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Does everyone have a price? On the role of payoff magnitude for ethical decision making

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ABSTRACT

Most approaches to dishonest behavior emphasize the importance of corresponding payoffs, typically implying that dishonesty might increase with increasing incentives. However, prior evidence does not appear to confirm this intuition. However, extant findings are based on relatively small payoffs, the potential effects of which are solely analyzed across participants. In two experiments, we used different multi-trial die-rolling paradigms designed to investigate dishonesty at the individual level (i.e., within participants) and as a function of the payoffs at stake – implementing substantial incentives exceeding 100€. Results show that incentive sizes indeed matter for ethical decision making, though primarily for two subsets of "corruptible individuals" (who cheat more the more they are offered) and "small sinners" (who tend to cheat less as the potential payoffs increase). Others ("brazen liars") are willing to cheat for practically any non-zero incentive whereas still others ("honest individuals") do not cheat at all, even for large payoffs. By implication, the influence of payoff magnitude on ethical decision making is often obscured when analyzed across participants and with insufficiently tempting payoffs.

1. Introduction

All too often, another instance of dishonesty, deceit, or fraud hits the headlines: whether it be a car company being involved in an emission scandal, a celebrity being convicted of tax evasion, or an athlete admitting to doping. In all these cases, (undetected) dishonesty bears substantial benefits for the individual, at sometimes tremendous costs for others and society (e.g., Mazar & Ariely, 2006). For example, the loss for governments worldwide due to income held in tax havens alone has been estimated to amount to 2 billion US$ per year (Zucman, 2015). Importantly, however, dishonest behavior is not only prevalent if large benefits are at stake but also in more micro-level day-to-day interactions. Many people can probably memorize an instance of deciding not to correct the cashier who returned too much change or of deciding to feign an excuse to avoid an unpleasant encounter.

In general, the decision to engage in dishonesty has long been viewed through the perspective of expected utility models. Most prominently, according to a purely economic approach (Becker, 1968), one simply trades-off the utilities associated with lying against its potential costs or disutility (i.e., sanctions), each weighted by the respective probability of occurrence. By implication, everyone should decide to lie once the corresponding payoff is certain and larger than zero, especially if the probability of sanctions is zero. However, the empirical picture does not confirm this prediction (Bazerman & Gino, 2012): At least a substantial proportion of individuals appear not to lie in such situations (e.g., Fischbacher & Föllmi-Heusi, 2013) and many avoid distorting the facts to the maximum extent (e.g., Hilbig & Hessler, 2013), even if such "major lies" imply a higher personal profit than more minor ones (e.g., Mazar, Amir, & Ariely, 2008; Shalvi, Handgraaf, & De Dreu, 2011).

Thus, the purely economic view on dishonesty seems incomplete – missing out on what one may term the *psychological costs* or disutility of dishonesty (Bazerman & Gino, 2012). Specifically, self-maintenance theory (Mazar et al., 2008) proposes that the decision to lie also incurs a threat to individuals' moral self-image which is aversive. In turn, given that individuals should be generally motivated to maintain a positive (moral) self-image, they should only lie occasionally and/or to a limited extent – in line with the evidence summarized above. Ultimately, individuals thus engage in "ethical manoeuvring" (Shalvi et al., 2011), securing additional payoffs for themselves while avoiding the disutility of a negative self-view.

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However, the question arises whether and to what extent individuals actually care about maintaining a positive self-image once dishonesty yields *substantial* benefits, as in our opening examples. Plausibly, individuals should be willing to lie "when the materialistic gain exceeds the psychological cost caused by lying" (Shalvi et al., 2011, p. S23) which implies that, all else being equal, dishonesty should increase with increasing benefits. Cheating to a limited extent might thus only apply to relatively small incentives – simply because they are insufficient to outweigh the psychological costs of lying. In other words, it is conceivable that everyone will indeed lie once the corresponding payoffs exceed a certain magnitude.

In line with this reasoning, some evidence has indicated that cheating increases with increasing incentives offered to participants (Boles, Croson, & Murnighan, 2000; Conrads, Irlenbusch, Rilke, Schielke, & Walkowitz, 2014; Gibson, Tanner, & Wagner, 2013; Gneezy, 2005; Gneezy, Rockenbach, & Serra-Garcia, 2013; Weisel & Shalvi, 2015). However, in the majority of these studies (except for Gibson et al., 2013), incentives directly affected an individual's absolute *and* relative payoff compared to another individual. Thus, dishonesty served as a means to avoid being worse off than another participant and could therefore just as well have been driven by inequality aversion. By contrast, most studies implementing situations in which lying simply increased participants' absolute payoffs (without directly affecting their relative outcomes compared to another) did not find that payoff magnitude influenced the decision whether to lie (Fischbacher & Föllmi-Heusi, 2013; Gino, Ayal, & Ariely, 2013; Harkrider et al., 2013; Hilbig & Zettler, 2015; Kajackaite & Gneezy, 2015; Mazar et al., 2008; Wiltermuth, 2011). For example, using self-scored performance in quiz-like tasks as a measure of dishonesty yielded similar levels of alleged performance when solving one task was worth $0.50 versus $2 (Mazar et al., 2008) or $1 versus $2 (Gino et al., 2013; Wiltermuth, 2011), respectively. Correspondingly, a recent meta-analysis also suggests that payoff magnitude may be of minor importance for the decision to engage in dishonesty (Abeler, Nosenzo, & Raymond, 2016).

