2560		1012	
Log pseudolikelihood	-2051.9321		-2051.9321		-2051.9321			
R^2							0.2027	
D20=D30	0.211		0.212		0.963		0.296	

	UK						**UK**	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
RET rank	0.315***	(0.0654)	0.0130	(0.0571)	-0.328***	(0.0668)	0.333**	(0.159)
RET deviation	0.000271	(0.00259)	0.000147	(0.00312)	-0.000418	(0.00233)	-0.00398	(0.00550)
Male	0.101***	(0.0383)	-0.140***	(0.0333)	0.0390	(0.0352)	-0.156	(0.125)
Age	-0.00555**	(0.00243)	0.00540**	(0.00226)	0.000140	(0.00224)	0.00580	(0.00453)
Period	0.0216***	(0.00254)	-0.0129***	(0.00251)	-0.00871***	(0.00190)	-0.0145***	(0.00386)
DG=0	0.300***	(0.0654)	-0.192***	(0.0453)	-0.108**	(0.0501)	-0.412*	(0.215)
DG frac	-0.215	(0.131)	-0.0322	(0.113)	0.247**	(0.107)	0.663**	(0.308)
Civicness	0.0117	(0.0208)	0.0161	(0.0190)	-0.0278	(0.0200)	0.0350	(0.0532)
Trust	-0.0618*	(0.0369)	0.0548*	(0.0328)	0.00704	(0.0327)	-0.0347	(0.102)
SafeChoices	0.0176	(0.0110)	-0.00545	(0.00880)	-0.0122	(0.00923)	0.00749	(0.0172)
Ideology	-0.00527	(0.00807)	0.0127*	(0.00706)	-0.00748	(0.00696)	-0.0937***	(0.0253)
Income	0.0895	(0.0603)	-0.0564	(0.0546)	-0.0331	(0.0518)	-0.169	(0.132)
Deduction 20%	-0.0188	(0.0469)	0.0561	(0.0431)	-0.0373	(0.0387)	-0.0647	(0.0895)
Deduction 30%	0.0373	(0.0465)	-0.0421	(0.0399)	0.00482	(0.0415)	0.0591	(0.116)
Deduction 40%	-0.0843	(0.122)	0.0256	(0.109)	0.0587	(0.110)	0.791***	(0.175)
Deduction 50%	0.124	(0.104)	-0.0170	(0.0960)	-0.107*	(0.0598)	-0.665***	(0.155)
Deadweight loss	-0.125	(0.0921)	-0.0247	(0.0835)	0.150	(0.0929)	-0.696**	(0.268)
Redistribution	0.0621	(0.0819)	-0.0319	(0.0734)	-0.0302	(0.0713)	-0.455**	(0.179)
Shock	0.0286	(0.0798)	-0.0583	(0.0737)	0.0297	(0.0788)	-0.751***	(0.205)
Shock, yes	-0.0697*	(0.0399)	0.108**	(0.0509)	-0.0384	(0.0335)	-0.0926**	(0.0446)
Status	0.0919	(0.0868)	0.0108	(0.0888)	-0.103	(0.0684)	-0.690***	(0.230)
Status, 200 ECU	-0.164	(0.106)	-0.0985	(0.0638)	0.262**	(0.131)	0.123	(0.143)
Non-fixed	-0.0686	(0.0707)	0.0580	(0.0764)	0.0106	(0.0630)	-0.595***	(0.190)
Constant							0.935***	(0.345)
Observations	3320		3320		3320		398	
Log pseudolikelihood	-2307.1901		-2307.1901		-2307.1901			
R^2							0.5304	
D20=D30	0.289		0.0316		0.368		0.336	
D20=D40	0.590		0.781		0.379		0.000214	
D20=D50	0.195		0.474		0.320		0.00609	
D30=D40	0.323		0.538		0.606		0.000178	
D30=D50	0.403		0.793		0.0938		0.000398	
D40=D50	0.184		0.765		0.179		3.72e-08	

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table C11: Determinants of lying , periods 1-10, more controls, by countries

