THE MORAL COSTS OF NASTINESS

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We introduce two variants of the one-shot joy-of-destruction minigame *(mini-JOD). Two players are endowed with the same amount of money. They simultaneously decide whether or not to reduce the other player's payoff at an own cost. In one treatment there was a probability that nature would destroy the opponent's money anyway. We test whether this feature reduces the moral costs of nastiness, and find that destruction rates rise significantly, despite the absence of strategic reasons.* (*JEL* C72, C91, D03)

Antisocial behavior is ubiquitous in the real world. People suffer violence from perfect strangers or have their cars scratched and tires punctured. Computer viruses are circulated solely to do harm. Yet behavioral economists have devoted almost all their attention to prosociality. There is an overwhelming body of literature on the cooperative, altruistic, and fairness-minded *homo reciprocans* (a term coined by Fehr and Gächter [1998]), but experimental studies dealing with the darker side of human behavior are few and far between.[1] In their money-burning experiments Zizzo and Oswald (2001) and Zizzo (2003) observe people foregoing own payoff for the reduction of someone else's earned income, mainly to reduce disadvantageous inequality. Abbink and Sadrieh (2009) remove inequity aversion as a possible motive to burn money from their joy-of-destruction game and still obtain destruction frequencies of up to 40%. Despotic behavior has also been observed in public good games with punishment. Next to cooperators punishing free-riders, there is also a good deal of antisocial punishment, i.e., selfish individuals punishing contributors (Gächter, Herrmann, and Thöni 2005; Anderson and Putterman 2006; Herrmann, Thöni, and Gächter 2008).

In this paper we study the role of moral costs and scruples in antisocial behavior. We introduce the experimental *joy-of-destruction minigame* (mini-JOD, see Gächter et al. 2009) with two treatments, *open* and *hidden*. In both treatments two players are endowed with 10 money units (MU) each, and both players simultaneously decide whether or not to destroy 5 MU of the other player's endowment, at an own cost of 1 MU. In the hidden treatment, a die is rolled for each player. With 1/3 probability, the player loses 5 MU anyway, regardless of the other player's decision, rendering the other player's decision to burn ineffective. A player who loses 5 MU through destruction is not told whether this was because of the opponent's action, or to the roll of the die. Before we conducted the experiment, we hypothesized that this feature may reduce the moral costs of nastiness as the targeted subject cannot identify anymore the other player as the cause of destruction, while the destroyer can argue for herself that the money will quite possibly be destroyed anyway. Such reduction of the moral costs of being nasty therefore may increase burning rates. The game was played one-shot, i.e., in both treatments strategic aspects, like fear of retaliation, did not play a role. In neither treatment could the target find out the destroyer's identity; hence the moral cost effect involves the own conscience only, not the individual's social reputation.

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1. Earlier, some experimentalists explained behavior in common games with negative motivations, like envy in ultimatum games (Kirchsteiger 1994) or spite in public good games (Saijo and Nakamura 1995; see also Brunton, Hasan, and Mestelman 2001).

ABBREVIATIONS

JOD: Joy of Destruction
MU: Money Units
UAH: Ukrainian Hryvnas

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FIGURE 1
Burning Rates in the Two Treatments

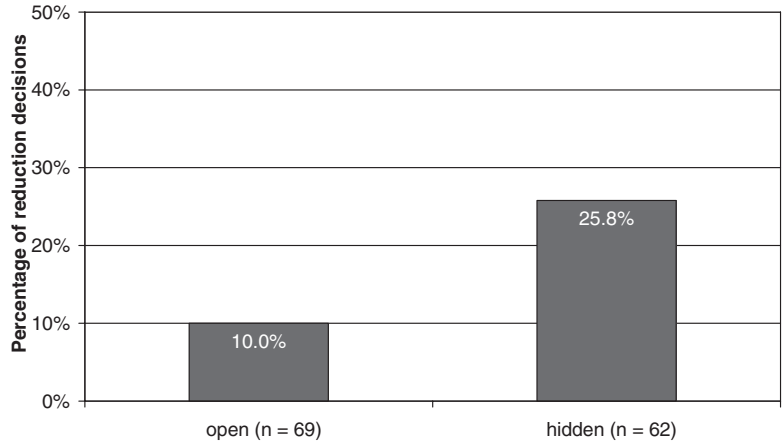
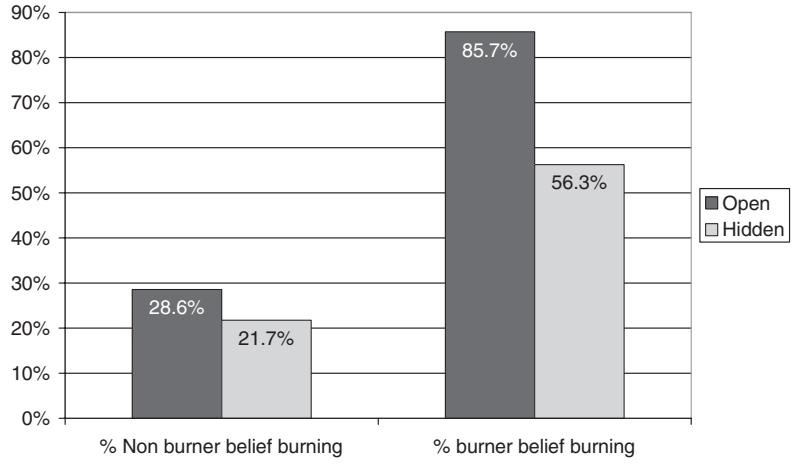


