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# Experimental Insights into Small-Scale Dishonesty: Contextual and Incentive-Driven Dynamics

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**Abstract:** This research investigates the psychological and contextual factors influencing small-scale dis-honesty, with a focus on the role of incentives, perceived monitoring, and social contexts. Using a semi-field experimental design, the first experiment examined the effects of external incentives and monitoring among community residents, while the second explored the interplay between social reporting contexts and reward structures among university students. The findings reveal that perceived monitoring reduces dishonesty, though not entirely, and that financial rewards increase dishonest behavior depending on individual variability. Moreover, public reporting tends to reduce dishonesty under high incentives, while private reporting is associated with in-creased dishonest behavior in certain contexts. However, this effect may vary depending on specific regulatory environments and individual differences. These results highlight the complex interaction between personal motivations and contextual factors, suggesting that visibility and accountability play crucial roles in shaping ethical decision-making. This study contributes to behavioral economics by integrating psychological constructs with broader situational influences, providing insights for reducing dishonesty in policy and organizational contexts.

**Keywords:** behavioral economics; small-scale dishonesty; ethical decision-making

## 1. Introduction

Small-scale dishonesty refers to minor unethical behaviors, including exaggerating one's achievements or engaging in acts of cheating. These actions, though seemingly trivial, could erode societal trust and economic efficiency over time. Behavioral economics challenges traditional economic theories, which often assume rational, self-interested decision-making, by highlighting the complex psychological underpinnings of dishonest behaviors. Prior research demonstrates that individuals frequently balance personal gain with the maintenance of a moral self-image, employing rationalizations to justify unethical actions [1]. Similarly, mechanisms like moral flexibility and cognitive dissonance enable individuals to engage in dishonest behavior while preserving their self-concept as ethical [2]. These findings suggest that dishonesty arises from an interplay of internal psychological mechanisms and external factors, such as incentives and social norms.

Building on these theoretical perspectives, this study examines the mechanisms that drive small-scale dishonesty and the contextual factors that shape its manifestation. Specifically, it investigates how external incentives, perceived monitoring, and social contexts influence dishonest behavior. By employing a semi-field experimental design in both

community and university settings, the study balances ecological validity with methodological rigor. This interdisciplinary approach seeks to bridge gaps in existing literature by integrating individual psychological constructs with broader situational influences. Ultimately, the research aims to inform interventions that mitigate unethical behavior in diverse contexts, thereby contributing to theoretical advancements and practical applications in behavioral economics and organizational policy.

## 2. Literature Review

Research on dishonesty spans multiple disciplines, offering diverse theoretical perspectives that shed light on individual and group unethical behavior. Traditional economic theories, such as Becker's rational choice model, conceptualize dishonesty as a calculated decision where individuals weigh potential rewards against risks. While this model has been influential, it presumes fully rational decision-making and overlooks the psychological complexities influencing unethical behavior, particularly in low-stakes or socially nuanced contexts [3].

Behavioral economics critiques the rational choice theory, focusing on psychological factors influencing dishonest behavior. Ariely introduced the concept of moral balancing, whereby individuals cheat just enough to gain benefits while preserving their moral self-image [2]. Similarly, the theory of self-concept maintenance suggests that individuals experience cognitive dissonance when their actions conflict with their moral beliefs, prompting rationalizations or minor ethical violations that align with self-perceptions of integrity. These theories deepen our understanding by highlighting internal mechanisms, rather than external incentives, as key drivers of dishonesty. However, they tend to prioritize individual cognition and emotions, often neglecting how these internal mechanisms interact with external social and situational factors.

Social and situational influences are critical to understanding dishonesty, yet they remain underexplored in traditional behavioral frameworks. Gino, Ayal, and Ariely demonstrated the "contagion effect", where observing dishonest acts by others increases one's likelihood of engaging in similar behavior [2]. Cialdini further emphasized the role of contextual factors, such as anonymity or perceived consequences, in shaping ethical decision-making. However, much of this research has been confined to high-stakes settings, leaving small-scale dishonesty — a ubiquitous phenomenon in everyday life—relatively underexplored. Moreover, existing studies often examine individual or group behaviors in isolation, failing to address the interplay between the two [4].