	Chile						Chile	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
Test period performance	0.0154**	(0.00730)	-0.00975	(0.00915)	-0.00566	(0.0102)	-0.00613	(0.0174)
Male	0.0738*	(0.0389)	-0.0260	(0.0463)	-0.0479	(0.0510)	0.126*	(0.0651)
Age	0.000609	(0.00244)	-0.00606	(0.00393)	0.00545	(0.00445)	0.00150	(0.00547)
Period	0.00928***	(0.00184)	0.000936	(0.00258)	-0.0102***	(0.00262)	-0.00269	(0.00399)
DG=0	0.421***	(0.147)	-0.217**	(0.0864)	-0.204	(0.142)	-0.00455	(0.107)
DG frac	-0.0765	(0.127)	-0.269**	(0.133)	0.346**	(0.159)	0.242	(0.212)
Deduction 20%	-0.0770**	(0.0376)	-0.0825	(0.0510)	0.160***	(0.0556)	-0.0170	(0.0682)
Deduction 30%	0.0153	(0.0404)	-0.0879*	(0.0481)	0.0725	(0.0553)	0.0719	(0.0721)
Shock	0.119	(0.130)	0.0308	(0.102)	-0.150	(0.0936)	0.166*	(0.0945)
Shock, yes	0.0105	(0.0292)	0.00303	(0.0447)	-0.0135	(0.0421)	-0.00806	(0.0610)
Status	0.203	(0.155)	-0.00940	(0.110)	-0.194*	(0.108)	0.0249	(0.116)
Status, 200 ECU	-0.0790	(0.0591)	-0.0726	(0.0920)	0.152	(0.108)	0.132	(0.120)
Non-fixed	0.168**	(0.0783)	-0.139*	(0.0771)	-0.0293	(0.0764)	0.143	(0.0938)
Constant							0.130	(0.221)
Observations	3078		3078		3078		718	
Log pseudolikelihood	-2857.486		-2857.486		-2857.486			
R^2							0.0864	
D20=D30	0.0330		0.922		0.159		0.190	

	Russia						Russia	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
Test period performance	0.0183**	(0.00770)	-0.0125	(0.00794)	-0.00574	(0.00624)	-0.00485	(0.0104)
Male	0.0441	(0.0453)	-0.147***	(0.0473)	0.103***	(0.0346)	0.0523	(0.0515)
Age	-0.0184	(0.0130)	0.0160	(0.0106)	0.00241	(0.00502)	0.0000855	(0.00392)
Period	0.0189***	(0.00288)	-0.0225***	(0.00295)	0.00364*	(0.00205)	-0.0235***	(0.00305)
DG=0	0.312***	(0.104)	-0.361***	(0.0751)	0.0484	(0.0766)	-0.0513	(0.0847)
DG frac	-0.278	(0.185)	0.0502	(0.154)	0.228**	(0.106)	0.210	(0.152)
Deduction 20%	-0.0769	(0.0513)	0.111**	(0.0531)	-0.0345	(0.0350)	0.000568	(0.0561)
Deduction 30%	-0.00105	(0.0634)	0.0336	(0.0634)	-0.0326	(0.0385)	-0.0610	(0.0649)
Redistribution	0.00917	(0.0802)	0.0140	(0.0907)	-0.0232	(0.0811)	0.0263	(0.117)
Shock	0.00563	(0.0748)	-0.0559	(0.0652)	0.0502	(0.0633)	-0.0665	(0.0658)
Shock, yes	-0.0169	(0.0435)	0.0317	(0.0410)	-0.0147	(0.0339)	0.00729	(0.0449)
Status	-0.0255	(0.0854)	-0.0260	(0.0955)	0.0514	(0.0704)	0.00201	(0.0681)
Status, 200 ECU	0.0204	(0.101)	-0.0588	(0.110)	0.0384	(0.0916)	-0.0307	(0.0852)
Non-fixed	0.0441	(0.0727)	-0.130*	(0.0673)	0.0860	(0.0556)	0.0267	(0.0921)
Constant							0.438***	(0.126)
Observations	2560		2560		2560		1012	
Log pseudolikelihood	-2105.6811		-2105.6811		-2105.6811			
R^2							0.1097	
D20=D30	0.233		0.220		0.965		0.339	

