

The role of social context in experimental studies on dishonesty

Abstract

We all have struggled with dishonesty—that uncomfortable feeling when we are the dishonest and the indignation when we are on the receiving end. In addition to emotional stress, dishonesty often has serious consequences: dishonesty in organizations not only causes material and reputational damages, but can also undermine institutions. The emotional charge and institutional consequences of dishonesty make it one of the perennial problems humans struggle with, and presumably that is why researchers have always been interested in the concept of dishonesty. However, a quick look at recent experimental literature on dishonesty shows that these social dimensions are often distorted in or missing from the experimental contexts. This paper examines the major experimental paradigms of dishonesty research and discusses the findings in light of their specific social contexts as well as methodological implications.

1. Introduction

Dishonesty is an emotionally-charged word. Accusations of dishonesty are often considered as powerful weapons by the accusing and serious insults by the accused. Across cultures, people are imbued with values against dishonesty since childhood, so much so that most of us do not need people to call out our dishonest behavior—just being aware of our own dishonesty often brings significant discomfort: fear of getting caught, guilt, and shame. Despite emotional costs, people still engage in all kinds of dishonest behavior big and small because cheating or breaking rules can bring significant material and/or psychological payoffs. Many of the high-profile cases of dishonesty in organizations can be told as stories of individuals or groups of people succumbing to the temptation of money or power. Unfortunately, misconducts at this level not only often result in substantial financial harm to others (Dyck, Morse, & Zingales, 2014) but they also undermine rules and norms, thereby corrupting institutions and compromising their long-term effectiveness (Gächter and Schulz, 2016; Shalvi, 2016; Stapel, 2016).

The emotional charge and harm to others underpin the social nature of dishonesty: it makes no sense to talk about dishonesty in a society made of only one person—she could make all kinds of false statements and no one is there to call out her false statements; no one will be hurt so there is no responsibility, guilt, or shame. Put differently, dishonesty matters when it can potentially cause social harm, and that is why people feel uneasy and want to conceal dishonest behaviors. Preserving the social nature of dishonesty in the lab, however, poses a significant challenge to experimentalists because examining dishonesty in the lab requires inducing this covert behavior while making it transparent—a very fine line to walk on.

Although researchers have come up with various experiment designs to tackle this challenge, the extent to which these designs preserve the social nature of dishonesty is an

issue that has not been explored. This article argues that dominant experimental paradigms of dishonesty research are susceptible to experimental artifacts that distort the social nature of dishonesty. The next section samples recent literature on dishonesty and identifies major experimental paradigms of dishonesty research. Taking a closer look, the three sections that follow analyze the social contexts of these paradigms and discuss their methodological implications.

2. Major experimental paradigms of dishonesty research

This section covers studies on dishonesty, lying and cheating since the experimental literature tends to treat them as synonyms (Gozli, 2019; Jacobsen, Fosgaard, & Pascual-Ezama, 2017; Köbis, Verschuere, Bereby-Meyer, Rand, & Shalvi, 2019). Based on the nature and procedures of the experimental tasks, we can divide methods for inducing and measuring dishonesty in the lab into four categories: performance-misreporting tasks, stochastic tasks, social tasks, and instructed intention tasks.

2.1 Performance misreporting tasks

Performance misreporting experiments involve effortful tasks with built-in incentives (usually performance-based monetary incentives) for participants to over-report their performance. A prime example of performance misreporting tasks is Mazar, Amir, and Ariely (2008), where performance refers to the number of matrix problems participants solve in a given amount of time. Each of those 3x4 matrices contains 12 three-digit numbers (e.g., 1.23), two of which add up to exactly 10, and the participants' task is to find those two numbers for each matrix. At timeout, participants report their performances and are paid accordingly. There are a few variants to this method (Gino, Ayal, & Ariely, 2009; Gino & Ariely, 2012). General knowledge questions are sometimes used in place of matrix questions, and the answer submission and payment procedures vary slightly. The most important commonality is that, with performance misreporting tasks, the induced level of dishonesty

depends on the verifiability of participants' reported performances, which vary with experimental conditions. For example, in Mazar et al. (2008) participants' answers are verified in the control condition so there is no chance for cheating. In contrast, in the treatment condition participants indicate their performance on a separate answer sheet and are instructed to put away their original test sheet for recycling, creating an opportunity to cheat.