The recent study by Castillo, Choo, and Grimm addresses some of these gaps by investigating group versus individual dishonesty under varying conditions of moral accountability [5]. Using an adapted die-rolling paradigm, they challenge the prevailing assumption that groups are inherently more dishonest than individuals. Their findings reveal that groups display reduced dishonesty when unethical actions explicitly harm a third party, such as a charity. This contrasts with earlier studies, such as Kocher, Schudy, and Scanting, which consistently observed greater dishonesty in group settings [6]. Castillo et al. attribute their findings to the salience of negative externalities, suggesting that moral accountability reduces dishonesty in groups by promoting collective responsibility [5]. These insights complicate traditional narratives, indicating that group dishonesty is context-sensitive rather than universally higher.

Despite these contributions, several critical gaps remain. Firstly, while Castillo et al. emphasize negative externalities, their study does not fully disentangle the psychological mechanisms driving reduced dishonesty in groups [5]. For instance, it remains unclear whether reduced dishonesty results from heightened moral awareness, fear of judgment, or diminished coordination among dishonest group members. Second, the cross-cultural applicability of these findings warrants further investigation, as moral accountability and social norms vary across societies. Lastly, while the study integrates individual and group

dynamics, it does not sufficiently address how these dynamics evolve over time or in repeated interactions.

This study builds on the foundational work of behavioral economics and psychology to explore the psychological and situational factors underlying small-scale dishonesty. By employing a semi-field experimental design, it aims to bridge theoretical divides and offer practical insights into mitigating unethical behavior [7]. Understanding how individuals and groups rationalize dishonest actions, and how these processes are influenced by situational factors, is essential for designing effective interventions in policy and organizational contexts.

## 3. Methodology

### *3.1. Experiment 1: Effects of Incentives and Monitoring on Dishonesty*

The experiment 1 aimed to examine the effects of external incentives and perceived monitoring on dishonest behavior. Sixty participants were randomly selected from a community in a western region of China to ensure diversity in age, gender, and occupation. The experiment was conducted in a community activity center, which provided a familiar environment that also facilitated natural interactions, while still maintaining the necessary experimental control. Each participant was provided with an electronic six-sided die that displayed random outcomes between 1 and 6. The device recorded the actual result of each roll, allowing for subsequent verification and cross-checking of participants' reported outcomes [8]. Participants were instructed to roll the die once and record the outcome. To create an incentive for dishonesty, participants were informed that reporting a number greater than 3 (4, 5, or 6) would earn them a ¥5 shopping voucher. Participants were randomly assigned to one of three experimental conditions. In the control group, participants received no additional instructions beyond completing the task. In the reward group, participants were explicitly told that only results greater than 3 would qualify for the voucher, reinforcing the connection between truthful reporting and potential rewards. In the monitoring group, participants were informed that their rolls might be observed by an invisible camera, although no actual monitoring was implemented. This condition was designed to evoke a sense of being watched, potentially reducing dishonesty through perceived surveillance [9].

At the end of the experiment, the recorded outcomes on the electronic dice were compared to participants' reported results, enabling accurate identification of dishonest reporting. Statistical analysis was conducted using chi-square tests to evaluate the relationship between experimental conditions and dishonest reporting frequency. Descriptive statistics were also used to summarize patterns of dishonesty across the groups, providing insight into the influence of external incentives and perceived monitoring on ethical decision-making [10].

### *3.2. Experiment 2: Effects of Social Contexts and Incentive Structures on Dishonesty*

The experiment 2 examined the effects of social contexts and incentive structures on dishonest behavior among university students. Twenty students from different academic disciplines participated. The study was conducted in a controlled laboratory, simulating both public and private reporting scenarios. Participants rolled an electronic die five times and recorded the total score. Their monetary reward was based on the reported sum. The experiment used a 2 × 2 factorial design (See Figure 1) with two independent variables: social contexts (public vs. private reporting) and incentive structures (high vs. low rewards). In the public condition, participants announced their results aloud in the presence of peers. In the private condition, results were recorded individually without observation. Participants in the high-reward group were told that a total score greater than 15 would earn them a ¥100 shopping voucher, while those in the low-reward group were told they would receive a ¥5 voucher for the same score. This setup created a clear differentiation in potential gains between the incentive conditions [11].