	UK						UK	
	Mlogit, average marginal effects						OLS	
	Maximal lying		Partial lying		Honest		Partial lying	
Test period performance	0.0271***	(0.00508)	-0.00452	(0.00440)	-0.0226***	(0.00500)	0.0139	(0.0108)
Male	0.104***	(0.0322)	-0.125***	(0.0274)	0.0207	(0.0288)	-0.0373	(0.0669)
Age	-0.00769***	(0.00233)	0.00485**	(0.00207)	0.00285	(0.00216)	0.00205	(0.00414)
Period	0.0210***	(0.00206)	-0.0106***	(0.00195)	-0.0104***	(0.00162)	-0.0154***	(0.00323)
DG=0	0.348***	(0.0518)	-0.232***	(0.0334)	-0.117***	(0.0430)	-0.00644	(0.117)
DG frac	-0.186*	(0.104)	-0.197**	(0.0890)	0.382***	(0.0996)	0.515**	(0.241)
Deduction 20%	0.0148	(0.0400)	0.0306	(0.0355)	-0.0455	(0.0316)	0.0709	(0.0768)
Deduction 30%	0.0743*	(0.0411)	-0.0477	(0.0344)	-0.0266	(0.0354)	0.0921	(0.0991)
Deduction 40%	0.0214	(0.0670)	0.0577	(0.0602)	-0.0791*	(0.0441)	0.236**	(0.104)
Deduction 50%	0.124*	(0.0731)	0.000215	(0.0715)	-0.124***	(0.0413)	-0.312***	(0.102)
Deadweight loss	-0.122*	(0.0644)	0.00688	(0.0571)	0.115*	(0.0639)	-0.153	(0.141)
Redistribution	0.0588	(0.0538)	-0.0152	(0.0439)	-0.0436	(0.0438)	-0.145	(0.105)
Shock	-0.00709	(0.0600)	-0.0236	(0.0545)	0.0307	(0.0575)	-0.249**	(0.0995)
Shock, yes	-0.0291	(0.0377)	0.0806*	(0.0443)	-0.0514*	(0.0272)	-0.0325	(0.0196)
Status	0.168***	(0.0642)	-0.0655	(0.0610)	-0.103**	(0.0521)	-0.136	(0.154)
Status, 200 ECU	-0.153*	(0.0821)	-0.00296	(0.0949)	0.156	(0.116)	-0.0347	(0.138)
Non-fixed	-0.0400	(0.0474)	0.0579	(0.0437)	-0.0179	(0.0389)	-0.0455	(0.109)
Constant							0.117	(0.148)
Observations	5080		5080		5080		661	
Log pseudolikelihood	-3856.4259		-3856.4259		-3856.4259			
R^2							0.2029	
D20=D30	0.174		0.0362		0.628		0.791	
D20=D40	0.924		0.642		0.469		0.0939	
D20=D50	0.147		0.668		0.0907		0.000351	
D30=D40	0.443		0.0823		0.274		0.233	
D30=D50	0.510		0.512		0.0513		0.00165	
D40=D50	0.226		0.468		0.389		0.000000519	

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table C12: Determinants of lying in each period, by country. Performance data from training period

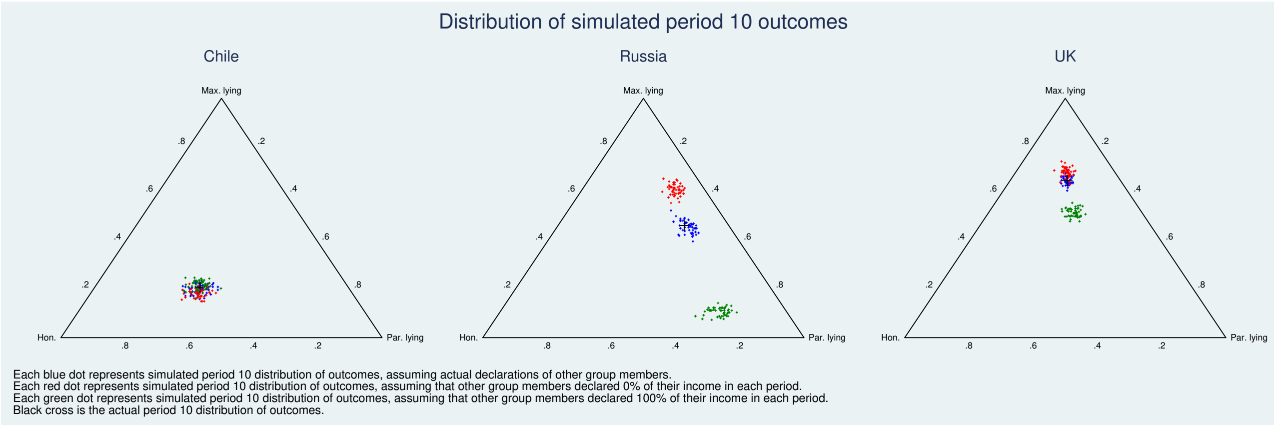


Figure C3: Predicted and actual behavior in Period 10.