FIGURE 2
Expectations of Subjects About Their Counterpart's Behavior



The experiment was conducted by hand in lecture theaters at universities in Dnipropetrovsk, Donetsk, and Ternopil, all in Ukraine. The participants were students from a wide range of disciplines, on average 19 yr old, 49% males and 51% females.[2] Almost all were Ukrainians. No subject had participated in a similar experiment before, as this was the first economic experiment at any of the places. We conducted three sessions in each treatment, with a total of 69 participants in the open and 62 in the hidden treatment.[3] As the experiment was one-shot each individual is a statistically independent observation.

At the outset of each session the instructions (a translation of which is reproduced in

2. We did not detect significant age or gender effects in our data.

3. By mistake there was an odd number of participants in one of the sessions. We drew the decisions for the leftover subject's opponent randomly from the other participants in that session. As the game is one-shot, our data set was not affected by this manipulation.

Supporting Information Appendix S1) were read aloud by a local research assistant. Participants were separated by a complete cardboard cover to ensure anonymity as burning decisions may be sensitive to the possibility of being observed. In an incentivized post-experimental questionnaire we asked participants about their expectation of their opponent's behavior. A correct guess was rewarded with 2 Ukrainian Hryvnas (UAH). We also asked to estimate the total percentage of burners in the session. UAH 20 were awarded to the best guess in each session. Including instructions and questionnaires a session lasted about 30 min. At the end of the session subjects' earnings were converted into cash at a rate of UAH 2 for one experimental MU. On average a subject earned approximately UAH 24, which is considerably more than a student's average wage per hour in the three locations. At the time of the experiment the exchange rate to other major currencies was US-$ 0.21, € 0.15, ¥ 25, and RMB 1.60 for UAH 1.

Figure 1 shows the burning rates in the two treatments of our experiment. In the open treatment, about one in nine subjects (10.8%) exhibits nasty behavior and destroys another person's money at own costs. While this figure may seem low, the rate shoots up to more than a quarter (25.8%) in the hidden treatment. The difference is significant at $p = .012$ (one-sided) according to Fisher's exact test. If there is a chance that the target loses the money anyway, and the destroyer is not identifiable as the source of the loss, the scruples subjects have to harm other subjects are reduced and they become considerably nastier.

Figure 2 shows the expectations subjects have about other players' behavior, displayed separately for participants who destroyed money and those who did not. There is a strong and significant correlation that those subjects who burn money tend to be also those who expect their counterpart to burn theirs. Subjects tended to overestimate the total frequency of burners. In the open treatment the average estimate was that 37.7% would burn, in the hidden treatment the corresponding figure was 41.6%. The treatment difference is not statistically significant according to Fisher's two-sample randomization test.[4]

4. Similarly over-pessimistic expectations on others' harming behavior were also observed in the context of a one-shot experiment on cooperation and punishment where cooperative players expect to be punished by defectors (Gächter and Herrmann 2009).

To summarize, our experiment reveals a tension between the pleasure of being nasty and the scruples to live it. The hidden setup, in which there was a good chance that the target would lose the money anyway and could not tell where the destruction came from, was effective in overcoming many subjects' hesitations. This effect only involves a decision-maker's own conscience, as both treatments were conducted under the same anonymous conditions. Nasty acts are thus more likely to be carried out if the environment provides an excuse for them, even a flimsy one like in our environment.

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SUPPORTING INFORMATION

Additional Supporting Information may be found in the online version of this article:

APPENDIX S1: Translation of the instructions provided to the participants.