Center for European, Governance and Economic Development Research
cege

Discussion Papers

Number 233 – March 2015

THE VICTIM MATTERS – EXPERIMENTAL EVIDENCE ON LYING, MORAL COSTS AND MORAL CLEANSING

Lukas Meub, Till Proeger, Tim Schneider, Kilian Bizer

GEORG-AUGUST-UNIVERSITÄT GÖTTINGEN

ISSN: 1439-2305

THE VICTIM MATTERS – EXPERIMENTAL EVIDENCE ON LYING, MORAL COSTS AND MORAL CLEANSING

Lukas Meub [a], Till Proeger [b,*], Tim Schneider [c], Kilian Bizer [d]

[a,b,c,d] Faculty of Economic Sciences, Chair of Economic Policy and SME Research, University of Goettingen, Platz der Goettinger Sieben 3, 37073, Goettingen, Germany,
* Corresponding author, Till.Proeger@wiwi.uni-goettingen.de;
phone: +49 551 39 12330; fax: +49 551 39 19558

Abstract: In an experiment on moral cleansing with an endogenously manipulated moral self-image, we examine the relevance of the addressee of an immoral action. The treatments differ such that cheating on a die roll reduces either the experimenter's or another subject's payoff. We find that cheating is highest and moral cleansing lowest when subjects cheat at the expense of the experimenter, while cheating is lowest and moral cleansing highest once cheating harms another subject. A subsequent measurement of subjects' moral self-image supports our interpretation that the occurrence of moral cleansing crucially depends on the moral costs resulting from immoral actions directed at individuals in different roles. Our results can help to explain the different propensity to cheat and conduct moral cleansing when immoral actions harm either another person or the representatives of an organization.

Keywords: dictator game; laboratory experiment; lying; moral balancing; moral cleansing; self-image

JEL classification: C91; D1

1. INTRODUCTION

Dishonesty and immoral behavior are constant features in human interaction, influencing economic interactions. The propensity to act dishonestly is driven e.g. by personal characteristics and the situational context[1], as well as the desire to maintain the moral self-image. Individuals derive utility from a favorable moral self-image, which is thus kept at an individually optimal level (Bénabou and Tirole, 2011; Akerlof and Kranton 2000; Benjamin et al., 2010; Chen and Xin Li, 2009). Therefore, the choice of engaging in immoral behavior exceeds the mere weighing of monetary costs and benefits and encompasses the individuals' current self-image, which is influenced by past and future actions. Preceding actions that have negatively affected one's self-image lead to morally favorable actions (moral cleansing) – and vice versa (moral licensing) – to even out the imbalanced self-image (Battigalli et al., 2013; Merritt et al., 2010; Baumeister et al., 1994).

While previous experiments investigating moral balancing have relied on ex ante priming to induce a positive or negative self-image, Ploner and Regner (2013) initially implemented an endogenous manipulation of subjects' self-image. They conducted a self-reported die roll that enables lying to increase the individual endowment; in a subsequent dictator game, subjects can then engage in moral cleansing by transferring money to another subject. However, while a substantial number of their subjects cheated, little moral cleansing resulted. In this paper, we argue that the occurrence of moral cleansing crucially depends on the addressee of the preceding immoral action. It

[1] In the discussion on determinants of immoral behavior, different complementary explanations have been presented, e.g. regarding personal characteristics (Cappelen et al. 2013; Fosgaard et al., 2013; Gino et al., 2011; Gneezy, 2005; Pascual-Ezama et al, 2013; Shalvi and Leiser, 2013), situational circumstances as e.g. the anticipation of repercussions (Erat and Gneezy, 2012; Gneezy et al., 2013) or the individually ascribed importance of the individual moral identity (Gino et al., 2011).

has been suggested that social concerns are activated to a different extent when cheating on individuals in different roles, such as fellow experimental subjects or the experimenter (Gneezy et al., 2013). We hypothesize that this notion extends to moral cleansing, whereby cheating on individuals in different roles incurs distinct moral costs and a different inclination to balance the moral self-image. For an example, consider a street vendor falsely handing you too much change, with your full knowledge. Compare that to the taxman who - again with your knowledge - falsely grants you the same amount of money at the cost of the state. While you are basically given the opportunity to cheat an individual by taking the money in both cases, your reactions may be quite different. We would hypothesize that the inclination to both refrain from cheating and engage in subsequent moral cleansing will substantially differ with respect to the addressee of your decision. Consequently, the occurrence of moral cleansing could be explained by the specifics of the decision context, particularly by the moral costs associated with cheating individuals in different roles.