Questions	
Avoid paying a fee on public transport	0.340
Cheating on taxes if you have a chance	0.373
Driving faster then the speed limit	0.226
Keeping money you found on the street	0.260
Lying in your own interests	0.308
Not reporting accidental damage you have done to a parked car	0.330
Throwing away litter in a public place	0.298
Driving under the influence of alcohol	0.303
Making up a job application	0.325
Buying something you know is stolen	0.370

The civicness index is calculated as the normalized first principle component of 10 questions of the following form: "Please consider the following and indicate if you think they are justified or not. [$\cdots$] Never (4)/Rarely (3)/Sometimes (2)/Always justified (1)." The first principle component explained 28% of variation.

Table C13: Components of the civicness index.

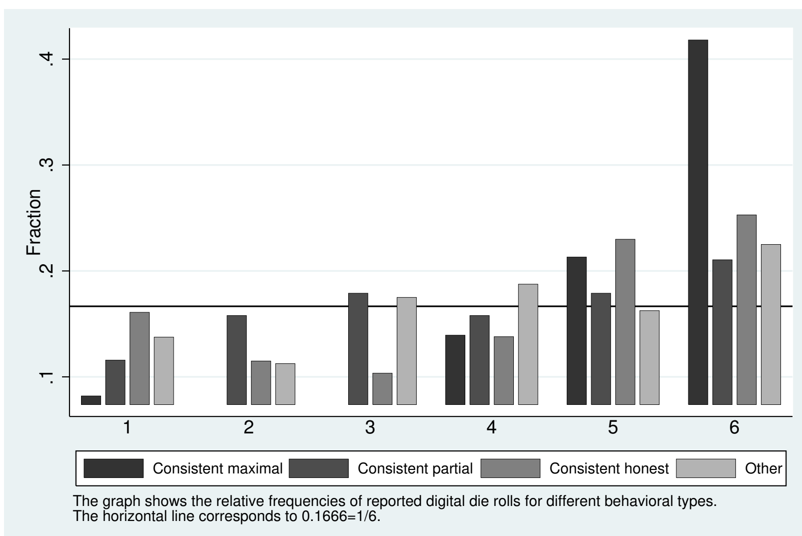


Figure C4: Lying and the digital die roll result.

	Maximal lie	Partial lie	Honest	Total
Always declare 0%	25	4	26	55
Declare 0% in at least 8 periods	28	7	43	78
Always declare above 0%, but below 100%	1	0	24	25
Declare above 0%, but below 100% in at least 8 periods	7	8	50	65
Always declare 100%	2	5	33	40
Declare 100% in a least 8 periods	7	5	44	56

The table shows the frequency actions on the digital die task when 1, 2, 3, or 4 was rolled, depending on the individual's behavior in the main part of the experiment.

Table C14: Lying on the digital die task

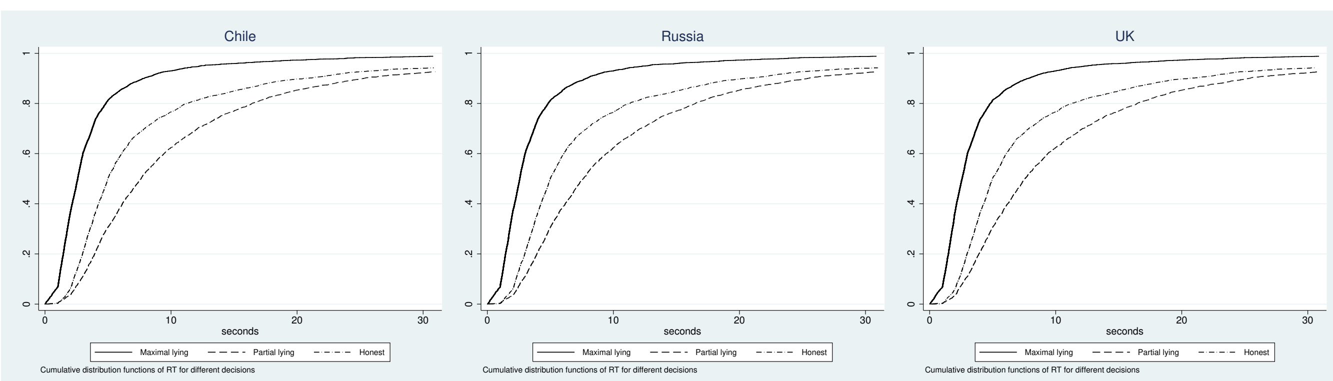


Figure C5: Distribution of reaction time by country. Figures present the cumulative distributions functions of TR for different decisions

