

## **Financial Deprivation Selectively Shifts Moral Standards and Compromises Moral Decisions**

### **Abstract**

Previous research suggests people firmly value moral standards. However, research has also shown that various factors can compromise moral behavior. Inspired by the recent financial turmoil, we investigate whether financial deprivation might shift people's moral standards and consequently compromise their moral decisions. Across one pilot survey and five experiments, we find that people believe financial deprivation should not excuse immoral conduct; yet when people actually experience deprivation they seem to apply their moral standards more leniently. Thus, people who feel deprived tend to cheat more for financial gains and judge deprived moral offenders who cheat for financial gains less harshly. These effects are mediated by shifts in people's moral standards: beliefs in whether deprivation is an acceptable reason for immorality. The effect of deprivation on immoral conduct diminishes when it is explicit that immoral conduct cannot help alleviate imbalances in deprived actors' financial states, when financial deprivation seems fair or deserved, and when acting immorally seems unfair.

### *Keywords*

ethics, fairness, morality, dishonesty, cheating, lying, scarcity, judgment and decision making

Financial security is a fundamental human goal (e.g., Diener & Oishi 2000), and the tumultuous past few years have shaken individual economic wellbeing across the globe. In 2011, in the U.S. alone, real median household income was more than seven percent below its 1999 peak, and income inequality was at its worst since the Great Depression (U.S. Census Bureau, 2011). In the workplace, chief executive officers experienced a 27% rise in compensation in 2010, while the average worker's pay rose by only 2.1% (Krantz & Hansen, 2011). In the midst of such times, people are prone to experiencing feelings of financial deprivation. Inspired by this spate of financial turmoil, in this paper we examine one potentially damaging consequence of psychological states of financial deprivation: the possibility that people are willing to compromise their moral judgments and behaviors when they feel deprived. In addition, we investigate the extent to which people believe it is acceptable to behave immorally due to financial deprivation, and whether shifts in these moral standards can help explain the effect of financial deprivation on moral decision making.

We begin with a definition of financial wellbeing and deprivation. Then, drawing from the literatures on morality and fairness, we suggest contexts in which deprivation might influence the perceived acceptability of immoral conduct and in turn compromise moral decisions. Based on this conceptualization, we present a pilot study and five experiments that examine how and why deprivation might shift the perceived acceptability of deprivation-induced immoral conduct and in turn affect moral decisions. To summarize our results, in the pilot survey, we found that in general people firmly believed that deprivation should not pardon immoral behavior, and that they would not relax these standards if deprived. In five experiments, however, participants induced to feel more versus less financially deprived made moral decisions that flouted those firm standards. People cheated more for financial gains (Experiments 1, 2, and 3) and judged

deprived criminal offenders less harshly (Experiments 4 and 5) when deprived, and these effects were mediated by shifts in people's beliefs about the acceptability of deprivation-induced immorality (Experiment 5). The effect of deprivation on immorality diminished when: (1) it was made explicit that behaving immorally would not help to alleviate deprivation (Experiment 2, cheating for hypothetical vs. real gains), (2) deprivation seemed fair, deserved, and acceptable (Experiment 3), and (3) when it did not seem fair to act immorally (Experiments 4 and 5). Having discussed these results, we conclude by considering the implications of these effects for organizations, justice, and public policy.

### **Subjective Financial Wellbeing and Deprivation**

Subjective financial wellbeing is a term that captures how people think and feel about their financial state, and can be conceptualized along a continuum that ranges from “worse off” to “better off” (e.g., Diener et al. 1999; Sharma & Alter, 2012). People assess their position on this continuum by evaluating their financial state against a range of objective (e.g., income, wealth, material possessions) as well as subjective standards (e.g., past states, preferred states). Previous research has suggested that the subjective components tend to exert a stronger influence on subjective financial wellbeing than the objective components (e.g., Diener et al. 1999). One of the strongest of those subjective influences is social comparison: how people believe they fare relative to their peers (Festinger, 1954). When people feel that their financial position is relatively inferior, they experience *financial deprivation*.

In the current work, we draw on Sharma and Alter's (2012) definition of financial deprivation: a psychological state in which people feel financially inferior relative to a salient

comparison standard because they perceive a deficit in their financial position. Accordingly, losing money (an objective financial deficit) or merely feeling financially worse off than one's peers (a psychological financial deficit) can trigger financial deprivation.