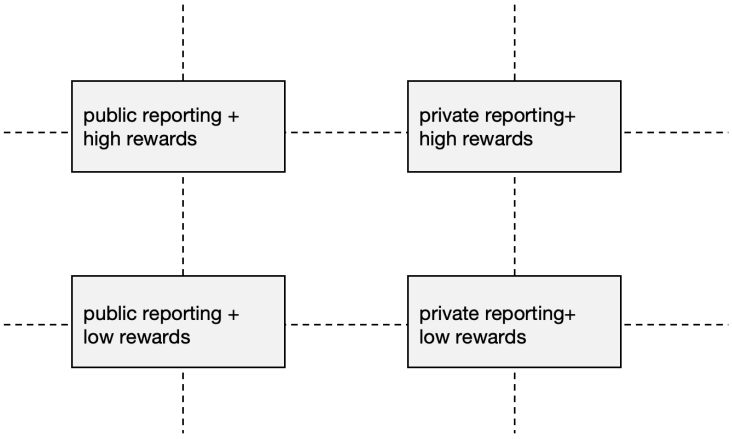


**Figure 1.** 2 × 2 Factorial Design for Experiment 2.

The electronic dice recorded the actual outcomes of each roll, allowing a direct comparison between the reported and actual scores to identify dishonest behavior. To analyze the data, chi-square tests were performed to examine the relationship between experimental conditions and honesty. Kruskal-Wallis H tests were used to compare the differences in reported sums across the four experimental groups, while Mann-Whitney U tests were applied for pairwise comparisons. Descriptive statistics were calculated to summarize the rates of dishonesty in each condition [12]. These methods provided a clear understanding of how social contexts and incentive structures affected participants' decisions to report truthfully or dishonestly.

Furthermore, ethical considerations are integral to the study's design. All participants provide informed consent and are assured of anonymity and the voluntary nature of their participation. To ensure transparency, participants are debriefed after the experiments, during which the true purpose of the study is disclosed. Ethical approval is obtained from the appropriate institutional review board to confirm that the study adheres to ethical research standards [13].

By employing a controlled experimental design in semi-field settings, this study achieves a balance between maintaining control over key variables and reflecting the complexities of real-world decision-making. This approach ensures that the findings contribute both theoretical insights and practical applications in understanding small-scale dishonesty.

## 4. Results and Findings

### *4.1. Experiment 1: Effects of Incentives and Monitoring on Dishonesty*

Descriptive statistics revealed differences across groups. The control group had a mean reported value of 3.10, identical to the mean actual value (3.10), showing truthful reporting. In the reward group, the mean reported value was 3.80, exceeding the actual value of 3.00, indicating that rewards led to inflated reporting. The monitoring group had the highest mean reported value at 4.05, slightly above the actual value of 3.65, suggesting that monitoring reduced dishonesty but did not fully eliminate it. Variability was highest in the reward group, showing inconsistent dishonest behavior, while the monitoring group showed less variability, indicating more uniform reporting under oversight [14]. The control group showed consistent truthful behavior with equal variability in reported and actual values (See Table 1 & Figure 2).

**Table 1.** Descriptive Statistics for Experiment 1.

| Category | mean_reported | std_reported | mean_actual | std_actual |
|---|---|---|---|---|
| control group | 3.10 | 1.68 | 3.10 | 1.68 |
| monitoring group | 4.05 | 1.39 | 3.65 | 1.46 |
| reward group | 3.80 | 1.67 | 3.00 | 1.86 |

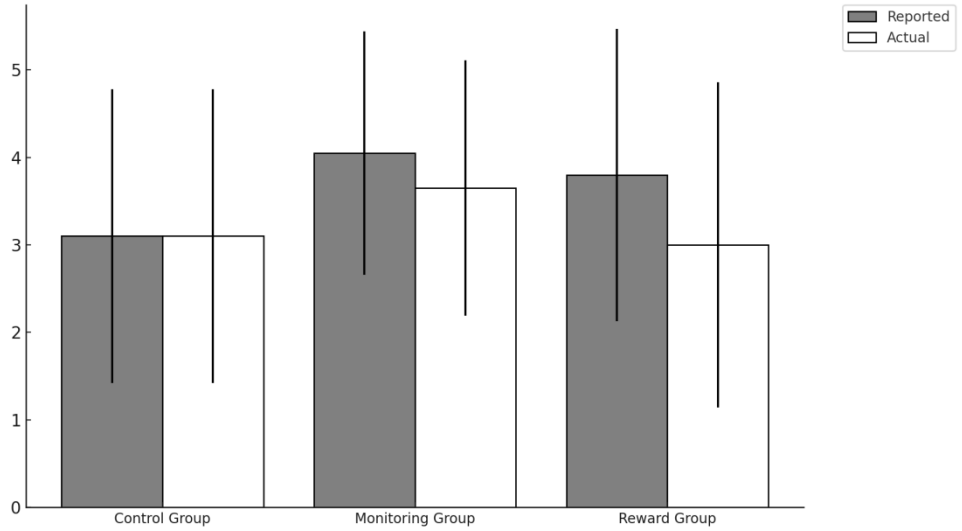


**Figure 2.** Comparison of Reported and Actual Values for Experiment 1.

A chi-square test examined the relationship between group conditions and honesty, defined as whether reported values matched actual values (Table 2). The test revealed a significant association ($\chi^2 = 6.652, p = 0.036$), indicating that group conditions significantly influenced honestyal. A crosstabulation analysis further showed that the reward group had the highest proportion of dishonest reports, while the control group demonstrated the most honest behavior. The monitoring group exhibited a more balanced pattern, with levels of honesty comparable to the control group.