Questions	
"How often do you lend money to your friends. 0 - More often than once a week, 1 - Approximately once a week, 2 - Approximately once a month, 3 - Once a year or less often."	0.626
"How often do you lend your belongings to your friends. 0 - More often than once a week, 1 - Approximately once a week, 2 - Approximately once a month, 3 - Once a year or less often."	0.671
"How often do you leave your door open. 0 - Very often, 1 - Often, 3 - Sometimes, 4 - Rarely, 5 - Never."	0.396

The trusting behavior index is calculated as the normalized first principle component of 3 questions. The first principle component explained 44% of variation.

Table C15: Components of the trusting behavior index.

	Average		Per round	
Male	1.411***	(0.313)	1.428***	(0.306)
Age	-0.0289	(0.0416)	-0.0281	(0.0430)
Period			0.165***	(0.0165)
DG=0	0.216	(0.464)	0.245	(0.452)
DG above 0	-0.00230**	(0.000942)	-0.00235**	(0.000924)
Deduction 20%	0.423	(0.335)	0.495	(0.330)
Deduction 30%	0.00765	(0.468)	-0.0486	(0.454)
Shock	0.339	(0.456)	0.514	(0.481)
L.Shock=Yes			-0.411	(0.265)
Status	0.716	(0.602)	0.799	(0.570)
Status, 200 ECU	-0.0496	(0.798)	-0.143	(0.770)
Non-fixed	1.184***	(0.435)	1.238***	(0.427)
Redistribution	0.183	(0.786)	-0.0186	(0.742)
L.Dec. others, 1000			-0.191*	(0.113)
Civicness	-0.245	(0.149)	-0.255*	(0.145)
Trusting behavior index	0.0804	(0.165)	0.0828	(0.160)
SafeChoices	0.0750	(0.0844)	0.0605	(0.0811)
Ideology	-0.0968	(0.0770)	-0.0842	(0.0736)
Income	-0.559	(0.808)	-0.644	(0.788)
Constant	11.55***	(1.227)	11.00***	(1.232)
Observations	256		2304	
R^2	0.172		0.153	

OLS regressions. Dependent variable is average performance over 10 rounds in the first model, and performance in a round for the second model. Robust standard errors for first model, standard errors clustered by subject for the second model. DG frac is the fraction of the 1000 ECU donated in the dictator game. Norms is the social norms index (see Table C13). SafeChoices if the number (0-10) of safe choices on the lottery task. Trusting behavior is the trusting behavior index (see Table C15). Income is the number of the individual's income bracket, rescaled between 0 and 1 (for Chile and the UK), and the individual's perceived income decile, rescaled between 0 and 1 (for Russia).

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table C16: Determinants of subject's performance, Russia.