However, prior findings are restricted to relatively small payoffs which might often be insufficient to outweigh the psychological costs of lying. Specifically, the largest monetary incentive offered for cheating in any study was US$50 (Kajackaite & Gneezy, 2015) and, more commonly, incentives rarely exceed US$20 (Abeler et al., 2016). Moreover, in several studies manipulating payoffs experimentally (i.e., Gibson et al., 2013; Gino et al., 2013; Gneezy, 2005; Gneezy et al., 2013; Harkrider et al., 2013; Mazar et al., 2008; Wiltermuth, 2011), cheating was not fully anonymous in the experimental situation because the experimenter was able to infer dishonesty from a participant's final payoffs (payoffs were a direct function of the extent to which participants cheated; cf. Hilbig & Hessler, 2013). Consequently, even with larger payoffs, individuals might have refrained from cheating (severely) to prevent being exposed as a cheater. Once cheating is fully anonymous, payoffs might indeed matter for cheating to occur (Kajackaite & Gneezy, 2015). Finally, manipulating payoffs between-subjects and analyzing corresponding effects on the aggregate level (i.e., averaging the level of dishonesty across participants) might obscure effects of payoff magnitude at the individual (i.e., within-participant) level. The critical question must thus be how large a payoff (if any) will make any one individual decide to lie.

Consequently, in two experiments, we devised more fine-grained and conclusive tests of whether the absolute magnitude of payoffs is decisive for dishonesty. Specifically, we extended prior studies by (a) manipulating payoffs more substantially, providing up to 154€ (approx. US$170 at the time of data collection) for a single lie, (b) rendering cheating fully anonymous within the experimental situation by relying on a variant of the die-rolling paradigm (e.g., Hilbig & Hessler, 2013; see Fischbacher & Föllmi-Heusi, 2013; Shalvi et al., 2011, for the more classical variant), and (c) implementing a within-subjects manipulation of payoffs in different multi-trial paradigms in which incentives were either determined in an adaptive fashion (Experiment 1) or manipulated randomly within-participants (Experiment 2). Notably, the use of such approaches to uncover individual response patterns across situations has already been proven highly fruitful in related research on cooperative behavior and norm violations (Fiedler, Glöckner, Nicklisch, & Dickert, 2013; Pfister, Wirth, Schwarz, Steinhauser, & Kunde, 2016).

2. Experiment 1

2.1. Method

2.1.1. Materials and procedure

As sketched above, we implemented a within-subjects design in Experiment 1, manipulating payoffs adaptively depending on individuals' responses in a multi-trial die-rolling paradigm. This was the only manipulation we implemented and all dependent measures relevant for the research question at hand are reported in what follows. All materials as well as the complete raw data are available online (https://osf.io/d6ph2/). The study was run as a lab-based experiment on the campus of a German university. Participants were invited to take part in a decision-making experiment, in sessions of up to nine individuals. Upon arrival, participants were seated in front of a computer in individual cubicles and provided informed consent. Given that the experiment was part of a battery of tasks which were entirely unrelated to the current experiment, participants completed two other tasks prior to the experiment of interest herein. In these tasks, participants did not receive behavior-contingent payment.

In the main experiment, participants first provided demographic information before receiving detailed instructions on the die-rolling paradigm, including a test trial to become more familiar with the task at hand. Specifically, participants received a fair six-sided die in a cup. Note that we strictly tested whether each die was indeed fair (see Hilbig & Zettler, 2015, for details) and that participants received a written document (signed by the PI) providing corresponding information. Participants were instructed that they would be asked to complete multiple trials of the task whereas the exact number of trials was unknown beforehand. In each trial, a target number (1–6) was randomly drawn (from a uniform distribution) and shown in the center of the screen. Participants were asked to roll the die once in private in the cup – ensuring that nobody except for themselves was able to observe the actual outcome of the roll – and to report whether they rolled the target number specified on-screen by either pressing the S-key for "yes" or the L-key for "no". This procedure (target number presented, die roll, and response) was repeated in each trial. Participants were assured (in the instructions and as part of the written and signed document) that the experimenter would at no time (attempt to) check whether the participant actually rolled a target number.

Participants were further informed that each "yes"-response was potentially associated with a certain monetary gain which was additionally specified on the screen in each trial. Moreover, participants received the information that ultimately one trial of the entire task was going to be randomly selected and that they were going to receive the specified monetary payoff in case they reported having rolled the target number in this particular trial (but no additional payoff if not). We emphasized that the experimenter handling payment would only learn the participant's response in this single, randomly selected trial and that the remaining responses would remain concealed. Thus, our paradigm