Recent research has begun to examine how feelings of financial deprivation can influence behavior and suggests that financially deprived people are particularly attuned to opportunities that might restore them to a more comfortable equilibrium (e.g., Briers, Pandelaere, Dewitte, & Warlop, 2006; Mazar & Aggarwal, 2011; Nelson & Morrison, 2005). Some opportunities lead to a direct influence on people's financial state, while others lead to a less direct influence. For example, Karlsson and colleagues (2004, 2005) have shown that people cut back on their discretionary spending when they feel financially inferior to their peers. On the other hand, people who feel deprived might also consume a greater number of calories (Briers et al., 2006), prefer slightly heavier women (Nelson & Morrison, 2005), and acquire scarce goods that other consumers do not possess (Sharma & Alter, 2012). These findings suggest that, in the absence of opportunities to materially change their financial position, people who feel deprived might turn to whichever opportunities are readily available to redress inequity. We build on this prior work by testing the extent to which financial deprivation might prompt people to exploit these opportunities, particularly when doing so requires tradeoffs on another important dimension: their moral standing.

### **The Current Research: Deprivation and Moral Tradeoffs**

Research has shown that people generally care about morality and think highly of themselves as moral individuals (e.g., Aquino & Reed, 2002). However, in the current work, we

suggest that transient states of financial deprivation might change people's moral decisions despite the fact that they typically strive for an enduring sense of morality (Bandura et al, 1996; Mazar, Amir, & Ariely, 2008). This might happen if financial deprivation shifts people's perceptions about what is morally acceptable. This mechanism might be especially likely to operate when deprivation is perceived as unfair and when behaving immorally can help mitigate the imbalance in a deprived actor's financial position.

Previous research provides support for the possibility that deprivation might shift the perceived acceptability of deprivation-induced dishonesty and hence immoral conduct. Researchers have found that people are particularly sensitive and averse to inequality when disadvantaged (Dawes, Fowler, Johnson, McElreath, & Smirnov, 2007; Fehr & Gächter, 2002), and that the fairness perceptions associated with a system might in turn influence the rigidity of people's moral standards. For example, Greenberg (1990) showed that workers who perceive their pay-cut as unfair rather than fair are more likely to engage in employee theft, presumably to reinstate fairness. In related work, Zitek and colleagues (2010) showed that people who feel wronged behave selfishly due to a sense of entitlement, and Loewen and colleagues (2013) showed that the higher people's sense of social fairness, the higher their perceived acceptability of transgressions (e.g., avoiding paying for public transportation). In addition, people are more likely to violate minor laws—stealing a borrowed pen, sampling grapes from a grocer—when the legal system seems incapable of guaranteeing justice (e.g., Alter, Kernochan, & Darley, 2007; Becker, 1968; Nadler, 2005). Scholars have theorized that this so-called *moral spillover* occurs because people are only willing to support a system that seems globally just; when the system ceases to guarantee fair and just outcomes, its capacity to compel honest, moral behavior weakens as well (Mullen & Nadler, 2008).

Although previous research has examined various ways in which people respond to unfairness, less work has focused specifically on how objective and psychological states of financial deprivation influence moral judgments and decisions (their own as well as others') due to perceptions of inequity. This context is particularly interesting as previous research has shown that people care deeply about both their moral and financial standing, and little work has examined the potential tradeoffs people might make to protect their standing on either dimension. Building on the previous research, we suggest that financial deprivation might entice people to redress the imbalance in their financial position by adopting questionable moral behaviors. Put simply, when people feel deprived in one instance, it might seem fair that they subsequently engage in immoral behaviors that correct the perceived imbalance in their financial position. The same logic might also lead deprived people to treat other people's immoral behavior more leniently when the perpetrator is also deprived. This argument is consistent with equity theory (Adams, 1965), in which people judge the acceptability of actions (their own and others') based on the ratio of inputs and outputs of the given parties, and attempt to restore equity to compensate for an outcome that seems deserved but is denied. The work on equity sensitivity suggests that, not only are disadvantaged people more likely to treat their own immoral actions more leniently, but they are also likely to perceive the immoral conduct of other immoral actors with greater leniency – an observation consistent with findings that people are likely to identify with people with whom they have something, even something trivial, in common, as long as that feature is salient (Mussweiler, 2003). Indeed, previous research has shown that people's punitive judgments depend on perceptions of ethicality, equity sensitivity, their ingroup versus outgroup, and the amount of information people have about the wrongdoers (e.g., Gino, Shu, & Bazerman 2010; Goldberg, Lerner, & Tetlock, 1999; Huseman, Hatfield, & Miles, 1987; Reed & Aquino,

2003). Thus, to the extent that deprivation can influence the perceived acceptability of immorality in given contexts, it is likely that it might consequently influence actual decisions about the moral conduct of deprived actors – whether the actor is oneself or others.