	Model 1		Model 2		
RET rank	-0.500***	(0.0579)	-0.314***	(0.0497)	-0.308***
RET deviation	0.0279***	(0.00432)	0.0258***	(0.00428)	0.0277***
Male	0.0189	(0.0323)	0.0831***	(0.0263)	0.0788***
Age	0.00772***	(0.00268)	0.00421*	(0.00250)	0.00406
Period	-0.158***	(0.00278)	-0.146***	(0.00275)	-0.0954***
DG=0	-0.276***	(0.0552)	-0.00103	(0.0441)	0.0300
DG frac	0.207*	(0.111)	0.166*	(0.0865)	0.183**
Deduction 20%	0.101***	(0.0376)	0.0739**	(0.0311)	0.0743**
Deduction 30%	-0.0583	(0.0395)	-0.0271	(0.0325)	-0.0280
Deduction 40%	0.237**	(0.102)	0.215***	(0.0760)	0.207***
Deduction 50%	-0.146	(0.0981)	-0.0884	(0.0828)	-0.100
Redistribution	-0.0120	(0.0638)	0.0326	(0.0508)	0.0278
Shock	0.155***	(0.0570)	0.162***	(0.0482)	0.150***
Shock, yes	0.354***	(0.0461)	0.336***	(0.0441)	0.349***
Status	-0.113	(0.0685)	-0.0744	(0.0539)	-0.0795
Status, 200 ECU	0.127	(0.0851)	0.103	(0.0670)	0.114*
Non-fixed	0.0913**	(0.0428)	0.118***	(0.0354)	0.117***
Russia	-0.123**	(0.0493)	-0.134***	(0.0418)	-0.151***
UK	-0.498***	(0.0413)	-0.323***	(0.0357)	-0.318***
Maximal lie this period			0.486***	(0.0351)	
Partial lie this period			0.835***	(0.0334)	
Maximal lie in period 1					0.407***
Partial lie in period 1					1.277***
Honest in period 1					0.979***
Max. lie this and previous period					-0.463***
Max. lie prev. period, part. lie this period					0.512***
Max. lie prev. period, honest this period					0.409***
Part. lie prev. period, max. lie this period					-0.0139
Part. lie this and previous period					0.403***
Part. lie prev. period, honest this period					0.350***
Honest prev. period, max. lie this period					-0.0430
Honest prev. period, part. lie this period					0.500***
Constant	2.667***	(0.102)	2.015***	(0.0945)	2.070***
Observations	10714		10714		10714
R^2	0.3580		0.4506		0.5089

OLS regression. Dependent variable is log reaction time. Standard errors are clustered by subject. Baseline category for subje
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table C17: Determinants of reaction time

	Model 1		Model 2		Model 3	
RET rank	0.372***	(0.0727)	0.245***	(0.0656)	0.270***	(0.0652)
RET deviation	-0.0298***	(0.00780)	-0.0269***	(0.00786)	-0.0270***	(0.00686)
Male	-0.0565	(0.0404)	-0.0980***	(0.0347)	-0.106***	(0.0337)
Age	-0.00654*	(0.00340)	-0.00467	(0.00302)	-0.00384	(0.00326)
Period	0.184***	(0.00402)	0.174***	(0.00407)	0.101***	(0.00420)
DG=0	0.305***	(0.0763)	-0.0259	(0.0616)	-0.0862	(0.0610)
DG frac	-0.145	(0.146)	-0.164	(0.120)	-0.212*	(0.118)
Deduction 20%	-0.128***	(0.0479)	-0.111***	(0.0413)	-0.113***	(0.0396)
Deduction 30%	0.0375	(0.0497)	0.00904	(0.0420)	-0.0151	(0.0421)
Deduction 40%	-0.392***	(0.148)	-0.288**	(0.112)	-0.304***	(0.112)
Deduction 50%	0.104	(0.114)	0.0469	(0.101)	0.0961	(0.0894)
Redistribution	0.0183	(0.0853)	-0.00992	(0.0680)	0.0116	(0.0658)
Shock	-0.0935	(0.0722)	-0.118*	(0.0645)	-0.124**	(0.0617)
Shock, yes	-0.361***	(0.0592)	-0.337***	(0.0596)	-0.336***	(0.0532)
Status	0.119	(0.0890)	0.0991	(0.0672)	0.101	(0.0659)
Status, 200 ECU	-0.159	(0.106)	-0.135	(0.0862)	-0.136*	(0.0819)
Non-fixed	-0.0875	(0.0541)	-0.119***	(0.0450)	-0.116***	(0.0442)
Russia	0.280***	(0.0589)	0.326***	(0.0521)	0.293***	(0.0515)
UK	0.646***	(0.0512)	0.515***	(0.0463)	0.452***	(0.0470)
Maximal lie this period			-0.494***	(0.0493)		
Partial lie this period			-0.841***	(0.0445)		
Maximal lie in period 1					-0.618***	(0.0839)
Partial lie in period 1					-1.408***	(0.0594)
Honest in period 1					-1.266***	(0.0802)
Max. lie this and previous period					0.481***	(0.0566)
Max. lie prev. period, part. lie this period					-0.504***	(0.0743)
Max. lie prev. period, honest this period					-0.465***	(0.147)
Part. lie prev. period, max. lie this period					-0.0941	(0.0769)
Part. lie this and previous period					-0.457***	(0.0464)
Part. lie prev. period, honest this period					-0.377***	(0.0600)
Honest prev. period, max. lie this period					-0.00740	(0.112)
Honest prev. period, part. lie this period					-0.580***	(0.0632)
Constant	-3.164***	(0.131)	-2.473***	(0.121)	-2.289***	(0.124)
Observations	10392		10392		10392	
L	-14601.7		-14092.3		-13584.3	