To investigate the impact of different addressees of an immoral action on moral cleansing, our experimental design builds closely on Ploner and Regner (2013). We thus investigate the extent of cheating and subsequent moral cleansing, whereby, in two distinct treatments, subjects know that cheating is conducted at the expense of either the experimenter or another subject. A subject's initial endowment is determined by a self-reported, hidden roll of a fair die. False numbers can be reported to gain a higher payoff, which serves as the endogenous manipulation of the self-image. The subsequent dictator game enables subjects to engage in moral cleansing by sharing their endowment with another subject. In a control treatment, no cheating is allowed, as die rolls and reported numbers are observed by the experimenter. Moreover, subjects' moral self-image is recorded following their decisions, yet prior to the announcement of payoffs. We use a

short questionnaire drawn from Gino et al. (2013), which provides a measure of the individual moral costs incurred by the actions in the game.

We find a substantial degree of cheating on the experimenter and little ensuing moral cleansing. Furthermore, there is no "Robin-Hood-Effect", i.e. cheating on the experimenter to give to other subjects. By contrast, when cheating is at the expense of another subject, there is substantially less cheating ex ante and higher contributions in the dictator game ex post. A subsequent questionnaire shows that subjects' moral self-image is similar across treatments. In comparison to subjects in the control treatment, cheating on the experimenter does not negatively affect the self-image. By contrast, when given the opportunity to cheat on another subject, the moral self-image is balanced in two distinct ways: firstly, a substantial share of subjects refrains from cheating altogether, thus avoiding the respective moral costs; and secondly, higher donations are made in the dictator game as a means of moral cleansing.

The remainder of this paper is structured as follows. Section two describes our experimental design and section three our hypotheses. Section four presents the results and section five concludes.

2. EXPERIMENTAL DESIGN

Subjects' moral self-image is endogenously manipulated, whereby subjects are able to cheat on a die roll that determines their endowment. Afterwards, they can donate to another subject in a standard dictator game as a means of moral cleansing. There is a benchmark treatment in which no cheating is possible (*control*), as well as two treatments in which cheating is conducted at the expense of either the experimenter (*cheat experimenter*) or another subject (*cheat partner*). The experiment comprises four parts.

In the first part, subjects claim their endowment by reporting the number of a role of a fair six-sided die. In *control*, the self-reported numbers are verified through the direct supervision of the experimenter, whereby no cheating is possible. In the other two treatments, die rolls are conducted in private. Reporting even numbers earns 15 ECU, and odd numbers 5 ECU. Reported numbers also determine the payoff for a matched partner, whereby it is randomly chosen whose die roll actually determines the endowments. Table 1 gives the payoffs related to the reported die rolls for all treatments. Note that the core difference between the treatments is at whose expense subjects can cheat. For *cheat experimenter*, the other subject will receive 5 ECU regardless, meaning that the additional payoff is taken from the experimenter. By contrast, in c*ontrol* and *cheat partner*, the individual decision to claim 15 ECU automatically reduces the other subject's payoff to 5 ECU.

reported die roll	own payoff	partner payoff
2,4,6	15 (15)	5 (5)
1,3,5	5 (5)	15 (5)

Table 1. Die roll and payoffs in ECU for *control* and *cheat partner* (*cheat experimenter*)

In the second part, after having reported the die roll, all subjects take the role of dictators in a standard dictator game and decide how much of their previously claimed endowment they want to donate to their partner.

In the third part, using a short, four-item questionnaire from Gino et al. (2013), we elicit subjects' current moral self-image, whereby they indicate their current feeling of *guilt*, *remorse*, *regret* and *overall self-image* (i.e. *how good of a person do you feel you are?)* on a Lickert scale from 1 to 7 (1= not at all, 7= to a great extent/very much).

Finally, subjects are matched to pairs and randomly assigned the roles of dictators and recipients. Subsequently, the endowment claims and donation choices of the dictators are executed and displayed to both subjects.

For *control* / *cheat experimenter* / *cheat partner*, there were 4/3/3 sessions with 68/50/44 subjects. Experiments were conducted with a standard subject pool across disciplines in the Laboratory of Behavioral Economics at the University of Goettingen, using ORSEE (Greiner, 2004) and z-Tree (Fischbacher, 2007). Subjects were 24 years old on average, and 57% were female. The average session duration was 20 minutes, whereby subjects earned 6 € on average, including show-up fees.[2]

[2] The original instructions were in German and are available from the authors upon request.