In experiments based on performance misreporting tasks, participants report their performances anonymously, and researchers infer group-level dishonesty by comparing the performances between treatment and control groups. On the other hand, researchers also have the option of tracking individual-level dishonesty by linking individual worksheets to reported performances. This can be done in various ways: adding small print ID numbers to worksheets (Gino & Ariely, 2012), marking them with invisible ink (Vincent, Emich, & Goncalo, 2013), using a hidden camera to record and match worksheets to participants (Yaniv, Tobol, & Siniver, 2019).

2.2 Stochastic tasks

In contrast to performance misreporting tasks, stochastic tasks do not involve effort and effort-based achievement. Instead, participants only need to perform simple actions that generate random outcomes such as rolling a die (Fischbacher & Föllmi-Heusi, 2013) or flipping a coin (Buccioli & Piovesan, 2011). While these random variables have predictable distributions, dishonesty is incentivized by paying participants more for certain outcomes (e.g., \$1 if the die roll result is 1, \$2 for 2, and so on), thereby inducing deviation in reported outcomes from the natural distributions of the random variables. Of course, people will be concerned about whether their reported outcomes signal dishonesty, so anonymity is an important element in such tasks. To assure participants of their anonymity, stochastic tasks often include extra protection such as rolling the die in a cup to convince participants that misreporting cannot be detected.

The main appeal of stochastic tasks lies in its simplicity—a die roll or a coin flip takes almost no time and little administration effort is required. Although built-in anonymization precludes measuring honesty at the individual level, group-level dishonesty can be easily inferred by comparing the aggregate reported outcome to the expected distribution of the random variable and no control group is required. The die-roll experiment is also particularly popular among experimental economists (Gächter & Schulz, 2016; Hilbig & Thielmann, 2017; Rosenbaum, Billinger, & Stieglitz, 2014) because it does not require deception, which is banned from experimental economics (Jacobsen et al., 2017).

2.3 Social tasks

In their review, Jacobsen et al. (2017) define social tasks as “those that involve more than one person (not counting the experimenter), which means that either the pay-off to the individual depends on another person, or the task involves a social component that might influence behavior.” Gneezy’s sender-receiver game (2005) is the most prominent example in this category. In this game, participants are randomly paired and assigned the role of a sender or a receiver. Both parties are informed that the total monetary reward is split between the sender and receiver according to one of two distributions that either favor the sender or the receiver, but only the sender is informed of the two distributions and their labels (option A or option B), which are kept from the receiver. The sender’s task is to send a message to the receiver indicating which option is favorable to her, and the receiver makes the final decision on the option to be implemented. Gneezy shows empirically that most people expect the receiver to trust the sender’s message and choose the recommended option. This pattern gives the sender the opportunity to take advantage of her superior information by lying to the receiver, and dishonesty at the individual level can be measured by comparing the sender’s recommendation to the actual monetary distributions.

2.4 Instructed intention tasks

Cognitive psychologists are interested in the “lie effect”, the phenomenon that an untruthful answer usually comes with longer response time and lower accuracy (Gozli, 2019; Suchotzki, Verschuere, Van Bockstaele, BenShakhar, & Crombez, 2017; Verschuere, Köbis, Bereby-Meyer, Rand, & Shalvi, 2018). This effect is typically studied in the lab by instructing participants to lie, and the instructed intention task (Foerster, Wirth, Berghoefer, Kunde, & Pfister, 2019) is illustrative of how this works. In experiments based on instructed intention tasks, experimenters first obtain a number of facts about participants’ recent actions by either asking them to answer some factual questions (e.g. did you watch TV today?) or asking them to perform certain actions (e.g., sending an email). Following this fact-collection stage, participants are then instructed to either “tell the truth” or “lie” about those facts with yes/no answers. (That is, when instructed to “lie”, the participants have to change the answer from what they provided the first time or deny having performed the instructed action.) Participants’ error rate and response time, while participants enact these instructions, are taken to reflect the cognitive efforts required by the task. As such, increased error rates and response time for “lie” responses is interpreted as the extra cognitive effort required in lying.