Exponential distribution survival time model. Standard errors are clustered by subject. Baseline category for subject decision in Model 2 is honest behavior in this period. Baseline category for subject decision in Model 3 is honest behavior in this and previous period.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table C18: Parametric estimation of hazard rate, exponential distribution of reaction time

	Model 1		Model 2		Model 3	
RET rank	0.391***	(0.0806)	0.269***	(0.0782)	0.332***	(0.0853)
RET deviation	-0.0322***	(0.00893)	-0.0301***	(0.00992)	-0.0313***	(0.00996)
Male	-0.0628	(0.0446)	-0.109***	(0.0414)	-0.130***	(0.0442)
Age	-0.00684*	(0.00376)	-0.00517	(0.00352)	-0.00420	(0.00419)
Period	0.201***	(0.00503)	0.201***	(0.00548)	0.124***	(0.00619)
DG=0	0.327***	(0.0856)	-0.0350	(0.0745)	-0.123	(0.0822)
DG frac	-0.150	(0.162)	-0.181	(0.144)	-0.265*	(0.155)
Deduction 20%	-0.141***	(0.0532)	-0.134***	(0.0489)	-0.152***	(0.0513)
Deduction 30%	0.0427	(0.0550)	0.0127	(0.0500)	-0.0260	(0.0559)
Deduction 40%	-0.442***	(0.165)	-0.345**	(0.135)	-0.416***	(0.151)
Deduction 50%	0.109	(0.126)	0.0445	(0.121)	0.122	(0.117)
Redistribution	0.0196	(0.0944)	-0.00930	(0.0807)	0.0236	(0.0864)
Shock	-0.0957	(0.0795)	-0.128*	(0.0771)	-0.150*	(0.0820)
Shock, yes	-0.390***	(0.0661)	-0.377***	(0.0726)	-0.393***	(0.0739)
Status	0.134	(0.0991)	0.125	(0.0795)	0.140	(0.0867)
Status, 200 ECU	-0.179	(0.117)	-0.166	(0.103)	-0.186*	(0.108)
Non-fixed	-0.0965	(0.0599)	-0.136**	(0.0533)	-0.142**	(0.0577)
Russia	0.323***	(0.0642)	0.405***	(0.0609)	0.400***	(0.0661)
UK	0.715***	(0.0571)	0.621***	(0.0538)	0.594***	(0.0607)
Maximal lie this period			-0.556***	(0.0596)		
Partial lie this period			-0.937***	(0.0555)		
Maximal lie in period 1					-0.786***	(0.109)
Partial lie in period 1					-1.706***	(0.0817)
Honest in period 1					-1.590***	(0.109)
Max. lie this and previous period					0.585***	(0.0779)
Max. lie prev. period, part. lie this period					-0.587***	(0.0944)
Max. lie prev. period, honest this period					-0.572***	(0.192)
Part. lie prev. period, max. lie this period					-0.138	(0.101)
Part. lie this and previous period					-0.548***	(0.0606)
Part. lie prev. period, honest this period					-0.441***	(0.0773)
Honest prev. period, max. lie this period					-0.0287	(0.150)
Honest prev. period, part. lie this period					-0.693***	(0.0820)
Constant	-3.493***	(0.143)	-2.924***	(0.139)	-2.930***	(0.161)
ln_p						
Constant	0.0816***	(0.0125)	0.129***	(0.0134)	0.201***	(0.0146)
Observations	10392		10392		10392	
L	-14533.5		-13922.9		-13189.3	

Weibull distribution survival time model. Standard errors are clustered by subject. Baseline category for subject decision in Model 2 is honest behavior in this period. Baseline category for subject decision in Model 3 is honest behavior in this and previous period.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table C19: Parametric estimation of hazard rate, Weibull distribution of reaction time