3. HYPOTHESES

Within our experimental design, three distinct aspects of individual decision-making can be investigated in detail, for which we present behavioral hypotheses. Firstly, the basic feature of our design is the endogenous manipulation of subjects' self-images by enabling them to cheat and thus increase their payoff. Previous studies on the determinants of immoral behavior would predict that lying is likely to occur in both *cheat experimenter* and *cheat partner* when compared to *control*, in which no cheating is possible. Consequently, there is no clear direction concerning whether the addressee of the immoral action reduces an individual's propensity to lie, i.e. whether more cheating will be observed in either *cheat experimenter* or *cheat partner*. However, drawing upon Gneezy et al. (2013), who suggest that social concerns are activated to a different degree when cheating on individuals in different roles, we hypothesize that less cheating will be observed in *cheat partner*, as a fellow subject in the experiment will activate more social concerns than the experimenter.

Hypothesis 1 ("*cheating*").

H1a) Subjects engage in cheating to claim higher endowments.

H1b) More subjects engage in cheating in *cheat experimenter* than in *cheat partner*.

Secondly, following the reporting of the die roll, subjects are asked to participate in a standard dictator game and potentially share their endowment. This enables moral cleansing following a potentially untruthful appropriation of the endowment. Drawing upon the results of Ploner and Regner (2013), we assume that only little moral cleansing will occur when the experimenter is the victim of untruthfully claimed endowments. By contrast, we expect that substantially higher amounts will be donated when cheating reduces the payoff of another subject due to social concerns, as suggested by Gneezy et

al. (2013). Consequently, we do not assume that subjects will develop a "Robin-Hood" attitude, i.e. cheating on the "rich" experimenter to give to the other "poor" subject afterwards. This expectation is motivated by Ploner and Regner's (2013) observation that this pattern of behavior only happened with a prior, unrelated experiment with a focus on charitable giving, which is not given in our setting.

Hypothesis 2 ("*giving*").

H2a) Subjects donate more in *cheat partner* than in *cheat experimenter*.

H2b) Subjects do not engage in a "Robin-Hood"-like behavior.

Thirdly, subjects are asked to rate their current moral self-image after making their choices, yet before knowing their assigned role and what their final payoff will be. In general, systematically different choices in our treatments should result in different levels of moral costs, which in turn should be represented in distinct perceptions of guilt/remorse/regret and the individual self-image. However, given that all subjects in our setting can either avoid the moral costs associated with cheating altogether or share their endowment to compensate the moral costs, the average self-images should not differ across treatments. Conversely, a significantly different self-perception across treatments would indicate that moral cleansing is not used effectively to compensate moral costs in our setting. However, this assumption would strongly contradict the previous findings supporting the moral balancing theory.

Hypothesis 3 ("*moral self-image*").

H3) The moral self-image is not different across treatments.

