Journal of Behavioral and Experimental Economics 117 (2025) 102407

Contents lists available at ScienceDirect

Journal of Behavioral and Experimental Economics

journal homepage: www.elsevier.com/locate/jbee

The limited role of prosocial behavior in preventing others from being dishonest

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ARTICLE INFO

Keywords:
Selection effects
Dishonesty
Auction
Experiment

ABSTRACT

Honest individuals can strategically assume positions of power to prevent dishonest individuals from taking these positions. We conducted a laboratory experiment where participants were given two versions of an incentivized prediction task, one of which allowed cheating. Cheating on the task led a charity to lose endowed money. By introducing an auction for a limited spot in the cheating-enabling version, we examined whether honest participants bid in the auction to prevent dishonest participants from cheating and thereby harming the charity. We found that such behavior was rare, with at most 2.2 % of participants engaging in it. Furthermore, the size of the charity loss and the presence of information about cheating of others did not affect bidding in the auction and cheating in the task. The participants willing to pay for the cheating-enabling version of the task did so primarily for their own gain. The prosocial preferences of honest individuals are not strong enough to prevent dishonest individuals from seizing positions of power, and only a few honest individuals are prepared to combat dishonesty actively.

1. Introduction

Research on the persistence of corruption primarily focuses on the incentives facing civil servants or officials once in office—such as opportunities for dishonesty, low wages, ineffective monitoring, and low levels of transparency (Gorodnichenko & Peter, 2007; Lindstedt & Naurin, 2010). However, less is known about the role these factors play in shaping not only officials' behavior but also who seeks these positions in the first place (Gans-Morse et al., 2021). Our study contributes to this gap.

Apart from the reasons, such as job stability and security (Perry & Hondeghem, 2008), work-family balance (Saltzstein et al., 2001), and a desire to serve the public (Lewis & Frank, 2002), people may be drawn to civil service by opportunities for illicit enrichment (Di Tella & Schargrodsky, 2003). Bureaucratic and civil servant positions typically offer low salaries but can nevertheless allow for corruption to supplement income (Di Tella & Schargrodsky, 2003). This dynamic has led to recommendations advocating for higher salaries for civil servants as a higher salary may deter corrupt behavior because job loss resulting from detection can be a significant penalty (Becker & Stigler, 1974; Shapiro & Stiglitz, 1984). However, when bribe amounts are considerable, or the probability of detection and punishment is low, the salary required to deter corruption becomes exceedingly high (Van Rijckeghem & Weder, 2001). In environments where public sector corruption is rampant, only those driven by personal gain then self-select for public office as an attractive avenue for enrichment, reinforcing the cycle of corruption (Houdek & Bahník, 2025).

While the allure of monetary gain from unethical actions frequently attracts unscrupulous individuals (Brassiolo et al., 2021; Hanna & Wang, 2017; Houdek et al., 2021), it is essential to emphasize that the same civil service occupations—especially those where dishonest and corrupt conduct generates detrimental societal consequences—also draw honest individuals who are determined to mitigate potential harm and enhance societal well-being in general (Barfort et al., 2019; Gans-Morse, 2022). In environments where public sector corruption is scarce, those selecting careers in public service do so with motives beyond personal gain, driven instead by a commitment to contribute to the public good. This altruistic selection helps sustain the low levels of corruption within a society (Barfort et al., 2019).

Selection pressures—for the honest and the dishonest—collide because environments conducive to cheating often possess limited capacity. In particular, only individuals in key positions have the ability to influence social outcomes, but such positions are scarce. Eventually, a selective process will accommodate individuals exhibiting the highest

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https://doi.org/10.1016/j.socec.2025.102407
Received 11 September 2024; Received in revised form 28 May 2025; Accepted 25 June 2025
Available online 26 June 2025

propensity to exploit such opportunities, i.e., those who are most willing to sacrifice to get into such positions to enrich themselves, or, on the contrary, to prevent such exploitation. The experimental literature rarely covers how these different outcomes occur, the factors influencing them, and their possible negative consequences on social welfare (Brassiolo et al., 2021; Gaines & Kuklinski, 2011).

In this study, we examine how the societal costs of cheating influence self-selection into environments that allow unethical behavior. We hypothesize that higher societal costs of cheating—examples might be damage to public trust or undermining institutional effectiveness—can motivate honest, prosocial individuals to enter these environments as a preventive measure (Gans-Morse et al., 2021). Although it may appear counterintuitive for honest individuals to seek positions in cheating-enabling roles, prosocial motives can drive them to do so in order to mitigate potential harm (Gans-Morse et al., 2022). Higher societal costs may also make these positions less appealing to those inclined to cheat, if such wrongdoing contributes to broader social harm or triggers public backlash. We therefore investigate whether awareness of high societal costs spurs honest individuals to 'preempt' dishonest ones and, conversely, discourages those inclined to cheat. If more honest individuals self-select into these positions, they may offset the negative impacts of corruption, thereby helping to protect the broader public interest.

Furthermore, we test for the occurrence of a contagion effect of antisocial behavior (Dimant, 2019), namely, whether participants are willing to pay more to get into the cheating-enabling environment if they can see how much others cheat in this environment. The knowledge about others' cheating can have significant implications for policy design. For instance, if transparency mechanisms reveal the extent of corruption within a sector, it may galvanize public demand for reform and increase the political cost of inaction (Kolstad & Wiig, 2009). On the other hand, transparency can show the social norm for dishonesty and thus increase overall cheating (Gulino & Masera, 2023; Huber et al., 2023). Moreover, being transparent about the high prevalence of corruption can be a signal to dishonest individuals about opportunities to make a substantial amount of money in that environment.

Our study introduces an adaptation of the experimental task used by Houdek et al. (2021), which allows observing the motivation of honest and dishonest persons to self-select into an environment where they can cheat under varying degrees of negative social externalities. In the task, participants guessed the outcome of die rolls, increasing monetary rewards for each correct prediction. This "mind game" study featured two task versions: a version where predictions were made openly before the roll, preventing cheating, and a version allowing participants to claim they had predicted correctly after the roll, enabling dishonesty (Jiang, 2013; Parra, 2024). A charity, representing the public sector, faced financial losses for high numbers of correct guesses. We introduced a low-loss and a high-loss condition to examine the impact of charity losses on participants' behavior.

Participants first experienced both task versions to establish a baseline for honesty. In subsequent rounds, they could choose to pay to play the version enabling cheating, with their willingness to pay assessed via the Becker–DeGroot–Marschak (BDM) method, ensuring truthful valuation. Later, a second-price sealed-bid auction determined access to the version just for the winner, exploring whether participants were willing to pay to prevent others from playing the version out of altruism or to secure the opportunity to cheat for themselves.

Although our motivating context is the public sector, in our experimental design, the negative consequences of corrupt or dishonest behavior manifest as losses for a charitable organization, rather than directly affecting public funds. This approach, which has been used in prior studies (e.g., Castillo et al., 2022), still captures how cheating can harm social welfare while making these effects more salient to participants. Moreover, the dynamics we describe—where dishonest individuals seek positions of authority to exploit resources, and honest individuals may attempt to secure such positions to prevent wrongdoing—can arise in many professional contexts. In corporate environments, for instance, managers might misappropriate company assets at the expense of shareholders and employees, while ethically motivated individuals could vie for leadership roles to mitigate misconduct. Similarly, nonprofit staff may divert donations from intended recipients, yet some colleagues might intervene to safeguard these resources. Although our illustrative focus is on civil service, our findings are relevant to any setting where opportunities to gain at the expense of others coexist with the potential for socially minded individuals to preempt such exploitation.