Following the brief descriptions above, the next three sections discuss some observations about the social contexts of these experimental paradigms. The focus is on how dishonesty is operationalized in these studies and we ask if from the participants viewpoint what they see is really similar to what we mean by dishonesty in everyday language.

3. Dishonesty with and without deception

One issue emerging from the previous overview of major experimental paradigms is that dishonesty seems to mean different things in different studies. In this light, it is also interesting to note that published experimental papers rarely define dishonesty. A possible explanation for this is that dishonesty, despite its prevalence and significance in society, is

difficult to define in a way that can withstand serious logical inquisition (Lackey, 2013; Mahon, 2008; Meibauer, 2018).

Cognizant of this challenge, here we steer away from philosophical debates and begin with Coleman and Kay's prototypical lie (1981), where a person knowingly makes a false statement with the intention to deceive an addressee. Although Coleman and Kay focus on gradients along three dimensions (falsehood, the speaker's belief about the falsehood, and intention to deceive), for our purpose of comparing and contrasting experimental paradigms, we combine the first two conditions into one criterion "knowingly making a false statement" because no experimental studies on dishonesty are interested in people making a false statement without knowing it to be false. This results in two criteria: knowingly making a false statement and intentional deception. While all experimental paradigms examined in the previous section meet the first criterion, the instructed intention task do not meet the intentional deception criterion.

As the name "instructed intention task" suggests, in such experiments, participants do knowingly make a false statement, but they do so on the instruction of the experimenter rather than their own volition. In instructed intention experiments, there is no stake for the participants; they "lie" not for making gains or avoiding losses—unless we count participants' eagerness to impress the experimenter with their ability to follow instructions. Although this is a social factor, pleasing an experimenter is a completely different behavior from misrepresenting the state of affairs or hiding an undesirable fact.

Another issue is that many of these questions that can arise from such research methods (e.g., probability of choosing "lie" across groups or the time it takes to press a "yes" response untruthfully) are quite trivial, such as "did you go down a staircase?" The problem with this is that such activities may be too trivial to register and people may not be able to correctly recall the answer when suddenly asked about it. Perceiving the question as

trivial, some may just give a rushed answer and repeat the same answer when asked about it the second time around. When this is the case, the experimental task is reduced to a recall test of whether one answered yes or no the first time. Even if participants have no trouble recalling the correct answer, this kind of task is essentially a purely logical task of repeating or flipping a fact/statement, and while the results can inform us about the dominance of accessibility of the factual statement, it says nothing about the common-sense notion of lying—which invokes morality and has social consequences (Gozli, 2019).

Last, as instructed intention tasks usually measure dishonesty with responses to close-ended questions as opposed to open-ended questions, they often lack the richness of questions arising with respect to dishonest behaviors in everyday life. That is, the truth/lie dichotomy is quite clear-cut in experimental designs, overlooking the ambiguities of everyday scenarios and the option of making up alternative facts when responding to open-ended questions.

4. Simulating dishonesty in a lab

As dishonesty is by nature a covert behavior, it is hard to observe it without interfering with it. Attempts to achieve this dual goal in the lab can easily threaten the external validity of the experiment—measurement in the lab is usually achieved through participants' cooperation with experimental procedures, but just as in the case of instructed intention tasks, asking participants to behave dishonestly creates a social context totally different from what we mean by dishonesty. Through this lens, the biggest difference among major experimental paradigms appears to be how they address the difficult balance between inducing dishonesty and making the dishonest behavior observable. While performance misreporting tasks, stochastic tasks, and social tasks all induce dishonesty with monetary incentives, they provide participants with different levels of protection for their individual identity, which plays an important role in inducing dishonesty. Guaranteed anonymity is the standard practice for

protecting individual identity in the lab, but it may not be as straightforward as it seems at first glance.