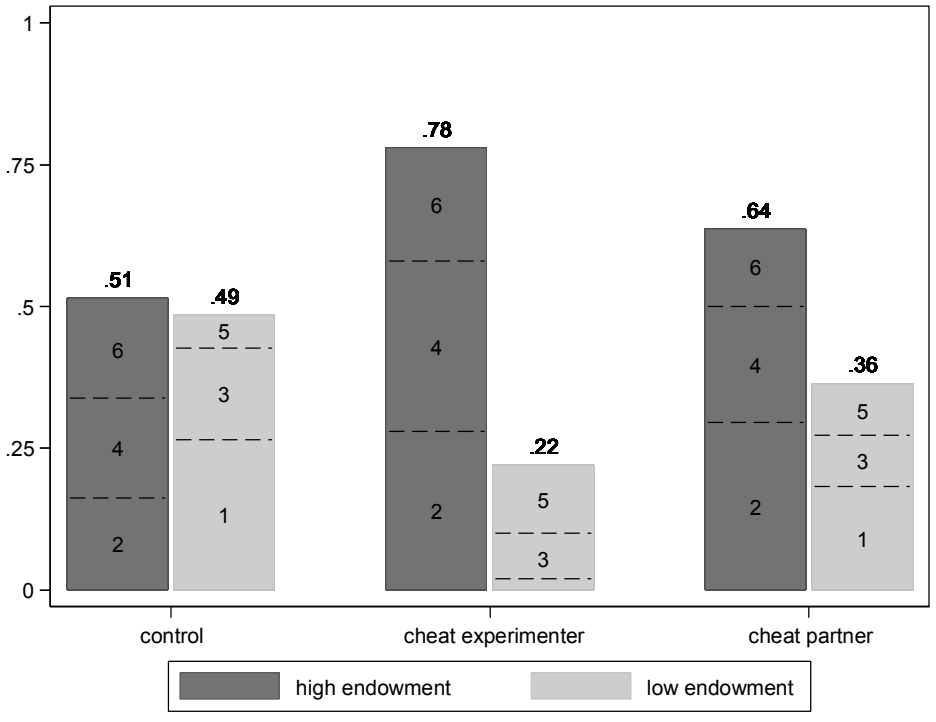
4. RESULTS

We outline our results in line with the individual gameplay and the hypotheses, i.e. we first show the shares of subjects cheating in the different treatments, then provide the results on giving in the dictator game as a means of moral cleansing. Finally, we present the results of the moral self-image questionnaire, which are further analyzed in a regression. Since we are primarily interested in the working mechanism of moral cleansing, we focus our analysis of giving in the dictator game and the moral self-image on subjects who potentially cheated on the die roll.

4.1 LYING

A subject's endowment for the dictator game is determined by the reported role of the die. Figure 1 illustrates self-reported values and the resulting endowments claimed.

Figure 1. Claimed endowments by treatment



As expected, there is an equal share of high and low endowments claimed for *control* (exact binomial test, p=0.904). By contrast, subjects in *cheat experimenter* and *cheat*

partner claim high endowments significantly more often (exact binomial tests, p=0.048). Subjects are more willing to claim high endowments at the expense of the experimenter rather than the partner (Fisher's exact, p=.096).

To estimate the proportion of cheaters with respect to our treatment conditions, we apply the procedure introduced by Houser et al. (2012). Assuming that the population exclusively comprises strictly dishonest and honest people, the shares of cheaters can be estimated by assuming that the proportion of cheater equals $2p_h - 1$, whereby p_H is the share of high endowments claimed by subjects. This procedure gives us 56% of subjects reporting untruthfully in *cheat experimenter* and only 26% in *cheat partner*.

Accordingly, there is strong evidence for H1a and H1b. Subjects cheat when compared to *control*, although about half the subjects who would cheat the experimenter refrain from doing so when cheating would harm another subject.

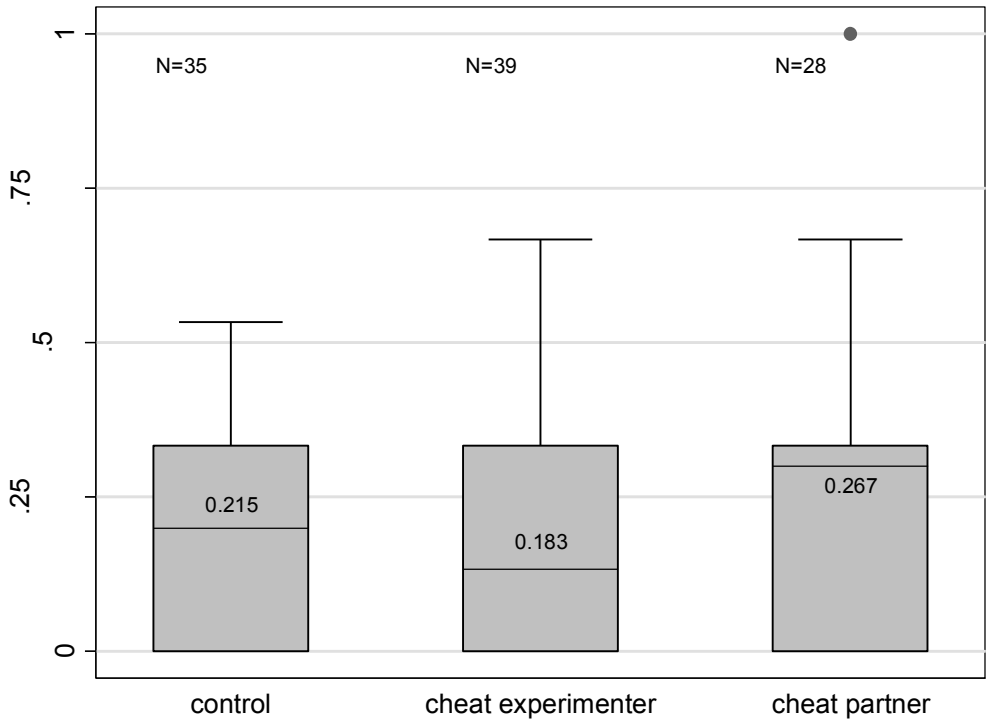
Result 1: *Half the subjects cheat on the experimenter, while only one quarter cheat on another subject.*

4.2 GIVING

Figure 2 gives the distribution of donations of subjects who previously claimed a high endowment, i.e. those who potentially cheated, whereby the numbers in boxes indicate the respective averages.[3]

[3] For subjects claiming a low endowment, the respective averages amount to 0.267 / 0.182 / 0.288 for *control* / *cheat experimenter* / *cheat partner*, whereby 0.39 / 0.36 / 0.44 gave nothing.