**Table 2.** Chi Square Results for Experiment 1.

| Test | Value | df | $p$-value |
|---|---|---|---|
| Pearson Chi-Square | 6.652 | 2 | 0.036 |
| Likelihood Ratio | 6.796 | 2 | 0.033 |
| Linear-by-Linear Association | 6.407 | 1 | 0.011 |
| Number of Valid Cases | 60 | | |

a.0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.67.

The effect size, calculated using Cramér's $V$ ($V = 0.335$), indicated a moderate association between experimental conditions and dishonesty. Post hoc comparisons revealed that the reward group exhibited a significantly higher frequency of dishonest behavior than the control and monitoring groups.

Further analysis using a Kruskal-Wallis H test on reported sums ($H = 3.76, p = 0.15$ ) showed no statistically significant differences in median reported values across groups. Although the reward group demonstrated a higher median reported value, this result aligns with the chi-square analysis, suggesting that the reward condition may promote dishonesty to a moderate degree.

### *4.2. Experiment 2: Incentives, Social Contexts, and Dishonesty*

Descriptive statistics from Experiment 2 revealed notable differences in reporting patterns across the four experimental groups (high incentive open, high incentive private,

low incentive open, and low incentive private). The high incentive private group had a mean reported sum of 17.2, exceeding the actual sum of 15.0, indicating that participants in this group were more likely to inflate their reported values. By contrast, the high incentive open group had a mean reported sum of 15.8, which matched perfectly with the actual sum of 15.8, suggesting truthful reporting under open conditions even with high incentives. Similarly, the low incentive open group and low incentive private group exhibited consistent reporting, with both the mean reported and actual sums being 17.6 and 16.4, respectively. These findings suggest that privacy under high incentives is more likely to encourage dishonest reporting, while open conditions and low incentives tend to promote honesty, though this relationship may vary depending on specific contexts (See Table 3 & Figure 3).

**Table 3.** Descriptive Statistics for Experiment 2.

| Category | mean_reported | std_reported | mean_actual | std_actual |
|---|---|---|---|---|
| High incentive open group | 15.80 | 6.18 | 15.80 | 6.18 |
| High incentive private group | 17.20 | 2.59 | 15.00 | 2.45 |
| Low incentive open group | 17.60 | 1.14 | 17.60 | 1.14 |
| Low incentive private group | 16.40 | 2.88 | 16.40 | 2.88 |

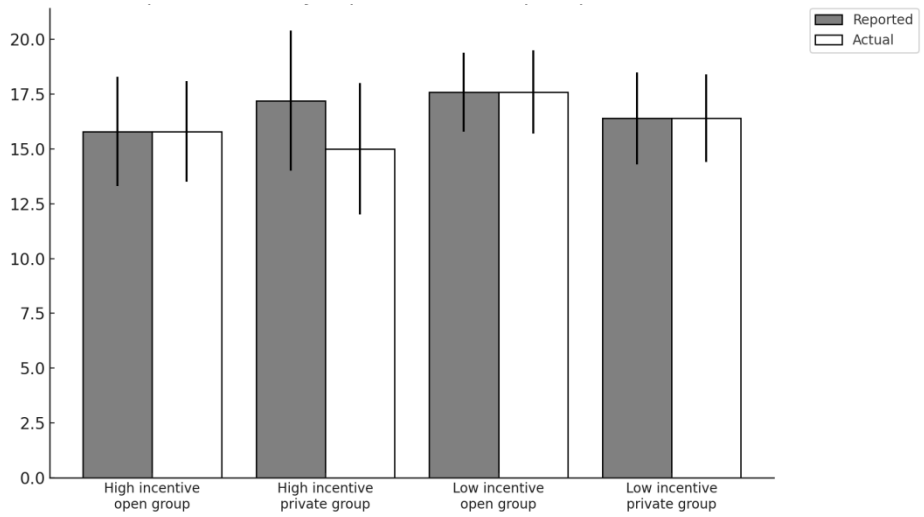


**Figure 3.** Comparison of Reported and Actual Values for experiment 2.

A chi-square test confirmed a significant association between group conditions and honesty ($\chi^2 = 6.72, p = 0.035$), indicating that experimental conditions influenced dishonest behavior. The likelihood ratio test ($p$ = 0.008) further supported this conclusion, while the linear-by-linear association test ($p$ = 0.092) suggested no clear linear trend across groups (See Table 4).