Let us start with the widely used matrix problem task. Recall that this design enables detection of dishonesty at the group level by comparing the reported numbers of matrix problems solved in two conditions. Unlike the control condition where cheating is made impossible by verification, the recycle condition allows for cheating as explained in Mazar et al. (2008):

...at the end of the four minute matrix task, participants indicated the total number of correctly solved matrices on the answer sheet and then tore out the original test sheet from the booklet and placed it in their belongings (to recycle later), thus providing them with an opportunity to cheat (p. 636).

Since the original instructions are not published with the paper, we have to rely on this short description to reconstruct what the instructions for the recycle group may look like. This can introduce uncertainties, but one thing for sure is that for this treatment to be effective, people in the recycle group have to know *in advance* the exact answer submission and payment procedures. Specifically, before submitting their answers, participants must be informed that they will report the number of correct answers on an answer sheet separate from the test sheet, and that they need to tear the original test sheet from the booklet and “recycle it”. This can easily raise suspicion, as normally for a math task like this there is no need to bother with a separate answer sheet, not to mention tearing the original test sheet from the booklet for recycling. Although from the short description it is hard to know exactly how the recycling works and how elaborate the original instructions were, the great lengths the experimenter went to ensure anonymity is likely to accentuate the unnatural lab context and the social contract between the experimenter and the subjects (Gozli, 2017; Böhme, 2016). Adding the widely known fact that deception is commonly used in social psychology experiments, it is not implausible that some participants would start wondering or even figure out the purpose of the procedures.

With this design, Mazar et al. (2008) find that people do cheat—but only moderately. They explain this pattern with their proposed “self-concept maintenance theory”, which states that “people behave dishonestly enough to profit but honestly enough to delude themselves of their own integrity. A little bit of dishonesty gives a taste of profit without spoiling a positive self-view.” While this explanation is very plausible, we could also turn our attention to the experimental context and ask: if people are sensitive enough to calculate the right balance between self-concept and profit, why would they not be sensitive enough to notice that they are lab subjects under study in an unnatural situation? Would the fact that they are in a lab not make them more self-conscious and accentuate their self-concept? These possibilities are also consistent with their findings.

This kind of awkward questions are typical of experiments based on performance misreporting tasks. For example, in Gino and Ariely (2012, p.449), where the matrix task is followed by a knowledge quiz that also offer monetary incentives for performance, participants indicate their answers according to the following description:

The experimenter told them to circle their answers on their question sheet and explained that they would transfer their answers to a bubble sheet after finishing. When participants finished the quiz, the experimenter told them that, by mistake, she had photocopied bubble sheets that already had the correct answers lightly marked on them. She then asked the participants to use these pre-marked bubble sheets, recycle the test sheets with their original responses, and submit the bubble sheets for payment.

For a participant, this probably seems quite peculiar after the matrix task. First an experimenter brings the wrong bubbles sheets and tells participants that those pre-marked answers are the correct answers, and then they are asked to recycle the test sheets with their original responses. Peculiarity aside, from the point of view of participants, the experiment probably seems to be quite poorly executed for a study measuring their general knowledge. This, of course, can help people rationalize dishonest behavior, but we then need to take this context into consideration when interpreting the results.

As discussed in the previous section, stochastic tasks based on random events draw on natural probabilistic distribution of random events for detection of dishonesty. With a die and a cup, measurement can be done in a matter of minutes. Simplicity is the method's beauty but at the same time also its potential weakness. The physical and transient nature of the task and its separability from the reporting mechanism help participants infer that reported outcomes cannot easily be verified. However, exactly because the task is so simple and making money out of it is so easy that its purpose is rather suspicious, as admitted in the original paper (Fischbacher & Foellmi-Heusi, 2010, p. 529):

In order to make the experiment as plausible as possible, we told the subjects that the reason for rolling the die was to determine the payoff for filling in a questionnaire. It is clearly not very plausible to pay subjects differently for doing exactly the same task. Still, it is more plausible to let them roll the die in order to determine a payoff for doing something instead of just letting them roll the die and paying them without any explanation.