		1-1 ECU	1-10 ECU	1-20 ECU	1-30 ECU	1-40 ECU	1-50 ECU	1-60 ECU	1-70 ECU	1-80 ECU	1-90 ECU
	Low	0.013636	0.029870	0.034416	0.042208	0.045455	0.061688	0.070779	0.070779	0.074675	0.076623
Chile	High	0.006494	0.023377	0.024026	0.025325	0.025974	0.033117	0.033766	0.034416	0.037013	0.038312
	p	0.069348	0.313751	0.108061	0.012285	0.004657	0.000242	0.000005	0.000007	0.000006	0.000006
	Low	0.014844	0.063281	0.078906	0.082812	0.084375	0.115625	0.120313	0.121875	0.123438	0.126562
Russia	High	0.005469	0.027344	0.031250	0.032031	0.032031	0.049219	0.049219	0.049219	0.049219	0.049219
	p	0.028163	0.000015	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
	Low	0.008268	0.037008	0.050394	0.056693	0.058268	0.070472	0.071260	0.071654	0.072441	0.073622
UK	High	0.009449	0.029134	0.036614	0.040157	0.042520	0.045669	0.046063	0.046063	0.046457	0.046457
	p	0.764972	0.135809	0.019173	0.007255	0.012237	0.000190	0.000161	0.000129	0.000109	0.000056

For each country, the first two rows report the frequencies of declarations for two groups of subjects. The third row reports the p-value for Fisher's exact test comparing these two frequencies.

Table C20: Near-maximal cheating depending on performance (p-values for two-sided Fisher's exact test).

		1-1 ECU	1-10 ECU	1-20 ECU	1-30 ECU	1-40 ECU	1-50 ECU	1-60 ECU	1-70 ECU	1-80 ECU	1-90 ECU
	Female	0.010256	0.030128	0.032692	0.039103	0.042308	0.058974	0.067308	0.067308	0.069872	0.070513
Chile	Male	0.009868	0.023026	0.025658	0.028289	0.028947	0.035526	0.036842	0.037500	0.041447	0.044079
	p	1.000000	0.262871	0.284682	0.110243	0.051868	0.002229	0.000179	0.000259	0.000700	0.001885
	Female	0.013821	0.061789	0.079675	0.083740	0.083740	0.113008	0.113008	0.114634	0.116260	0.117886
Russia	Male	0.006767	0.030075	0.032331	0.033083	0.034586	0.054135	0.058647	0.058647	0.058647	0.060150
	p	0.079462	0.000127	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000	0.000000	0.000000
	Female	0.009465	0.038683	0.053909	0.062963	0.064198	0.076543	0.076955	0.076955	0.077778	0.078189
UK	Male	0.008302	0.027925	0.033962	0.035094	0.037736	0.041132	0.041887	0.042264	0.042642	0.043396
	p	0.764755	0.033986	0.000555	0.000004	0.000021	0.000000	0.000000	0.000000	0.000000	0.000000

For each country, the first two rows report the frequencies of declarations for two groups of subjects. The third row reports the p-value for Fisher's exact test comparing these two frequencies.

Table C21: Near-maximal cheating depending on gender (p-values for two-sided Fisher's exact test).

		1-1 ECU	1-10 ECU	1-20 ECU	1-30 ECU	1-40 ECU	1-50 ECU	1-60 ECU	1-70 ECU	1-80 ECU	1-90 ECU
	DG>0	0.010544	0.027211	0.029932	0.034694	0.036735	0.048980	0.054082	0.054422	0.057823	0.059524
Chile	DG=0	0.000000	0.014286	0.014286	0.014286	0.014286	0.014286	0.014286	0.014286	0.014286	0.014286
	p	0.399202	0.586206	0.437506	0.330682	0.238977	0.064292	0.032065	0.032060	0.022563	0.023279
	DG>0	0.013333	0.053333	0.065641	0.068205	0.068718	0.098462	0.101538	0.102564	0.103590	0.105641
Russia	DG=0	0.000000	0.019672	0.021311	0.022951	0.024590	0.031148	0.031148	0.031148	0.031148	0.031148
	p	0.001678	0.000212	0.000009	0.000009	0.000016	0.000000	0.000000	0.000000	0.000000	0.000000
	DG>0	0.010315	0.041547	0.055874	0.062751	0.065616	0.076218	0.077077	0.077364	0.078223	0.079083
UK	DG=0	0.005660	0.014465	0.016352	0.016981	0.016981	0.018239	0.018239	0.018239	0.018239	0.018239
	p	0.108379	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

For each country, the first two rows report the frequencies of declarations for two groups of subjects. The third row reports the p-value for Fisher's exact test comparing these two frequencies.

Table C22: Near-maximal cheating depending on DG donation (p-values for two-sided Fisher's exact test).