Our study contributes to several streams of literature. First, it sheds light on whether prosocial people actively enter settings that enable cheating yet harm others. Indeed, dishonest behavior is sensitive to the degree to which other people are harmed (Gerlach, Teodorescu, & Hertwig, 2019), and the evidence from studies on collaborative dishonesty shows that cheating is higher when third parties experience no negative consequences (Leib et al., 2021). However, it remains unclear whether honest individuals take steps to prevent dishonesty with negative externalities. We find altruistic self-selection to be extremely rare—only a few percent of honest participants bid enough to crowd out cheaters—and the size of the social externality (low vs. high charity loss) does not change this pattern.

Second, our results build on the literature showing dishonest individuals gravitate towards environments where cheating is more feasible or overlooked (Houdek et al., 2021), such as public service (Hanna & Wang, 2017), organizations with unethical leadership (Cialdini et al., 2021), or financial firms known for deceptive practices (Cohn et al., 2014; Egan, Matvos & Seru, 2019). Participants who had cheated were most willing to pay for an environment where they could continue to cheat. They also cheated more when they had to pay to play the cheating-enabling version of the task. This finding suggests that imposing higher entry or maintenance costs in environments that enable cheating might paradoxically intensify cheating rather than deter it (Van Rijckeghem & Weder, 2001).

Third, extensive research has explored how witnessing rule-breaking behavior in one's surroundings influences subsequent antisocial actions (e.g., Fosgaard, Hansen, & Piovesan, 2013; Gächter & Schulz, 2016; Keizer, Lindenberg, & Steg, 2008). Furthermore, it has been shown that an individual's expectations regarding the dishonest actions of others can significantly influence their dishonest behavior (Bicchieri & Xiao, 2009). In our study, we did not observe these effects. However, our experimental setup was unique in that participants had to incur a cost to access an environment where they could cheat. Consequently, the sole effect of observing others' behaviors might not outweigh the cost of participation in that environment for many individuals, regardless of their predisposition towards honesty or dishonesty.

The rest of the paper proceeds as follows. Section 2 describes the sample and the experimental design and explains the procedure. Section 3 presents the results of our experiment. Finally, Section 4 discusses and concludes the article.

2. Methods

Data, materials, analysis code, and figures with precise numerical information can be found at https://osf.io/t4cjv/. Pre-registration of the study can be found at https://osf.io/uyjd4/.

2.1. Participants

We recruited 408 participants for the laboratory study, which consisted of computerized tasks (Lilleholt, Schild, & Zettler, 2020). It was ensured that participants had a .fluent command of Czech as the

experiment was administered in the Czech language. The experimental sessions were conducted with 4-20 participants simultaneously.[1] Due to technical errors, two participants had their data files incomplete, and one participant had to discontinue the experimental session. Following pre-registered exclusion criteria, we excluded these participants from the analyses where they had missing data. Furthermore, three members of the group, in which one participant did not finish the study were excluded from analyses as their responses could have been influenced by the missing data. A study with 408 participants has power 1-β = .80 to detect a small-to-moderate effect size of $d = 0.28$ or $r = .14$.

Among the 405 participants for whom the demographic information was available, 44.4 % were women, 86.4 % were students (70.3 % of them in the field of economics or management), and their median age was 22 ($IQR = 3$). Apart from the rewards won during the experiment, participants received a participation fee of 150 CZK and additional 30 CZK for correctly answering two attention check questions included in a questionnaire at the end of the study. The average reward from the whole experimental session was 384 CZK (about 17.6 USD).

2.2. Design and procedure

The experiment used a modified mind game adapted from Houdek et al. (2021). The design of the experiment is shown in Fig. 1.

In each trial of the task, participants guessed whether the outcome of a die roll would be odd or even. Each round contained twelve die rolls. Participants earned a monetary reward for every correct prediction. The reward for correct prediction increased by 5 CZK with each additional correct prediction, starting from 5 CZK for the first correct prediction and culminating in 60 CZK for the twelfth.

There were two versions of the task: in the BEFORE version, participants had submitted their predictions before the die was rolled, and then they saw the outcome. Therefore, no cheating was possible. In the AFTER version, participants were asked to make a prediction in their mind without submitting and remember it. After observing the roll, they reported whether their prediction had been correct. As the prediction was only in participants' minds, they could cheat and misreport even their incorrect predictions as correct.

Before guessing the outcomes of the die rolls, participants had an opportunity to choose which charity out of four selected well-known Czech charities would receive an endowment of 100 CZK from the experimenter's budget. If a participant achieved from 10 to 12 correct predictions within a round, a charity incurred a loss that would be subtracted from the charity endowment. If the charity endowment was depleted, the costs were borne by the contribution to the charity of the remaining participants. The loss to charity represents the social cost of cheating. Because the loss was triggered only when a participant recorded at least 10 correct guesses, it was highly unlikely that honest behavior would result in any social cost.

Participants were divided into two conditions differing in the magnitude of these losses. In the low-loss condition, the loss of the charity from the initial endowment was 25, 50, and 75 CZK for the tenth, eleventh, and twelfth correct predictions in the round. For the high-loss condition, the losses were 100, 200, and 300 CZK. Participants were further divided into groups of four, with all participants within a group assigned to the same condition. Participants were informed that they and the charity would receive the money earned in one randomly selected round. The two conditions and associated gains and losses are summarized in Table 1.

Participants played seven rounds of the task. In the first two rounds, participants played one round of the task in the AFTER and one in the BEFORE version, in random order. The first two rounds introduced participants to both versions of the task, and the number of reported predictions in the AFTER version of the task served as a baseline measure of cheating.

2.3. Becker–DeGroot–Marschak (BDM) method

In the third round, participants read short descriptions of both versions of the task and could choose to pay a fee for participating in the AFTER version of the task in this round. The willingness to pay was elicited using the Becker–DeGroot–Marschak (BDM) method. Participants indicated the maximum amount in CZK they were willing to pay for playing the AFTER version in this round. Afterward, a random number between 1 and 300 was selected. If the willingness to pay reported by the participant was higher than the random number or equal to it, the participant paid a fee for taking the AFTER version corresponding to the random number. This procedure ensured that participants were incentivized to state their true valuation of playing the AFTER version of the task. Participants in each group were assigned the same random number to ensure that their subsequent behavior was not affected by this random number selection differently. Before indicating their willingness to pay, participants were given two multiple-choice questions, checking their understanding of the procedure with feedback after they answered each question.

The BDM method was again used in the seventh round to assess whether the willingness to pay for the AFTER version changes over time.

2.4. Second-price sealed-bid auction

In rounds 4-6, participants in each group auctioned for a single spot in the AFTER version of the task. In the second-price sealed-bid auction, they indicated the amount of money they were willing to pay for the opportunity to play the AFTER version of the task. The maximum bid allowed was 300 CZK. The participant with the highest bid paid the amount equal to the second-highest bid and was assigned the spot in the AFTER version of the task. The participants were thus motivated to state truthfully their willingness to pay without any strategic concerns. However, unlike in BDM, their willingness to pay might have been affected by the motivation to prevent other participants from winning the auction or by a motivation to increase the payment for the AFTER version of the task for another participant. If two or more participants offered the same highest amount of money for playing the AFTER version of the task, the winner of the auction was selected randomly among them.

Other participants in the group did not pay anything and were assigned to the BEFORE version of the task. All participants knew the highest bid for the AFTER version of the task and whether they won. If they won in the auction, they also knew the fee they paid for the spot corresponding to the second-highest bid. The participants always auctioned in the same group of participants. Three rounds proceeded in this fashion. Following each bid, participants were asked about their beliefs regarding the number of correct predictions a group member of the task would report in the AFTER version if someone else secured the spot in the auction. Before the first round of auction, participants underwent a comprehension check consisting of two multiple-choice questions regarding the procedure. Feedback was provided after they answered each question.

