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Moral values and increasing stakes in a dictator game

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ABSTRACT

Using data from a large representative US sample ($N = 1519$), we compare hypothetical moral fairness values from the Moral Foundations Sacredness Scale with actual fairness behavior in an incentivized dictator game with either low or high stakes. We find that people with high moral fairness values fail to live up to their high fairness standards, when stake size increases. This violates principles from consistency theories according to which moral values are supposedly aligned with moral behavior, but is in line with temptation theories that question the absoluteness of morality values.

1. Introduction

One topic that economist as well as psychologist are increasingly interested in is self-control in face of everyday temptations. Exercising self-control is not only relevant for health and nutrition decisions but also for retirement plans, education, and all investment decisions in which long-term preferences may be suppressed in favor of short-term gratifications (e.g., Achtziger, Alós-Ferrer, & Wagner, 2016; DellaVigna, 2009; Duckworth & Seligman, 2005; Meier & Sprenger, 2010; Moffitt et al., 2011; Sutter, Kocher, Glaetzle-Ruetzler, & Trautmann, 2013). Temptation in this context describes all situational cues that might prompt decision makers to temporarily disregard their long-term preferences. To understand successful resistance to temptations, the question arises whether people with strong moral convictions are better equipped to overcome temptations and whether moral values can be a self-control device. Do they steer behavior and can they have a buffering effect against temptation?

To study these questions, we analyze data from a probability-based web panel of 1519 US citizens, designed to be representative of the US. These data come from the "Measuring Morality Survey", collected from Duke University in 2013, and

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have so far been published in methodological research, in the context of voting behavior or prosocial behavior and income inequality (Johnson et al., 2014; Miles, 2014; Miles & Vaisey, 2015; Vaisey & Miles, 2014; Côté, House, & Willer, 2015; Padilla-Walker & Jensen, 2015; Piff, Dietzke, Feinberg, Stancato, & Keltner, 2015). The survey includes a variant of the dictator game. Specifically, dictators were endowed with 10 "tickets" and were asked how many tickets they are willing to share with an anonymous co-player. Tickets could be submitted to an online raffle with either a prize of $10 or $500, depending on the treatment (the total number of distributed tickets was unknown to participants). At the same time, the survey also includes a variety of psychological morality tests. In our analyses, we will focus on moral concerns regarding fairness and thus on the *fairness/reciprocity* subscale of the Moral Foundations Sacredness Scale, which we will refer to as "*moral fairness*" (Graham & Haidt, 2012).[1]

To analyze fairness behavior of moral people in face of temptation, we will examine the following three research questions: (i) Is self-reported moral fairness reflected in more prosocial behavior in a dictator game? (ii) Does temptation in terms of high financial stakes decrease giving in a dictator game? (iii) Can high moral values buffer against the effects of temptation in high stakes situations? We find that participants harboring strong moral fairness values are on average more willing to share their endowment with an unknown co-player. However, participants with high moral fairness values fail to control themselves in face of high temptation: An increase in stake size from $10 to $500 reduces sharing to a greater extent for participants with high moral fairness values than for subjects with low moral fairness values. In particular, we find that people that claim they would never behave unfairly, "*not for a million dollars*", fail to live up to this claim in an actual dictator game, when the stake size increases to $500. This suggests that moral values are not absolute, and that people seem to underestimate the power of temptations.

2. Background and hypotheses

2.1. Previous evidence on stake size effects in dictator games

Behavioral economists have used dictator games for over two decades to study prosocial behavior (Forsythe, Horowitz, Savin, & Sefton, 1994). In the most common version of the game, the dictator receives an initial endowment of $10 and is asked what amount he is willing to share with an anonymous co-player. Usually, laboratory experiments reveal that only about 30% of dictators keep all of their money, whereas the rest is willing to share their money with the recipient. These results seem quite robust across different contexts, including experiments that were conducted with children (Fehr, Bernhard, & Rockenbach, 2008) or in small-scale societies (Henrich et al., 2001).

That said, it has been found that changing the stake size can affect generosity. Several studies testing an increase in stake size from $10 to $100 (Carpenter, Verhoogen, & Burks, 2005) and $20 to $100 (List & Cherry, 2008) find a slight shift toward relatively less generous offers by dictators but cannot confirm these changes to be statistically significant. However, a recent meta-study comprising 131 experimental papers on dictator games shows that increasing the stake size reduces the dictator's generosity in relative terms (Engel, 2011).[2] In a study of purely hypothetical decisions, Novakova and Flegr (2013) find the same effect such that dictators tend to reduce their relative proposed share as stake size increases. Similarly, Blake and Rand (2010) found evidence that higher stakes decrease generosity in dictator games with children, when they play with low versus high valued stickers.

In addition, the discussion about stakes in dictator games also evolved around the question of how behavior changes between hypothetical and financially incentivized decisions, for the same cake size. For instance, Forsythe et al. (1994) were the first to report that for a given cake size dictators are less generous in an incentivized context than in a hypothetical context. Similar results were confirmed by Camerer and Hogarth (1999) who reviewed 74 experimental papers and found higher generosity of dictators in hypothetical games with no incentives. Moreover, Ockenfels (1998) found in his experiment that actually paying subjects does not affect average generosity in dictator games compared to hypothetical choices, but leads to 'less round' money amounts given to recipients (utilizing an objective measure of the roundness of the data based on the prominence structure of the decimal system). The higher occurrence of less prominent outcomes seems to suggest that monetary incentives trigger more complex decision processes. Camerer and Hogarth (1999), too, argue that higher incentives might not change behavior substantially on average but reduce variance in responses. Overall, the effect of stake size turns out to be rather mixed, although there is a tendency of reduced relative generosity with higher stake size. In our study, we extend this line of research and study how not only social behavior in the dictator game but also moral fairness values interact with stake size. The next subsection reviews two lines of literature that guide us when formulating our hypotheses.

2.2. Consistency theories vs. temptation theories

There are at least two competing families of models addressing how moral values can guide social behavior: consistency theories and temptation theories. Consistency theories propose that people align values with behavior to appear more con-

[1] Indeed, as it will become clear in Section 4, we argue that it is a moral concept of fairness that influences social behavior and drives our results.

[2] Evidence from the ultimatum game more robustly finds a decrease in generosity with higher stake size (e.g., Andersen, Ertaç, Gneezy, Hoffman, & List, 2011).