**Table 4.** Chi Square Results for Experiment 2.

| Test | Value | df | $p$-value |
|---|---|---|---|
| Pearson Chi-Square | 6.72 | 2 | 0.035 |
| Likelihood Ratio | 9.617 | 2 | 0.008 |
| Linear-by-Linear Association | 2.832 | 1 | 0.092 |
| Number of Valid Cases | 60 | | |

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 3.33.

Despite these results, further analyses using the Kruskal-Wallis H test ($H = 1.14, p = 0.767$ ), and the Mann-Whitney U test ($U = 11.5, p = 0.917$) found no significant differences in reported sums across groups, though the private condition under high incentives indicated a slight tendency toward dishonesty (effect size = 0.460).

## 5. Discussion

This research provides important insights into how incentives, monitoring, and social contexts interact to influence dishonest behavior, contributing to both theoretical and practical understanding. The results of Experiment 1 showed that perceived monitoring reduced dishonest behavior but did not eliminate it entirely, reflecting the nuanced role of oversight in ethical decision-making. These findings align with prior research that emphasizes the psychological impact of perceived surveillance on moral behavior, as suggested by Cialdini and Gino et al [2,4]. At the same time, the reward condition revealed increased dishonesty compared to the control group, supporting Leisge, Bucciol, and Ariely's argument that financial incentives often promote self-serving behaviors [2,15,16]. However, the variability in dishonest behavior within the reward group suggests that individuals do not uniformly act out of self-interest, indicating that personal and situational factors may moderate responses to incentives.

Experiment 2 further highlighted the complex interplay between social contexts and incentive structures. Public reporting under high rewards led to more honest behavior compared to private reporting under similar conditions, suggesting that social accountability and peer observation act as significant deterrents to dishonesty. These findings extend the work of Castillo, Choo, and Grimm, who demonstrated that group dynamics and moral accountability can reduce dishonest behavior when the consequences are visible to others [5]. However, the results also suggest that high incentives in private settings may encourage greater dishonesty, highlighting the role of visibility and accountability in reducing unethical behavior. This interplay underscores the need to consider the broader social and contextual factors that shape individual decision-making.

By integrating individual psychological mechanisms with situational influences, this study offers a deeper understanding of dishonesty. It challenges the simplistic assumption that higher rewards always lead to greater dishonesty, instead showing that the effects of incentives depend on factors such as visibility and peer accountability. These findings carry practical implications for organizations and policymakers. For instance, designing transparent reward systems that emphasize public recognition and accountability could reduce dishonest practices in workplaces and public institutions. Moreover, the study reinforces the importance of balancing incentives with mechanisms that promote ethical decision-making, particularly in environments where oversight is limited.

Despite its contributions, the study has several limitations that warrant attention. The relatively small sample size in both experiments may limit the generalizability of the findings to broader populations, highlighting the need for replication studies with larger and more diverse samples. Additionally, the controlled experimental settings, while offering methodological rigor, may not fully capture the complexities of real-world dishonesty. Field experiments could provide further insights into how these dynamics operate in naturalistic environments, such as workplaces or public spaces. Moreover, as the study focused primarily on short-term dishonest behavior, future longitudinal research could explore how repeated exposure to incentives and monitoring influences ethical decision-making over time. Cross-cultural comparisons would also be valuable, as social norms and moral accountability vary significantly across societies, potentially affecting how individuals respond to incentives and oversight.

## 6. Conclusion

In conclusion, this study highlights the intricate ways in which incentives, monitoring, and social contexts shape dishonest behavior. It emphasizes that dishonesty is not

solely a function of individual motivations but is deeply influenced by the broader environment in which decisions are made. By integrating insights from behavioral economics and psychology, the research provides a comprehensive framework for understanding dishonesty and offers practical strategies for reducing unethical behavior. These findings pave the way for future studies to explore the complexities of dishonesty in diverse contexts, ultimately informing policies and interventions aimed at fostering ethical decision-making.

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