2.5. The information condition

Before the auction in the fifth and sixth rounds of the task, participants who were assigned to the BEFORE version of the task in half of the groups (the information condition) were provided with details regarding the performance of the participant who won the spot in the AFTER version during the previous round. This information included the number of correct predictions made by the winning participant, their reward, and any potential losses to the charity's endowment. In contrast, participants in the second half of the groups (the control condition) were

[1] The median size of the session was 12 participants and only 16 participants participated in a session consisting of only a single group.

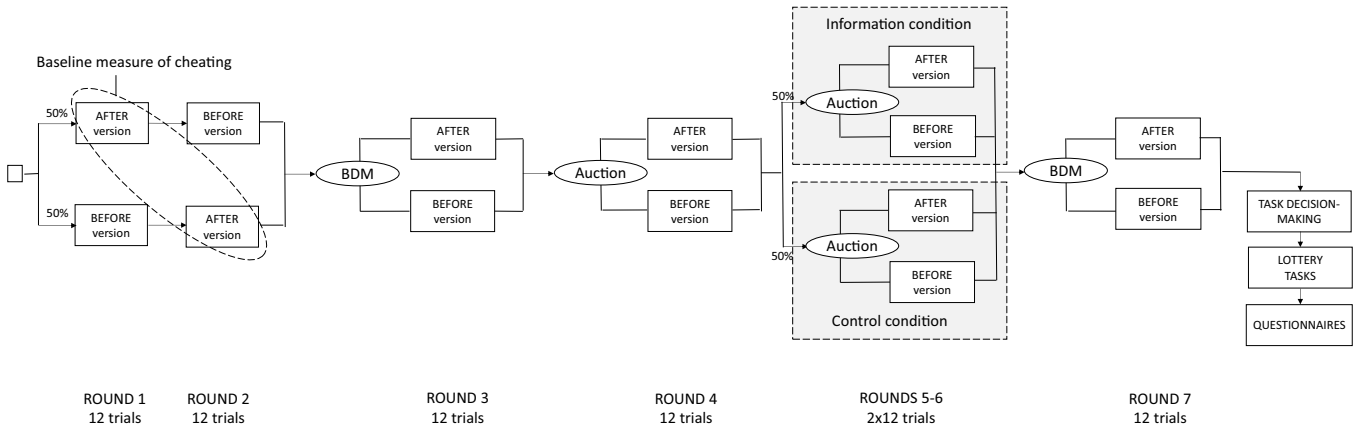

Fig. 1. The design of the experiment.

Table 1
Gains and losses in the low-loss and high-loss conditions.

	Number of correct predictions			
	1 to 9	10	11	12
Participant's gain	5 to 45	50	55	60
Charity's loss in the low-loss condition	0	25	50	75
Charity's loss in the high-loss condition	0	100	200	300

not given any information about the performance of the previous round's winner. Participants in both groups waited for the other participants in the group to complete the previous round before receiving instructions for the subsequent auction round.

2.6. Task decision-making and perception

After completing the task, we asked participants open-ended questions about how they formed decisions on their willingness to pay in both the BDM and auction. Answers were independently coded by one researcher and two research assistants, and any mismatches in coding were resolved by a discussion between the coders. Based on the reading of the answers, we developed a coding scheme with 22 coding labels to categorize the answers. After the open-ended questions, participants rated the extent to which they considered various factors in their decision-making on a five-point scale ranging from "not at all" to "very much". Afterward, participants indicated their agreement with various statements about the BDM and auction on a six-point scale ranging from "completely disagree" to "completely agree". Participants then assessed how much they believed their group members cared about the losses of the charities in the experiment, as well as their own level of concern, using a five-point scale ranging from "not at all" to "very much". Finally, we asked them about their awareness of the possibility of cheating in the AFTER version of the task and of the possibility to bid in the auction to prevent others from taking money from the charities and to report incorrect predictions to avoid causing losses to a charity.

2.7. Lotteries and questionnaire

To alleviate participants' concerns that a higher reward would be an indicator of dishonest conduct, they were also informed that after the main dice-rolling task, there would be a lottery in which they would be able to earn an additional reward and that experimenters paying out the rewards would know only the total amount of reward at the end of the session. The first lottery task was the Holt-Laury method for risk elicitation (Teubner, Adam & Niemeyer, 2015), where participants made five choices between a sure option of an increasing reward (42 to 50 CZK in steps of two) and a risky option with the possibility to win 100 CZK with increasing probabilities (30 to 70 % in steps of 10 %). The number of safe choices was used as a measure of risk aversion. The second lottery task consisted of a repeated decision to keep their reward or to play the lottery, where participants could double their reward, starting at 5 CZK, with a 50 % chance (up to the maximum of 1280 CZK) and losing all the reward with a 50 % chance.

Finally, participants answered socio-demographic questions, filled out a 60-item HEXACO scale (Ashton & Lee, 2009) and prosociality scale (Caprara, Steca, Zelli & Capanna, 2005), and answered questions about the perception of the experiment. Descriptive statistics for the main variables are shown in Table 2. Each participant obtained the reward from a randomly selected round and the lotteries and the charity also received remuneration according to the selected round. They were informed of the remuneration procedure from the outset.

3. Results

In general, conditions were coded with effects coding, and personality measures were centered before analysis.[2] We used linear regression for all analyses using data from a single round and mixed-effect linear regression for analyses using data from multiple rounds unless otherwise stated. Mixed-effect regressions used random intercepts for participants and, when data from fifth and later rounds were used, random intercepts for groups given that participants could have been influenced by the behavior of other group members in later rounds. For simplicity, we do not distinguish between pre-registered and exploratory analyses. However, we report the results of all the pre-registered analyses.

The Results section is structured according to the task structure. First, we present findings related to the overall prevalence of cheating behavior, establishing the baseline extent to which participants engaged in dishonesty. We then examine participants' willingness to pay for the opportunity to participate in the cheating-enabling version of the task, with specific attention to the behavior of both dishonest individuals seeking personal gain and honest individuals potentially motivated by altruistic intentions. Subsequently, we report on how transparency (availability of information about others' dishonest behavior) and varying the societal cost (high vs. low loss conditions) affected participants' willingness to engage in or deter cheating. Finally, we provide additional analyses regarding participants' perceptions and motivations behind their decision-making during the task, offering supplementary insights to contextualize the main findings.

[2] Even though we pre-registered that the personality measures will be standardized, we opted to keep the natural scale at the end. Given that standardization and centering differ only in scaling, this difference in analysis can influence only the reported regression coefficients, but not their significance.

Table 2
Descriptive statistics for selected variables. Values in square brackets indicate the 95% confidence interval for each correlation. * indicates $p < .05$. ** indicates $p < .01$.

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10
1. Baseline cheating	7.91	2.17										
2. Mean WTP in BDM	111.69	77.04	.31** [.22, .39]									
3. Mean WTP in auction	133.85	80.21	.33** [.24, .41]	.75** [.70, .79]								
4. Honesty-Humility	3.10	0.72	-.19** [-.29, -.10]	-.15** [-.24, -.05]	-.18** [-.27, -.08]							
5. Emotionality	3.07	0.74	-.12* [-.21, -.02]	-.08 [-.18, .02]	-.06 [-.15, .04]	.14** [.05, .24]						
6. Extraversion	3.30	0.75	-.03 [-.12, .07]	-.00 [-.10, .10]	.01 [-.09, .10]	-.15** [-.25, -.06]	-.14** [-.23, -.04]					
7. Agreeableness	3.01	0.67	.01 [-.09, .10]	-.03 [-.13, .06]	-.07 [-.16, .03]	.29** [.20, .38]	-.01 [-.11, .09]	-.17** [-.27, -.08]				
8. Conscientiousness	3.55	0.65	-.05 [-.14, .05]	.06 [-.04, .15]	.00 [-.10, .10]	.14** [.04, .23]	.07 [-.03, .16]	.15** [.05, .24]	-.07 [-.17, .02]			
9. Openness to experience	3.50	0.67	-.07 [-.17, .02]	.02 [-.08, .12]	-.00 [-.10, .09]	.06 [-.04, .15]	.08 [-.02, .18]	.10* [.00, .19]	.11* [.01, .21]	.03 [-.06, .13]		
10. Risk aversion	2.71	1.19	-.04 [-.14, .05]	-.07 [-.16, .03]	-.14** [-.23, -.04]	.05 [-.05, .15]	.07 [-.03, .16]	.04 [-.05, .14]	-.07 [-.17, .03]	.08 [-.02, .18]	-.06 [-.16, .03]	
11. Prosociality	3.41	0.66	-.12* [-.22, -.02]	-.03 [-.13, .07]	-.00 [-.10, .09]	.16** [.06, .25]	.36** [.27, .44]	.21** [.12, .30]	.15** [.05, .24]	.07 [-.02, .17]	.32** [.23, .40]	.08 [-.02, .17]