Figure 2. Giving in the dictator game by treatment



Overall, donations are in line with the typical results from dictator games (Camerer, 2003). Compared to *control*, subjects who (potentially) cheated on the experimenter tend to donate less, while subjects donate more after cheating on another subject. The share of subjects donating nothing is roughly equal across treatments (.35/.34/.36). Recall that there are about twice as many dishonest reports of die rolls in *cheat experimenter*. Accordingly, differences do not stem from the higher share of subjects donating, but rather from the amount actually donated. In absolute ECU terms, subjects who chose to donate in *cheat partner* (mean=5.89, sd=3.26) give about 43% more than in *cheat experimenter* (mean=4.12, sd=2.18). Subjects in *cheat partner* donate significantly more than in *cheat experimenter* (WRS-test, z=-1.864, p=.0623). Furthermore, the predominant choice of cheating yet giving less in *cheat experimenter* does not support the assumption of a "Robin-Hood-Effect".

Accordingly, the quarter of subjects who choose to cheat on another subject give substantially more in the dictator game than those cheating the experimenter, which hints at the high moral costs associated with claiming the high endowment from another subject. This lends support to hypothesis 2a. Furthermore, claiming a high endowment at the expense of the experimenter is not interpreted as a chance of increasing the individual endowment to subsequently share the profit. Rather, supporting H2b, it appears to be regarded as an opportunity to maximize income that is unrelated to the other subject's income.

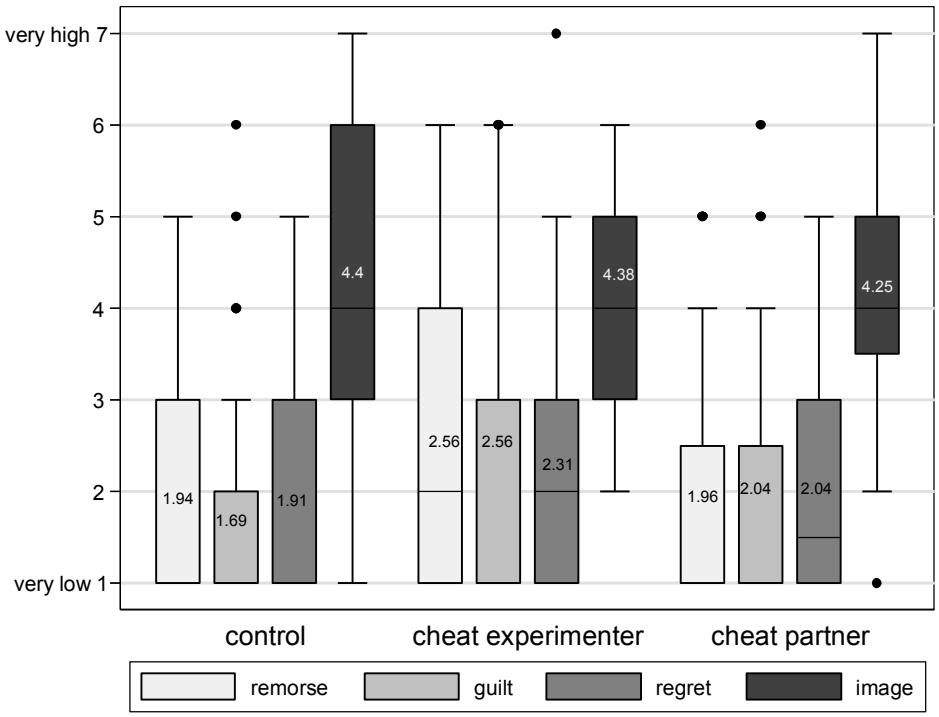
Result 2: *Subjects who potentially cheated on the experimenter donate less than those who potentially cheated on another subject; therefore, there is no "Robin-Hood-Effect".*

4.3 SELF-IMAGE

Right before seeing the game's final result, subjects report their feeling of *regret*, *guilt*, *remorse* and their *overall self-image*, as given in Figure 3 for subjects claiming a high endowment, i.e. those who potentially cheated.

The ratings are not substantially different across treatments, whereby the feelings of remorse/guilt/regret only tend to be slightly stronger in *cheat experimenter*, where cheating is frequent and the donations are small. This result can be interpreted such that cheating the experimenter incurs little moral costs, given that cheating subjects continue to hold a favorable self-image equal to subjects in *control* and thus do not require substantial donations in the dictator game as a means of moral cleansing.