To what extent this cover story prevents potential suspicion is uncertain. The purpose of this simple experiment could seem transparent to some participants.¹ For participants who have guessed at the moral focus of the experiment, the experiment becomes more than just about dishonesty and it is also about what a subject ought to do in an experiment. If a participant's only goal in participating in the experiment is to make as much money as possible, her behavior will reflect only dishonesty. However, there could easily be other superordinate goals that allow for alternative subordinate goals and ambiguous interpretations (Gozli, 2017, 2019). A participant who thinks the researchers want to see dishonesty may reason that by cheating she not only makes money for herself but also helps the researchers. In this case, her cheating reflects both dishonesty and her desire to cooperate. Contrarily, she may find the experimenter manipulative and, therefore, act defiantly, seeing herself as the agent who

¹ Ting & Fitzgerald (2020, p. 336) provides such an example.

brings fairness to the situation. In a large participant pool, there is no guarantee that these different factors cancel out each other, and the observed aggregate behavior is likely a mix of all these factors.

Fischbacher and Foellmi-Heusi also address the issue of anonymity. They made it as obvious as possible to participants that there is no way that the experimenters can learn about what number a participant actually roll. This is done by encouraging the participants to roll the die as many times as they want (on the pretext of testing if the die is loaded) so that the first roll (which is the one that counted) can be erased completely. They also acknowledge that although actual outcomes cannot be observed, the reported outcomes may serve as a signal of potential dishonesty. Since participants expect dishonest people to inflate their outcomes (p. 541), reporting large numbers (4 and 5) can make one self-conscious. To address this issue, the authors implemented a double anonymous condition where reported outcomes cannot be traced back to individual participants. Their paper so meticulously addresses the anonymity issue to the point that they even considered the possibility that participants might be concerned that the payoff they claimed could be inferred by the sound of taking coins out from an envelope. In addressing these concerns, they design a set of elaborate procedures that participants go through: (1) from a box presented by the experimenter they take an unmarked envelope (containing another unmarked envelope and the maximum payoff, which was five coins in their study), (2) take out from the first envelope the second envelope and the coins they reportedly earned (leaving the remaining coins in the second envelope), (3) seal it, and (4) anonymously deposit it in a box by the door. Conceivably these elaborate procedures probably take longer than the actual die-rolling task, which, while making it “as obvious as possible that we had no chance to trace back any decisions on the individual level” (p. 531), can also make the moral focus of the experiment

front and center. This would not be a problem if participants' only consideration is money, but in the presence of other motives, it could threaten the external validity of the experiment.

Of course, heightened self-concept and increased self-consciousness can also arise in many difficult real-life decisions where one is trading off honesty with personal gains. Yet if it is the elaborate anonymization procedures that bring the lab context to the forefront and make people self-conscious, what the experiments show probably does not reflect situations where people are desensitized to dishonesty and see dishonesty as part of the business, which characterize many of the commonly cited high-profile dishonesty cases (Bazerman & Tenbrunsel, 2012; Sezer, Gino, & Bazerman, 2015).

5. Harm and victim identity

In the performance misreporting and stochastic tasks, dishonesty harms an abstract victim (the experimental budget). In contrast, social tasks feature very concrete victims (usually another participant). The effect of this aspect of victim identity is examined in a recent meta-analysis (Köbis et al., 2019), which finds that if the victim is an abstract entity people's more intuitive response tilts towards dishonesty (but this effect disappears with a concrete victim).