3.1. Cheating

In all rounds, participants reported, on average, more than six expected correct predictions in the AFTER version of the task (see Fig. 2), showing that some of them cheated. It is not possible to determine precisely the proportion of participants who cheated due to variations in the degree of cheating. However, the difference between the expected and observed proportion of participants reporting a given number of correct predictions allows for a conservative estimate of 36.5 % of participants who cheated when they first played the AFTER version of the task. The true proportion is likely higher, given that this estimate assumes a minimum number of cheaters and maximum possible cheating consistent with the observed data. In reality, it is likely that a higher number of participants cheated somewhat less. With the current design, it is not possible to distinguish whether a higher number of participants cheat less or fewer participants cheat more. A similar conservative estimate for participants who played the AFTER version of the task is appreciably higher for later rounds, where participants had to pay to play the AFTER version of the task, and it ranged from 69.6 % in the third round to the maximum of 85.8 % in the fifth round.

3.2. Willingness to pay

Among our main objectives of this study was to investigate whether honest individuals proactively seek positions enabling dishonesty to prevent unethical behavior, and to explore the willingness to pay among dishonest individuals for positions enabling dishonesty.

Table 3 displays the results of a mixed-effect linear regression of the willingness to pay to play the AFTER version of the task using the main predictors of interest. Participants were more willing to pay to play the AFTER version of the task in later rounds and in an auction rather than in the BDM. Participants who reported a higher number of correct predictions in the baseline measure of cheating were willing to pay more to play the AFTER version of the task. The following sections show more detailed analyses of specific predictors, including all pre-registered analyses.

3.3. Differences between rounds

Paired t-tests showed that the willingness to pay was higher in later rounds, with all comparisons of consecutive rounds being significant, *ps* $< .004$, with the exception of the last two rounds, where the willingness to pay in BDM in the seventh round was lower than the willingness to pay in an auction in the sixth round, $t(401) = -2.96$, $p = .003$, $d = -0.15$, 95 % CI [-0.25, -0.05], $M_{BDM7} = 136.4$, $M_{auction6} = 147.7$ (see Fig. 3).

To examine the possibility that participants are willing to pay more to play the AFTER version of the task in the auction than in BDM because they want to prevent cheaters from harming charities, we tested a possible moderation of the difference in willingness to pay by prosociality and the baseline measure of cheating. However, the difference in the willingness to pay in BDM in the third round and in the auction in the fourth round was not moderated by prosociality, $t(403.0) = -0.13$, $p = .900$, $b = -0.7$, 95 % CI [-10.9, 9.6], or the baseline measure of cheating, $t(406.0) = 1.64$, $p = .102$, $b = 2.6$, 95 % CI [-0.5, 5.7]. We also hypothesized that the moderation by prosociality could be more pronounced in the high loss condition, but the three-way interaction was not significant, $t(401.0) = 1.27$, $p = .204$, $b = 13.4$, 95 % CI [-7.2, 34.0].

3.4. Effect of information

One of the study's objectives was to assess how information about others' dishonest actions influence bidding. We find that participants did not bid significantly more in the fifth and sixth rounds to play the AFTER version of the task in the information condition than in the no information condition, $t(98.0) = 0.73$, $p = .467$, $b = 7.8$, 95 % CI [-13.2, 28.8]. The association between the number of correct predictions by the group member in the AFTER version of the task from a previous round and the size of a bid was not significantly stronger for participants in the information condition than for those in the control condition, $t(498.9) = 0.32$, $p = .752$, $b = 1.8$, 95 % CI [-9.5, 13.2].

3.5. Searching for heroes

Given that there is little reason to pay in BDM to play the AFTER version of the task when one intends to avoid cheating, we next looked at participants who did not want to pay for the AFTER version of the task in BDM. There were 50 participants whose average willingness to pay in BDM was less than 10 CZK (40 with the willingness to pay equal to 0). Thirty-five participants of these also had an average bid in auctions of less than 10 CZK. Six participants of the remaining 15 had an average bid in auctions less than 50, while the remaining 9 (2.2 % of the total) had an average bid of 50 or higher. Therefore, it appears that there were not many honest participants who were motivated to bid just to prevent others from harming charity. An independent sample t-test showed that these participants reported fewer correct predictions in the baseline measure of cheating than the remaining participants, $t(406) = -1.90$, $p =$