Figure 3. Self-image (high endowment) by treatment



In *cheat partner*, fewer subjects decide to cheat in the first place, while the remaining cheaters may drive the higher donations in *cheat partner*. Also, it might be true that subjects anticipate partners to suspect them of cheating and thus donate more, although they have not cheated. Accordingly, as subjects either bypass or compensate their moral costs, the average self-image is not different from *control*.[4] This provides further evidence for the occurrence of moral cleansing and thus for H3.

[4] Looking at the moral self-image of individuals claiming low endowments yields a similar picture. Subjects' feelings of remorse, guilt and regret are on average somewhat lower in all treatments when compared to those by subjects with high endowments. This is understandable given that subjects in this case either reported their die roll honestly or decided to falsely claim a low endowment to avoid being suspected of cheating. However, the overall assessments of the self-image are neither significantly different when comparing high and low endowment subjects (Wilcoxon-Rank-Sum test gives for *control* z=0.947 and p=.3436, for *cheat experimenter* z=-0.158 and p=.8748, for *cheat partner* z=-1.083 and p=.2789), nor when comparing low endowment subjects across treatments, except for the case of low endowments claimed when comparing *control* and *cheat partner* (Wilcoxon-Rank-Sum test gives for high endowments and *control vs. cheat experimenter* z=0.055 and p=.9558, for *control vs. cheat partner*

We investigate the underlying determinants and the influence of personal characteristics by running a Tobit-regression to explain variation in the overall self-image (table 2).

	control	*cheat experimenter*	*cheat partner*
donation[ECU]	**0.224***** (0.078)	**0.249***** (0.065)	**0.150**** (0.059)
high endowment	**-0.633*** (0.344)	**-0.415** (0.397)	**-0.097** (0.430)
female	**-0.371** (0.333)	**-0.165** (0.281)	**-0.038** (0.388)
age	**-0.003** (0.036)	**-0.017** (0.065)	**0.029** (0.058)
econ	**-0.120** (0.333)	**0.153** (0.309)	**0.744*** (0.403)
constant	**4.688***** (0.960)	**4.563***** (1.533)	**2.761*** (1.607)
Observations	68	50	44

Note: Robust Standard Errors in parentheses; (*** p≤0.01, ** p≤0.05, * p≤0.1)

Table 2. Regression on Self-image

Claiming high endowments tends to reduce the self-image in all treatments. Subjects suffer on average from a loss in their self-image if they merely participated in *cheat partner*. Donations in the dictator game have a highly significant (positive) influence on the self-image in all treatments. While there is no significantly negative effect on the self-image when claiming high endowments in *cheat partner*, the influence of donations on the self-image is weakest; thus, subjects need to donate more to achieve a similarly

z=0.198 and p=.8432; for low endowments and *control vs. cheat experimenter* z=1.278 and p=.2014, for *control vs. cheat partner* z=2.2349 and p=.0188). This similarity in self-images underlines firstly that there are no substantial moral costs for subjects claiming a low endowment and secondly that the moral costs incurred by high endowment subjects are either minimal (when cheating the experimenter) or they are compensated successfully through the opportunity to engage in moral cleansing when cheating another subject.

favorable self-image. The fact that a higher donation is required to achieve the same self-image can be interpreted as an additional indicator of the higher moral costs associated with cheating on another subject. The self-image of economics students is less reduced in *cheat partner* compared to students of all other disciplines.

Overall, our evidence regarding the subjects' self-image shows that moral costs of an immoral action depend on the victim. As little moral costs incur when cheating the experimenter, untruthful claims of high endowments are chosen by most subjects and little moral cleansing ensues, although the self-image remains constant when compared to *control*. Self-image concerns are more complex in *cheat partner*, as the respective moral costs are higher. A number of subjects choose to avoid cheating and its moral costs altogether. Those subjects claiming a high endowment in turn compensate their choice by making higher contributions in the dictator game. Both avoiding and compensating the cheating thus lead to a self-image that is not different from that of the subjects in *control*, those given the opportunity to cheat the experimenter or those not claiming a high endowment. Accordingly, we would argue that moral cleansing as a means of compensating moral costs following the endogenous manipulation of self-images occurred in the one quarter of all subjects dishonestly claiming a high endowment in *cheat partner*.

Result 3: *The moral costs of cheating the experimenter are low; costs are higher when cheating another subject. Consequently, cheating is avoided ex ante or compensated by moral cleansing ex post.*

5. CONCLUSION

We investigate moral cleansing in a setting with an endogenous manipulation of subjects' moral self-image. We thus analyze the context dependence of moral cleansing by showing that the opportunity to cheat on individuals in different roles incurs different moral costs and leads to different degrees of cheating and moral cleansing.