Two points can be made about the role of victim identity in dishonesty experiments. First, it is not easy to simulate naturally occurring dishonesty in an environment closely associated with the notion of lab animals—simple dishonesty experiments tend to involve a tradeoff between anonymity and simulating social harm in the lab. As previously discussed, anonymity is elaborately highlighted in performance misreporting and stochastic tasks, which accentuates the lab context and the abstractness of any perceived victims (one could reason that budget must not be an issue since a researcher concerned with budget and data quality would probably be more careful about potential cheating). On the other hand, by pairing participants into potential cheater-victim pairs, social tasks foreground the victim, which arguably increases the moral stake and realism. This comes with a cost, though, as it is likely

that, with another person's interest at stake, people become more alert about the judgment of the experimenter and the fact that they are being watched. Balancing these two concerns is not an easy task. Can we simulate social harm under the condition of anonymity? It is possible to imagine increasing the group size in social tasks and thus obfuscating the identity of players, but the fact that everyone still has to enter a choice probably does not go far enough to alleviate this concern. Eventually, to more realistically simulate dishonesty as a social construct in the lab, deception and further obfuscation may be necessary.

Second, for real-life dishonesty of consequences, the victim is often neither as specific as another peer nor as vague as the experimental budget. An athlete deciding whether to dope is weighing between personal gains against a number of things: potential punishment if she gets caught, the meaning of a victory won by doping, the community of people who love the sport, competitors who choose to play by rules, competitors who choose not to play by rules, etc. A bank employee deciding whether to sell a fraudulent financial product to customers not only sees the would-be victims, but also at stake are important values such as "just doing the job right" and "public interest" (Heumann, Friedes, Cassak, Wright, & Joshi, 2013). These system- or community-wide values involve another layer of formal/explicit rules beyond the basic principle of honesty, and the associated cost of violations probably cannot be summarily captured by an experimental budget.

6. Hierarchy of rules and norms

As social beings, humans constantly operate in multiple social spaces and hierarchies that impose various rules and norms on members. On the one hand, these rules and norms help maintain order by coordinating people with diverging goals; on the other, rules and norms also function as resources people rely on to navigate through those spaces and hierarchies, and in this process the way people draw on rules/norms reshapes rules/norms and their roles. Take jaywalking as an example. School children are taught to walk through

pedestrian crosses only on the green light, and this rule is supposed to be followed regardless of how much traffic there is. However, as people socialize into bigger social contexts, we pick up social cues from others which often run counter to the rules on the book. While the green light means “go” for people all around the world, it is not hard to find places (usually major intersections in crowded cities) where jaywalking is the norm. Newcomers and children often take up the norm quickly and their perception of the rule of crossing change in the process and this reinforces the jaywalking norm in those places. Contrarily, there are also places where the rule of crossing on only green light has far more force and jaywalkers stand out as rule-breakers. In short, rules/norms and group members’ behavior mutually shape each other (Cicourel, 1974; Garfinkel & Sacks, 1970). We usually are oblivious to such dynamic adjustment to and reshaping of rules/norms because there are so many of them and we have come to rely on autopilot for basic rules to economize our cognitive resources. These basic rules become salient only when things do not work as what we are used to and/or take for granted, such as when we make a faux pas at a dinner with foreign guests.

Paying attention to all the ways people can violate all the implicit rules and social norms but do not, we can appreciate the incredible achievement of children picking up linguistic cues and learning to speak, and that of people using language and nonverbal cues to figure out how to follow rules and pass as a member of a group. As people go through this learning process, what originally took cognitive effort, such as turning away and covering up one’s mouth and nose when sneezing, becomes automatic and slowly recedes into the background. For most of us, it would feel very unnatural and nerve-wrecking if we were asked to sneeze right into someone’s face! Rules like this (that we automatically follow) can only be unlearned. With repetition, people can learn to suppress learned automatic responses with new behaviors. This example not only illustrates the social nature of rules, but also brings out the dynamic aspect of rule- following.