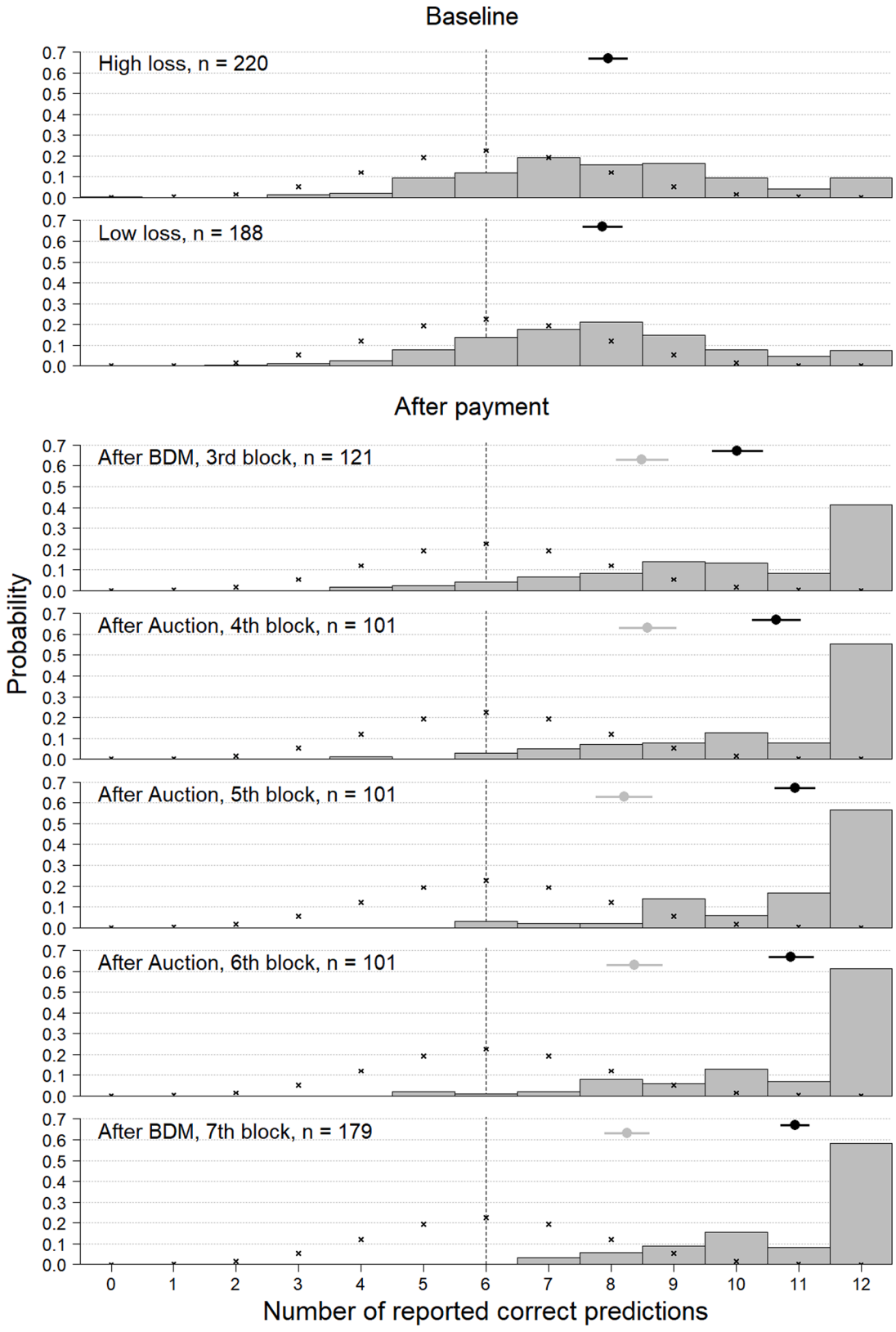

Fig. 2. The distribution of the number of reported correct predictions per round. The figure shows the distribution of the number of reported correct predictions in the baseline measure of cheating (i.e., in the cheating-enabling [AFTER] version of the task in one of the first two rounds) separately for the two loss conditions and for participants who played the AFTER version of the task in later rounds after payment. Observed means and their 95% confidence intervals are also displayed in black for a given round and in grey for the same participants in the baseline. The crosses show the binomial distribution expected if participants reported their predictions honestly.

Table 3
The overall model, including the variables from pre-registered analyses. The numbers in parentheses represent 95% confidence intervals for the estimates. All predictors were centered before analysis. Random intercepts and random slopes for BDM and round were included for participants.

	Willingness to pay	
Predictors	*Estimates*	*p*
(Intercept)	124.89 (118.16 – 131.62)	**<0.001**
Baseline cheating	11.66 (8.54 – 14.77)	**<0.001**
High loss	-9.87 (-23.10 – 3.36)	0.144
BDM	-21.79 (-27.24 – -16.34)	**<0.001**
Prosociality	2.92 (-7.26 – 13.11)	0.574
Round	12.70 (10.54 – 14.87)	**<0.001**
Information	3.39 (-9.89 – 16.67)	0.617
Baseline * High loss	5.39 (-0.75 – 11.53)	0.085
BDM * Prosociality	-3.52 (-11.81 – 4.78)	0.406
Baseline * BDM	-1.32 (-3.83 – 1.19)	0.304
Rounds 5 or 6 * Information	4.34 (-6.08 – 14.76)	0.414
Marginal R^2 / Conditional R^2	0.134 / 0.676	

higher number of correct predictions in the baseline measure of cheating were willing to bid more both in the high-loss condition, $t(218) = 6.08$, $p < .001$, $b = 16.1$, 95 % CI [10.9, 21.3], as well as low-loss condition, $t(186) = 2.54$, $p = .012$, $b = 7.4$, 95 % CI [1.7, 13.2].

3.7. Individual differences

Participants lower in honesty-humility were willing to pay more to play the AFTER version of the task (see Fig. 4).[3] While we expected that the association between honesty-humility and willingness to pay would be weaker for auction than for BDM, it was actually somewhat stronger when the willingness to pay in the third and fourth rounds were compared, $t(403.0) = -1.93$, $p = .055$, $b = -0.105$, 95 % CI [-0.211, 0.002], even though the interaction effect was not significant. Apart from honesty-humility and baseline cheating, only risk aversion significantly predicted the willingness to pay (see Fig. 4), albeit only in auction.[4] A pre-registered analysis further showed that participants who predicted a higher number of correct predictions of the group member who would win the auction also bid more in the auction in the fourth round, $t(404) = 6.52$, $p < .001$, $b = 12.9$, 95 % CI [9.0, 16.8].

3.8. Task decision-making and perception

When choosing the maximum fee in the BDM and bidding in the auction, participants, on average, mostly considered their expected monetary earnings and the ability to influence their size (see Table 4). Not surprisingly, the biggest difference in the considered factors between BDM and auction was in those that related to the behavior of other members of the group, which were considered more in the auction.

In open-ended questions asking about participants' decision-making in BDM and auction, they most often reported some calculation of their expected winnings (39.05 for BDM, 22.0 % for auction). In the auction, they also often considered the amount of money other players were willing to pay in their own offers (7.9 % for BDM, 24.7 % for auction). Some participants mentioned that they wanted to play honestly (12.3 %

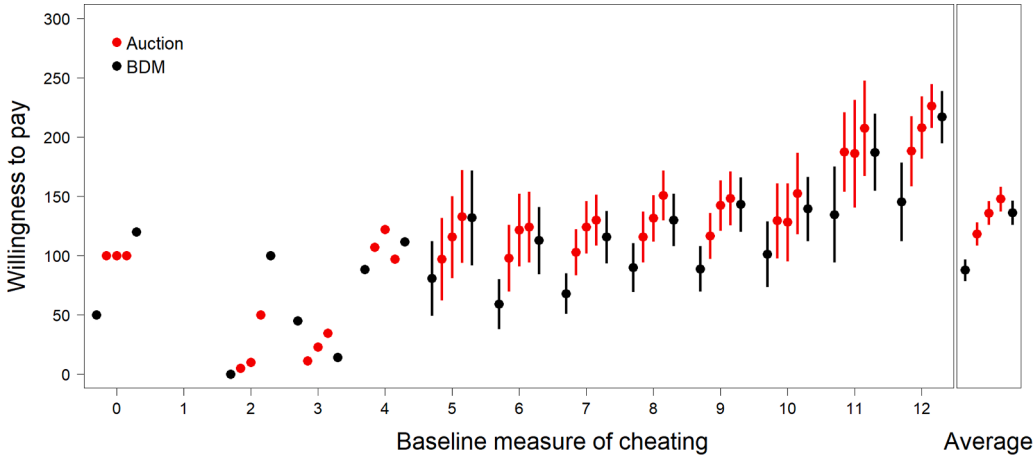

Fig. 3. The relationship of willingness to pay to play the cheating-enabling (AFTER) version of the task and the baseline measure of cheating. The points show the mean willingness to pay in the third to seventh rounds in order. The error bars show 95% confidence intervals of the means. The error bars are shown only when more than 10 participants reported a given number of correct predictions in the baseline measure of cheating.

.058, $d = -0.64$, 95 % CI [-1.30, 0.02], $M_{\text{low BDM, high auction}} = 6.56$, $M_{others} = 7.94$, suggesting that they really could have bid altruistically in the auction, even though the difference was not significant. However, only one participant who bid less than 10 CZK on average in BDM won any auction. The participant then reported all 12 correct predictions.

3.6. Association with baseline cheating

Participants who reported a higher number of correct predictions in the baseline measure of cheating were willing to pay more to play the AFTER version of the task both in the BDM procedure and in the auction (see Fig. 3).

Contrary to our expectation, the association between the baseline measure of cheating and the bid in the auction before the fourth round was more pronounced in the high-loss condition, $t(404) = 2.19$, $p = .029$, $b = 8.7$, 95 % CI [0.9, 16.5]. However, participants who reported a

[3] Pre-registered linear regression analysis shows significant effects for all rounds with the exception of the third round, $t(403) = -1.94$, $p = .053$, $b = -10.9$, 95% CI [-22.0, 0.1].

[4] Unlike correlational analysis shown in Figure 4, a linear regression using risk aversion and loss conditions as predictors shows a significant effect of risk aversion in all three rounds of auction, ps < .046 (see also Table 2).