We find that cheating the experimenter is widespread yet incurs little moral costs and no reduction of the moral self-image; consequently, there is no substantial moral cleansing. Furthermore, no "Robin-Hood-Effect" occurs, as cheating the experimenter is not associated with increased donations. By contrast, cheating at the expense of another subject halves the number of cheaters; obviously, a substantial share of subjects anticipates the moral costs and thus chooses not to cheat in the first place. Subjects who claim high endowments at the expense of another subject in turn donate significantly more, which should be interpreted as moral cleansing. Both reactions can be asserted through the moral self-image: as the moral costs of cheating on another subject are dealt with by either avoiding them ex ante or cleansing them ex post, the moral self-image is necessarily equal to that of our control group.

More generally, it can be stated that once moral costs are high, e.g. when an opportunity to cheat on another person is taken, both avoiding the immoral action and moral cleansing are likely to occur. By contrast, frequent rational cheating and little ensuing moral cleansing will occur when the addressee is a faceless organization only evoking minor social concerns, as is conceivable e.g. for large corporations or the state. Picking up the example mentioned above, our results suggest that in most cases, one would point out the vendor's mistake to avoid the moral costs of cheating him. In fewer cases, one would proceed with taking the unjustly taken money, but choose to do some good deed to ease one's bad conscience. In turn, cheating the taxman would be considered

morally acceptable to far more people and would not lead to the desire for sharing the profit to feel better. Our results thus emphasize that moral balancing should not be seen as a stand-alone effect, but rather that its occurrence crucially depends on the addressee of immoral behavior. This could be crucial for the design of organizations that are characterized by a set of rules prone to cheating. Once individuals are given the opportunity to make profits by not adhering to (unenforced) rules, they will be more likely to engage in immoral behavior without feeling guilty when the victim is perceived to be an anonymous organization. Instead, if the organization credibly assigns the blame and punishment for losses incurred from cheating to a single person, rational cheating will be associated with substantially higher moral costs and will thus lead to the avoidance or – at least – compensation of immoral actions.

REFERENCES

Akerlof, G.A., Kranton, R.E., 2000. Economics and Identity. Quarterly Journal of Economics 115 (3), 715-753. doi: 10.1162/003355300554881.

Battigalli, P., Charness, G., Dufwenberg, M., 2013. Deception: The role of guilt. Journal of Economic Behavior & Organization 93, 227-232. doi:10.1016/j.jebo.2013.03.033.

Baumeister, R.F., Stillwell, A.M., Heartherton, T.F., 1994. Guilt: An Interpersonal Approach. Psychological Bulletin 115 (2), 243-267. doi: http://dx.doi.org/10.1037/0033-2909.115.2.243

Bénabou, R., Tirole, J., 2011. Identity, Morals and Taboos: Beliefs as Assets. Quarterly Journal of Economics 126, 805-855. doi: 10.1093/qje/qjr002.

Benjamin, D.J., Choi, J.J., Strickland, A.J., Kirkland and Ellis LLP, 2010. Social Identity and Preferences. American Economic Review 100(4), 1913-1928. doi: 10.1257/aer.100.4.1913.

Camerer, C., 2003. Behavioral game theory: Experiments in strategic interaction. Princeton University Press.

Cappelen, A.W., Sorensen, E., Tungodden, B., 2013. When do we lie?. Journal of Economic Behavior & Organization 93, 258-265. doi:10.1016/j.jebo.2013.03.037.

Chen, Y., Xin, L.S., 2009. Group Identity and Social Preferences. American Economic Review 99 (1), 431-457. doi: 10.1257/aer.99.1.431.

Engel, C., 2010. Dictator games: a meta study. Experimental Economics 14 (4), 583-610. doi: 10.1007/s10683-011-9283-7.

Erat, S., Gneezy, U., 2012. White Lies. Management Science 58 (4), 723-733. doi: http://dx.doi.org/10.1287/mnsc.1110.1449

Fischbacher, U., 2007. z-Tree: Zurich toolbox for ready-made economic experiments. Experimental Economics 10, 171-178. doi: 10.1007/s10683-006-9159-4.

Fosgaard, T.R., Hansen, L.G., Piovesan, M., 2013. Separating Will from Grace: An Experiment on conformity and awareness in cheating. Journal of Economic Behavior & Organization 93, 279-284. doi: 10.1016/j.jebo.2013.03.027.