Most people belong to multiple social categories and are ingrained with the rules and norms pertinent to those categories, which are not always compatible. In every decision-making situation, though, some categories and the associated rules and norms take precedence over others. Which rules/norms dominate reflect people's priority of their roles and goals, which are called the superordinate goals in Gozli's framework of goal hierarchies (2019). For example, imagine an experiment where participants are instructed to inhale pepper and then sneeze into the experimenter's face. In this case, subjects face two goals that are likely to be at odds with each other—to be a “good” person versus a “good” subject. Even required by the experimenter, most subjects probably will not be able to follow this instruction successfully on (at least) the first few tries. Why is this instruction difficult to follow? If you are reading this, chances are you were taught that coughing and sneezing spread germs and diseases, and that covering up and turning away when sneezing are not only part of hygiene, but also a gesture of our concern for those around us and they are “good manners” based on which people are judged. For some, probably many, the idea of sneezing into another's face may be so disgusting and so damaging to one's self-image that it is easier to drop out of the experiment instead.

All things considered, despite participants' desire to be cooperative “good” subjects, their ability to follow those instructions will inevitably be compromised by ingrained social norms and their desire to be “good” people who are considerate, thoughtful and well-mannered. In other words, observed subject behaviors reflect combined effects of the experimenter's instructions and the social norms subjects bring with them into the lab. This is also true for other experiments, especially when the instructed task goes against the wider social norms relevant to the context (Mazar et al., 2008, p. 640). If social norms can be seen as instructions people pick up and internalize, then what the afore-discussed experiment paradigms do is essentially pitching one new instruction against other sets of instructions that

subjects have internalized long before coming into the lab. In this case, the internalized norms will prevent experimenters from observing people's default response to the newly introduced rule. Although it is definitely possible to design a context- and value-free rule as an experimental task and observe people's default response to it, whether findings based on such socially-neutral rules can readily apply to situations with real social and personal stakes is a question that must be answered first.

As implied in the jaywalking example, social norms also have a dynamic aspect that is often neglected in experimental studies on dishonesty. As social constructs rules do not enforce themselves: an effective rule requires an enforcement infrastructure on which a common understanding of the status of the rule is hinged. But here is the tricky issue: that common understanding of the status of the rule is part of the enforcement infrastructure and they mutually mold each other. For example, if a group or an organization has a bad track record of enforcing rules, members will take new rules lightly, which makes them less effective. This in turn reinforces the bad track record, encourages dishonesty and forms a feedback loop (Ting, 2020) and a culture/climate of rule-breaking. Such dynamics are important in groups and organizations, but they are rarely touched upon in the experimental literature on dishonesty which often cite organizational misconducts and illegal behaviors as opening hooks. The sampled literature does cover social factors, but it covers only those reflected in the values participants bringing with them into the lab and pays insufficient attention to the social context from the participant's view and the dynamics of dishonesty in the group context. Eventually, we cannot understand dishonesty as rule-breaking in organizations without considering the enforcement infrastructure as part and parcel of the puzzle.

Before closing, a practical point and emphasis is in order. As Pfister (this volume) points out, experimental psychology develops through identifying key concepts in

incremental steps of theorizing and empiricizing—such incremental approach is integral to the study of subjects as complex as the human mind as there are always additional factors beyond our theoretical model and methods. However, the point here goes beyond the realization that there are many factors influencing dishonest and rule-breaking behavior. Rather, what I want to emphasize in this chapter is that the categories of dishonest and rule-breaking behavior are themselves varied and context-dependent, thus, they ought to be carefully distinguished. Put another way, experimental operationalizations of dishonesty and rule-breaking should account for the difference between the general normative expectations and what the experiment rule aims to simulate, which, while presenting significant methodological challenges, is key to expanding our knowledge of dishonesty as a social construct.

7. Conclusion

This article analyzes the social aspect of dominant paradigms of the experimental literature on dishonesty and discusses its methodological implications. While the significance of dishonesty in human society is closely linked to its social nature, under closer examination the range of social contexts covered by dominant experimental paradigms appears to be quite limited due to definitional issues and potential lab artifacts. I argue that in striving to induce dishonest behavior in the lab while making it easy to identify and measure, research often loses sight of the social context of dishonesty and the fact that dishonest behavior is meaningful because of its place in a social context. The social and context-dependent nature of dishonesty is, in the first place, what makes it an interesting and challenging research topic.

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