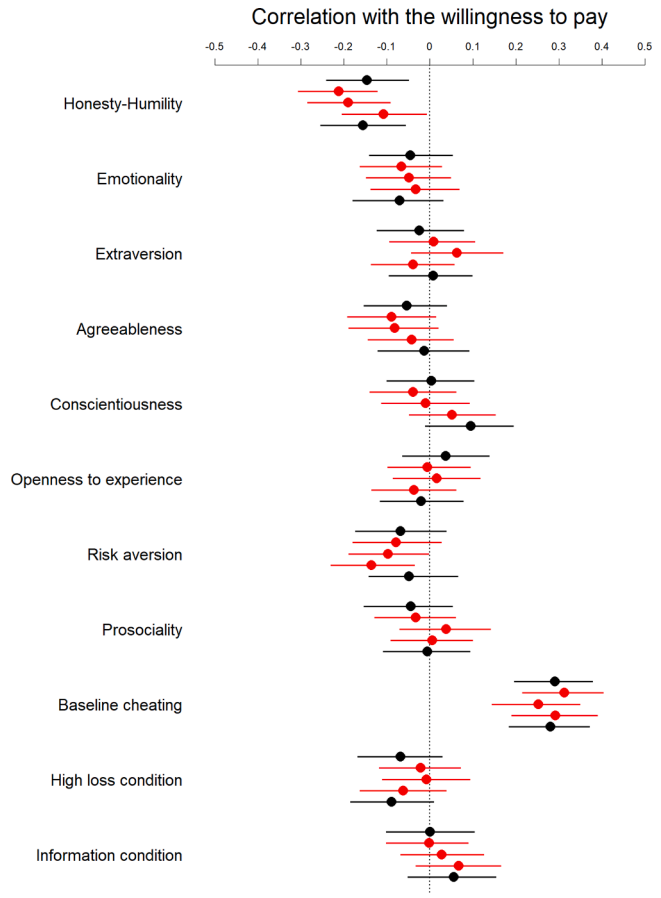

Fig. 4. The correlations of willingness to pay to play the cheating-enabling (AFTER) version of the task and measures of individual differences. The correlations with the two experimental manipulations are included. The points show the observed correlations between the willingness to pay in the third to seventh rounds (from top to bottom). The error bars show 95% confidence intervals of the correlations.

for BDM, 7.7 % for auction) or that their goal was to make money or maximize earnings (13.3 % for BDM, 7.4 % for auction). Out of the less frequent categories that were related to the goal of the study, it is notable that only a few participants reflected how other players could inflict monetary loss for charity (0.2 % for BDM, 1.2 % for auction) or mentioned that they did not want the charity to lose money (6.9 % for BDM, 2.7 % for auction).

Most of the participants (97%) stated that it occurred to them that it is possible to cheat in the task, but only a minority of participants stated that it occurred to them that it is possible to bid in the auction to prevent others from taking money from charities (24%) and to be able to misreport the predictions when they would otherwise cause loss for the charities (43%). A paired t-test showed that participants thought that they cared more about how much the charities would lose in the experiment than other members of the team did, $t(404) = -7.34$, $p < .001$, $d = -0.36$, 95% CI [-0.47, -0.26], $M_{others} = 2.02$, $M_{you} = 2.43$. Self-reported caring about the loss of charity negatively correlated with baseline cheating, $r(403) = -.12$, 95% CI [-.21, -.02], $p = .019$, and mean willingness to pay in BDM, $r(403) = -.20$, 95% CI [-.29, -.10], $p < .001$, and auction, $r(403) = -.20$, 95% CI [-.29, -.10], $p < .001$.

3.9. Reported correct predictions after payment

Paired t-tests showed that participants who played the AFTER version of the task in the third to seventh round reported a higher number of correct predictions than they did in the baseline measure of cheating, where they did not pay anything, $0.77 < ds < 1.21$, $ps < .001$, $1.52 < M_{\text{after payment}} - M_{baseline} < 2.74$.

The amount of money participants paid for playing the AFTER version did not significantly affect the number of correct predictions they reported when their bid was taken into account in the fourth round, $t(97) = 0.59$, $p = .555$, $b = 0.002$, 95 % CI [-0.005, 0.010], fifth round, $t(97) = 0.88$, $p = .380$, $b = 0.002$, 95% CI [-0.003, 0.008], or sixth round, $t(97) = 1.07$, $p = .286$, $b = 0.004$, 95 % CI [-0.003, 0.011]. Controlling for the willingness to pay for the AFTER version of the task, participants who actually paid more for playing the AFTER version of the task in BDM reported a higher number of correct predictions in the third round, $t(117) = 2.48$, $p = .015$, $b = 0.009$, 95 % CI [0.002, 0.015], but not in the seventh round, $t(175) = 0.88$, $p = .378$, $b = 0.002$, 95 % CI [-0.002, 0.005].

Among the objectives of this study was to assess how societal costs and information about others' dishonesty affect one's cheating. The manipulations of charity loss and availability of information did not significantly affect the number of reported correct predictions. Participants who won the auction in the high loss condition did not report a lower number of correct predictions in the fourth to sixth round than those in the low loss condition, $t(97.7) = 0.67$, $p = .504$, $b = 0.180$, 95 %

Table 4
Considered factors and perception of BDM and auction. The table shows descriptive statistics for answers to questions asking about their decision-making in the BDM and auction (first eleven rows), their perception of the two procedures (last four rows below the horizontal line), and their correlations with the baseline measure of cheating and average willingness to pay in the procedure. The last column shows the effect size for the difference in answers related to the two procedures. * $p < .05$, ** $p < .01$, *** $p < .001$.

Dimensions *Consideration when choosing the maximum fee / bidding in auction* *Evaluation of choosing the maximum fee / the auction*	BDM				Auction				Difference
	M_{BDM}	SD_{BDM}	$r_{baseline}$	r_{bid}	$M_{auction}$	$SD_{auction}$	$r_{baseline}$	r_{bid}	d
your expected monetary earnings	3.81	1.29	.25***	.36***	3.90	1.29	.31***	.47***	0.11*
the loss of money I may cause to charity	2.37	1.37	-.10*	-.19***	2.35	1.36	-.06	-.15**	-0.03
the loss of money that other members of the group may cause the charity	1.47	0.93	.01	-.09	1.69	1.09	-.02	-.06	0.28***
the amount of money that will be offered by other members of the group	2.88	1.46	.16**	.27***	3.40	1.35	.12*	.36***	0.33***
the number of correct predictions made by other group members in the AFTER version	2.24	1.34	.03	.06	2.50	1.38	-.02	.08	0.23***
how much fun it is to play both versions of the task	2.69	1.46	-.09	-.05	2.63	1.44	-.05	.05	-0.09
how easy it is to play both versions of the task	2.58	1.43	.03	.11*	2.49	1.43	.04	.13*	-0.14**
ability to influence the size of one's monetary earnings	3.63	1.33	.28***	.36***	3.63	1.32	.24***	.48***	-0.01
ability to influence the size of the loss of charity	2.25	1.30	-.01	-.11*	2.24	1.30	-.01	-.06	-0.02
aspiration to be a winner	2.33	1.44	.20***	.36***	2.39	1.47	.17***	.40***	0.07
aspiration to outperform others	2.13	1.40	.16**	.29***	2.26	1.44	.16**	.38***	0.15**
unfair	2.19	1.28	-.02	-.11*	1.94	1.13	-.03	-.09	-0.18***
risky	3.54	1.58	-.04	-.12*	3.71	1.50	-.01	-.01	0.11*
did not understand	1.90	1.10	.03	-.01	1.85	1.10	-.04	-.09	-0.05
complicated	2.13	1.21	-.04	.03	1.90	1.09	-.00	-.09	-0.23***

CI [-0.348, 0.708]. The information condition did not appreciably influence the number of reported correct predictions in the fifth and sixth rounds, $t(98.0) = -0.18$, $p = .856$, $b = -0.052$, 95 % CI [-0.611, 0.507].