Gino, F., Schweitzer, M.E., Mead, L.M., Ariely, D., 2011. Unable to resist temptation: How self-control depletion promotes unethical behavior. Organizational Behavior and Human Decision Process115, 191-203. doi: 10.1016/j.obhdp.2011.03.001.

Gino, F., Ayal, S., Ariely, D., 2013. Self-serving altruism? The lure of unethical actions that benefit others. Journal of Economic Behavior & Organization 93, 285-292. doi: 10.1016/j.jebo.2013.04.005.

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

Gneezy, U., Rockenbach, B., Serra-Garcia, M., 2013. Measuring lying aversion. Journal of Economic Behavior & Organization 93, 293-300. doi: 10.1016/j.jebo.2013.03.025.

Greiner, B., 2004. An online recruiting system for economic experiments. In: Kremer, K., Macho, V. (Eds.), Forschung und wissenschaftliches Rechnen 2003. GWDG Bericht 63. Ges. für Wiss. Datenverarbeitung, Goettingen, 79-93.

Houser D., Vetter, S., Winter, J., 2012. Fairness and cheating. European Economic Review 56, 1645-1655. doi: 10.1016/j.euroecorev.2012.08.001.

Merritt, A.C., Effron, D.A., Monin, Benoît, 2010, Moral Self-Licensing: When Being Good Frees Us to Be Bad. Social and Personality Psychology Compass 4/5, 344-357. doi: 10.1111/j.1751-9004.2010.00263.x.

Pascual-Ezama, D., Prelec, D., Dunfield, D., 2013. Motivation, money, prestige and cheats. Journal of Economic Behavior & Organization 93, 367-373. doi: 10.1016/j.jebo.2013.03.015.

Ploner, M., Regner, T., 2013. Self image and moral balancing: An experimental analysis. Journal of Economic Behavior & Organization 93, 374-383. doi: 10.1016/j.jebo.2013.03.030.

Shalvi, S., Leiser, D., 2013. Moral firmness. Journal of Economic Behavior & Organization 93, 400-407. doi: 10.1016/j.jebo.2013.03.014.

APPENDIX: Instructions for the three treatments. Differences in treatments are indicated in braces; T0 refers to CONTROL, T1 refers to *cheat experimenter*, T2 refers to *cheat partner*.

Welcome and thank you for your participation in this experiment! It is very important that you read these instructions thoroughly. During the entire experiment, you are not allowed to communicate with other participants. All decisions are made in full anonymity, so the other participants in this game cannot learn about your identity during or after the experiment.

You payoff in this game is calculated in Taler, whereby 1 Taler = 0,60 Euro. At the end of the experiment, your payoff will be converted from Taler to Euro and handed out to you. Your payoff depends on your decisions or those made by other players. Additionally, we ask you to answer a number of questions during the game, which are irrelevant for your payoff.

In the game, two players interact. These are called Player A and Player B. You will at the end of the experiment, right before your payoff, which role (A or B) you have been randomly assigned. The decision situation described in the following is played **only once**.

1. Part of the game

Every participant receives an **endowment in Taler**. This endowment is determined by the roll of a die. A die and a dice cup are in your booth [T0: The experimenter will activate the game with a code and will do the die roll with you].

To determine your endowment, you will enter the number you just rolled with your die. The following table shows you the endowments that result from the number you entered.

Your entry	**You receive**	**The other participant receives**
Even number (2,4,6)	15 Taler	5 Taler
uneven number (1,3,5)	5 Taler	15 [T1:5] Taler

2. Part of the game

You now decide **how much of your own endowment you want to transfer to Player B**. You can choose any amount between 0 and your endowment determined in part 1 of the game (5 or 15 Taler).

3. Part of the game

You are now randomly assigned another participant. Subsequently, you are assigned the role of Player A or B. The participant assigned to you is assigned the respective other role. **Now, the entry from part 1 and the decision from part 2 by Player A is implemented**. The entry of Player B in part 1 and the respective choice in part 2 thus have no influence on the payoffs.

Finally, the implemented decisions and your payoff are shown to you. Player B is informed about the amount Player A transferred to him. [T2: Player B is not informed, which endowment Player A has received in the first part of the game.]

Your payoff in the game

The random assignment as Player A or B determines whether your decision or that of the other players is implemented.

Payoff as Player A:

(Your decision is implemented)

Your payoff as Player A is the endowment determined in the first part of the game **minus** the amount transferred to Player B in the second part of the game.

Payoff as Player B:

(The other player's decision is implemented)

Your payoff as Player A is the endowment [T1: of 5 Taler] determined in the first part of the game by Player A **plus** the amount transferred to you by Player A in the second part of the game.