4. Discussion and conclusion

Using a laboratory task, we examined cheating, the willingness to pay to be able to cheat, and their determinants. As expected, participants cheated in the task, and they cheated more when they had to pay to play the cheating-enabling version of the task. However, the extent of cheating did not appear to be strongly influenced by the fee the participant paid, which was partly determined by outside factors: a random number in BDM and others' bids in an auction.

Participants were willing to pay more for the cheating-enabling version of the task in later rounds, possibly learning the mechanisms of the auction and adjusting their bids to overbid others. The results suggest a calculated approach to seeking out opportunities for self-enrichment. The behavior might reflect an effective strategy among dishonest individuals to fully exploit the systemic vulnerabilities of a given incentive system. The willingness to pay was predicted by the number of reported correct predictions in a baseline measure of cheating and by participants' honesty-humility (Zettler & Hilbig, 2010), and, in the case of an auction, by risk-seeking (Steinel et al., 2022). The participants willing to pay for the cheating-enabling version of the task did so mostly for their own gain.

It did not appear that there were many participants who tried to prevent others from harming charities. Most of the participants reported that they had not even realized this option, even though they reported that they cared more about charities than others. The size of the loss of charities influenced neither cheating nor willingness to pay for the cheating-enabling version of the task. We thus contributed to the mixed results of how various levels of moral or monetary costs affect dishonesty (Charness et al., 2019; Gerlach et al., 2019). Information about the rewards of participants who won the auction also did not affect the willingness to pay of the others or their cheating in the task.

Our study highlights that relying on inherently honest individuals to occupy roles with opportunities for dishonesty is likely ineffective due to their scarcity and lack of motivation. In effect, if honest individuals are willing to pay a personal cost to enter environments where they can counteract dishonesty, then policies should be aimed at reducing these personal costs. By doing so, policies can encourage honest behavior and create a system where individual efforts to prevent dishonesty align with broader societal interests without requiring significant personal sacrifice. Moreover, economic research on the role of these altruistic individuals in the public sphere as agents of moral action is limited, although heroes, defined as individuals who perform extraordinary acts of moral virtue, often in the face of personal risk, have been posited as key figures in fostering a culture of honesty and integrity (Franco, Blau, & Zimbardo, 2011). Heroes may act as societal role models, demonstrating the potential for individual action to combat unethical behaviors in public settings. Heroic acts, ranging from whistleblowing to intervening in crimes, serve as powerful deterrents against dishonesty by showcasing the valor of standing up for ethical principles (Alford, 2002; Hersh, 2002).

Nevertheless, there are two caveats. First, in our study design, the individuals did not bear the direct cost of dishonest behavior. Therefore, the motivation to prevent dishonesty was based on altruistic considerations. Second, the experimental design did not allow participants to be motivated by the exemplary behavior of exceptional individuals, and the anonymous nature of the interactions did not motivate participants to serve as such exemplars themselves. The concept of heroism, as delineated by Franco et al. (2011), seems to be a compelling avenue for follow-up economics research, largely ignoring the societal impact of heroes (Cagé et al., 2023). Future studies may modify our task design so that participants see an example of an individual who would be willing to sacrifice resources to enter a cheating-enabling environment and not cheat.

Lastly, our findings confirm that dishonest individuals prefer environments conducive to cheating, echoing prior research (Gans-Morse, 2022; Gans-Morse et al., 2022; Houdek et al., 2021; Hanna & Wang, 2017). Cheaters were more inclined to invest in access to such environments and increased their cheating with associated costs, which corroborate earlier findings on the increase in cheating when individuals had to choose the cheating-enabling option, as opposed to scenarios where cheating was universally possible (Houdek et al., 2021). This suggests that interventions increasing the entry costs to specific occupations or environments (e.g., by credentials, certifications, required training) could have unintended consequences of increasing the overall level of corrupt behavior if they are not especially effective in increasing the proportion of honest individuals. Our second-price auction design also inherently introduced a competitive element: by outbidding others, a participant could secure exclusive access to the cheating-enabling version of the task (participants also reported that in this version of the task they were more motivated by an aspiration to outperform others). This structure resembles "winner-takes-all" settings, which prior research has linked to increased unethical behavior (Faravelli, Friesen, & Gangadharan, 2015). Indeed, we found that dishonest individuals were more motivated to bid higher amounts for this opportunity. Conversely, very few participants, only around 2.2%, placed higher bids despite having shown little interest in paying to be able to cheat under the BDM mechanism, suggesting these rare "heroic" individuals may have wanted to win and/or block potential cheaters.

Higher entrance costs may thus enhance, not deter, cheating behavior, challenging traditional deterrence theories. Additionally, the growing willingness to pay indicates a strategic pursuit of exploitative opportunities, highlighting the methodical exploitation of systemic weaknesses by dishonest individuals.

A limitation of our design is that we cannot observe each participant's motive for cheating or bidding, nor can we precisely identify who cheated on specific trials. While our post-experimental questionnaire provides some insights, it does not fully disentangle the underlying rationales; for example, some participants in our experiment also made decisions based on "how easy it is to play both versions of the task," and additional experimental confounds may exist (Frollová et al., 2021). Given that the negative effect of cheating on a charity occurred when a participant reported at least ten correct predictions, the design could have favored partial cheating rather than full cheating for anyone concerned with the outcome of the charity. Moreover, in rare cases, otherwise honest participants could have misreported their predictions *not* to incur a loss to the charity if their predictions were too accurate by chance.

Future studies could incorporate additional conditions to shed further light on how participants perceive the framing and procedures of the experimental situation (Alfonso-Costillo, Brañas-Garza, & López-Martín, 2022; Schindler & Pfattheicher, 2017) and how they balance monetary benefits (Charness et al., 2019) or broader social impacts when deciding whether to participate in cheating-enabling environments. Nonetheless, our findings show a clear pattern: cheaters tend to self-select into environments that facilitate dishonesty, supporting the idea that opportunities for dishonest gain attract those most inclined to exploit them.

CRediT authorship contribution statement

Štěpán Bahník: Writing – review & editing, Writing – original draft, Visualization, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Petr Houdek:** Writing – review & editing, Writing – original draft, Methodology, Conceptualization. **Marek Hudík:** Writing – review & editing, Visualization, Methodology, Conceptualization. **Nicolas Say:** Writing – review & editing, Methodology, Investigation, Conceptualization.

Acknowledgments and funding

The Czech Science Foundation Project No. 23-06989S supported this study. We would like to thank Martin Babušík, Richard Kaucký, Kristína Klovaničová, Kateřina Koláčná, Jan Kolín, and Lenka Valeriánová for their help with data collection.

Data availability

Data, materials, and analysis code can be found at: https://osf.io/t4cjv/.

References

Alfonso-Costillo, A., Brañas-Garza, P., & López-Martín, M. C. (2022). Does the die-under-the-cup device exaggerate cheating? *Economics Letters, 214*, Article 110424.
Alford, C. F. (2002). *Whistleblowers: Broken lives and organizational power*. Cornell University Press.
Ashton, M. C., & Lee, K. (2009). The HEXACO-60: A short measure of the major dimensions of personality. *Journal of Personality Assessment, 91*(4), 340–345.
Barfort, S., Harmon, N. A., Hjorth, F., & Olsen, A. L. (2019). Sustaining honesty in public service: The role of selection. *American Economic Journal: Economic Policy, 11*(4), 96–123.
Becker, G. S., & Stigler, G. J. (1974). Law enforcement, malfeasance, and the compensation of enforcers. *Journal of Legal Studies, 2*, 1–19.
Bicchieri, C., & Xiao, E. (2009). Do the right thing: but only if others do so. *Journal of Behavioral Decision Making, 22*(2), 191–208.
Brassiolo, P., Estrada, R., Fajardo, G., & Vargas, J. (2021). Self-Selection into corruption: Evidence from the lab. *Journal of Economic Behavior & Organization, 192*, 799–812.
Cagé, J., Dagorret, A., Grosjean, P., & Jha, S. (2023). Heroes and Villains: The effects of heroism on autocratic values and Nazi collaboration in France. *American Economic Review, 113*(7), 1888–1932.
Caprara, G. V., Steca, P., Zelli, A., & Capanna, C. (2005). A new scale for measuring adults' prosocialness. *European Journal of Psychological Assessment, 21*(2), 77–89.
Castillo, G., Choo, L., & Grimm, V. (2022). Are groups always more dishonest than individuals? The case of salient negative externalities. *Journal of Economic Behavior & Organization, 198*, 598–611.
Charness, G., Blanco-Jimenez, C., Ezquerra, L., & Rodriguez-Lara, I. (2019). Cheating, incentives, and money manipulation. *Experimental Economics, 22*(1), 155–177.
Cialdini, R., Li, Y. J., Samper, A., & Wellman, N. (2021). How bad apples promote bad barrels: Unethical leader behavior and the selective attrition effect. *Journal of Business Ethics, 168*(4), 861–880.
Cohn, A., Fehr, E., & Maréchal, M. A. (2014). Business culture and dishonesty in the banking industry. *Nature, 516*(7529), 86–89.
Dimant, E. (2019). Contagion of pro- and anti-social behavior among peers and the role of social proximity. *Journal of Economic Psychology, 73*, 66–88.
Di Tella, R., & Schargrodsky, E. (2003). The role of wages and auditing during a crackdown on corruption in the city of Buenos Aires. *Journal of Law and Economics, 46*(1), 269–292.
Egan, M., Matvos, G., & Seru, A. (2019). The market for financial adviser misconduct. *Journal of Political Economy, 127*(1), 233–295.
Faravelli, M., Friesen, L., & Gangadharan, L. (2015). Selection, tournaments, and dishonesty. *Journal of Economic Behavior & Organization, 110*, 160–175.
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.
Franco, Z. E., Blau, K., & Zimbardo, P. G. (2011). Heroism: A conceptual analysis and differentiation between heroic action and altruism. *Review of General Psychology, 15*(2), 99–113.
Frollová, N., Houdek, P., & Vranka, M. (2021). A qualitative study of perception of a dishonesty experiment. *Journal of Economic Methodology, 28*(3), 274–290.
Gächter, S., & Schulz, J. F. (2016). Intrinsic honesty and the prevalence of rule violations across societies. *Nature, 531*(7595), 496–499.
Gaines, B. J., & Kuklinski, J. H. (2011). Experimental estimation of heterogeneous treatment effects related to self-selection. *American Journal of Political Science, 55*(3), 724–736.
Gans-Morse, J. (2022). Self-Selection into corrupt judiciaries. *The Journal of Law, Economics, and Organization, 38*(2), 386–421.
Gans-Morse, J., Kalgin, A., Klimenko, A., Vorobyev, D., & Yakovlev, A. (2021). Self-Selection into public service when corruption is widespread: The anomalous Russian case. *Comparative Political Studies, 54*(6), 1086–1128.
Gans-Morse, J., Kalgin, A., Klimenko, A., Vorobyev, D., & Yakovlev, A. (2022). Public service motivation as a predictor of corruption, dishonesty, and altruism. *Journal of Public Administration Research and Theory, 32*(2), 287–309.
Gerlach, P., Teodorescu, K., & Hertwig, R. (2019). The truth about lies: A meta-analysis on dishonest behavior. *Psychological Bulletin, 145*(1), 1–44.
Gorodnichenko, Y., & Peter, K. S. (2007). Public sector pay and corruption: Measuring bribery from micro data. *Journal of Public Economics, 91*(5-6), 963–991.
Gulino, G., & Masera, F. (2023). Contagious dishonesty: Corruption scandals and supermarket theft. *American Economic Journal: Applied Economics, 15*(4), 218–251.
Hanna, R., & Wang, S. Y. (2017). Dishonesty and selection into public service: Evidence from India. *American Economic Journal: Economic Policy, 9*(3), 262–290.
Hersh, M. A. (2002). Whistleblowers—Heroes or traitors?: Individual and collective responsibility for ethical behaviour. *Annual Reviews in Control, 26*(2), 243–262.
Houdek, P., & Bahník, Š. (2025). *When Honesty Checks-out: Willful Ignorance and the Persistence of Unethical Environments*. Mimeo.
Houdek, P., Bahník, Š., Hudík, M., & Vranka, M. A. (2021). Selection effects on dishonest behavior. *Judgment and Decision Making, 16*(2), 238–266.
Huber, C., Litsios, C., Nieper, A., & Promann, T. (2023). On social norms and observability in (dis) honest behavior. *Journal of Economic Behavior & Organization, 212*, 1086–1099.
Jiang, T. (2013). Cheating in mind games: The subtlety of rules matters. *Journal of Economic Behavior & Organization, 93*, 328–336.
Keizer, K., Lindenberg, S., & Steg, L. (2008). The spreading of disorder. *Science, 322*(5908), 1681–1685.
Kolstad, I., & Wiig, A. (2009). Is transparency the key to reducing corruption in resource-rich countries? *World Development, 37*(3), 521–532.
Leib, M., Köbis, N., Soraperra, I., Weisel, O., & Shalvi, S. (2021). Collaborative dishonesty: A meta-analytic review. *Psychological Bulletin, 147*(12), 1241–1268.
Lewis, G. B., & Frank, S. A. (2002). Who wants to work for the government? *Public Administration Review, 62*(4), 395–404.
Lilleholt, L., Schild, C., & Zettler, I. (2020). Not all computerized cheating tasks are equal: A comparison of computerized and non-computerized versions of a cheating task. *Journal of Economic Psychology, 78*, Article 102270.
Lindstedt, C., & Naurin, D. (2010). Transparency is not enough: Making transparency effective in reducing corruption. *International Political Science Review, 31*(3), 301–322.
Parra, D. (2024). Eliciting dishonesty in online experiments: The observed vs. mind cheating game. *Journal of Economic Psychology, 102*, Article 102715.
Perry, J. L., & Hondeghem, A. (2008). Building theory and empirical evidence about public service motivation. *International Public Management Journal, 11*(1), 3–12.
Saltzstein, A. L., Ting, Y., & Saltzstein, G. H. (2001). Work-family balance and job satisfaction: The impact of family-friendly policies on attitudes of federal government employees. *Public Administration Review, 61*(4), 452–467.
Schindler, S., & Pfattheicher, S. (2017). The frame of the game: Loss-framing increases dishonest behavior. *Journal of Experimental Social Psychology, 69*, 172–177.
Shapiro, C., & Stiglitz, J. E. (1984). Equilibrium unemployment as a worker discipline device. *American Economic Review, 74*(3), 433–444.
Steinel, W., Valtcheva, K., Gross, J., Celse, J., Max, S., & Shalvi, S. (2022). (Dis)honesty in the face of uncertain gains or losses. *Journal of Economic Psychology, 90*, Article 102487.
Teubner, T., Adam, M., & Niemeyer, C. (2015). Measuring risk preferences in field experiments: Proposition of a simplified task. *Economics Bulletin, 35*(3), 1510–1517.
Van Rijckeghem, C., & Weder, B. (2001). Bureaucratic corruption and the rate of temptation: do wages in the civil service affect corruption, and by how much? *Journal of Development Economics, 65*(2), 307–331.
Zettler, I., & Hilbig, B. E. (2010). Honesty-humility and a person-situation interaction at work. *European Journal of Personality, 24*(7), 569–582.