In summary, though people tend to hold firm moral standards, we suggest that financial deprivation might lead them to relax these standards. Thus, people who feel deprived might engage in more immoral conduct and treat other deprived moral offenders more leniently than they would otherwise. Since we expect these effects to be mediated by how acceptable it seems to compromise moral behavior to lessen perceived deprivation (i.e., the perceived acceptability of deprivation-induced immoral conduct), we expect them to attenuate in at least three contexts: when behaving immorally cannot help alleviate deprivation (Experiment 2), when financial deprivation seems fair, deserved, and acceptable (Experiment 3), and when people believe it is less fair to commit moral transgressions (Experiments 4 and 5).

### **Overview of Experiments**

We designed one pilot survey and five experiments to examine the relationship between deprivation and morality, utilizing multiple manipulations of financial deprivation and measures of moral judgment and behavior. First, in the pilot survey, without manipulating deprivation, we examined people's general beliefs and predictions about immoral conduct under conditions of financial deprivation. Next, in Experiments 1 and 2, we examined whether people who were induced to feel financially deprived versus non-deprived were more willing to behave dishonestly, using both objective (Experiment 1) and subjective (Experiment 2) manipulations of deprivation. Then, in Experiment 3 we manipulated the perceived fairness of people's financial

state to examine whether the effect of deprivation on dishonest behavior diminished when deprived people believed they were in a financial state that they deserved. Next, in Experiment 4, we adopted a sentencing paradigm to test whether induced financial deprivation also heightened laxity toward the dishonest conduct of other deprived individuals, and whether perceptions of fairness were associated with these effects. Finally, in Experiment 5, we tested whether the effects found in Experiment 4 were explained at least in part by shifts in people's moral standards (i.e., the perceived acceptability of deprivation-induced immoral conduct).

### **Pilot Survey: Beliefs about the Relationship between Financial Deprivation and Morality**

Before conducting our experiments, we wanted to gain a basic understanding of people's beliefs about the relationship between financial deprivation and morality. We therefore designed a pilot survey to investigate whether people (who were not induced to feel deprived) relax the moral standards they apply to themselves and to others who are financially deprived, or whether instead they endorse the same standards regardless of an actor's financial standing. We also asked them to predict whether their morally-laden decisions would change if they were financially deprived.

### **Method**

We paid 124 participants (65 females, 59 males,  $M_{\text{age}} = 33.33$  years,  $SD = 12.14$ ) in the United States 50 cents to complete a questionnaire on Mechanical Turk (MTurk; for an examination of the demographic makeup of MTurk participants and the quality of the data



obtained with that sample see e.g., Buhrmester, Kwang, & Gosling, 2011; Paolacci, Chandler, & Ipeirotis, 2010). First, we assessed participants' beliefs about the relationship between deprivation and morality by asking them to evaluate four statements regarding whether financial deprivation should excuse immoral conduct (collapsed to form a *moral standards* scale; Cronbach's  $\alpha = .83$ ), and two statements regarding whether they would grant leniency to financially deprived moral offenders (collapsed to form a *leniency* scale;  $r(122) = .52, p < .001$ ). We then asked participants to predict the extent to which they believed moral judgments and behaviors would change under conditions of financial deprivation. Specifically, participants indicated their agreement with four statements describing their own moral conduct (collapsed to form a *self-focused moral predictions* scale; Cronbach's  $\alpha = .86$ ), and four statements describing an average person's moral conduct (collapsed to form an *other-focused moral predictions* scale; Cronbach's  $\alpha = .88$ ). For each of the scales used, we conducted a confirmatory factor analysis and found that all the measures loaded onto a single factor (each of the eigenvalues were greater than 1.52, capturing a total variance greater than 67%). Participants responded to all statements using a 9-point scale (1 = *disagree strongly*, 9 = *agree strongly*; for details see Appendix A in the supplementary material).

## Results

We began by scoring participants' responses to the four scales so that higher scores represented stricter moral standards. Accordingly, responses above the scale's midpoint value of 5 indicated perceptions that deprivation is not an acceptable excuse for immoral conduct, that

they would not grant leniency to deprived moral offenders, and that they and others would not behave immorally when financially deprived.

Overall, participants agreed strongly that financial deprivation should not excuse immoral conduct, as their responses to the moral standards scale ( $M = 7.05$ ,  $SD = 1.73$ ) were significantly higher than the scale's midpoint value of 5,  $t(123) = 13.21$ ,  $p < .001$  (75% of responses above the scale's midpoint; 7% below it). Furthermore, their responses to the leniency scale were consistent with these standards, as they were unwilling to grant leniency to deprived moral offenders, ( $M = 6.87$ ,  $SD = 1.90$ ; higher than the scale's midpoint value of 5:  $t(123) = 10.92$ ,  $p < .001$ ; 72% of responses above the scale's midpoint; 12% below it). Finally, participants' responses to the self-focused and other-focused moral predictions scale reflected firm faith in their and others' moral conduct: participants predicted that financial deprivation would not lead them to behave immorally (i.e., lying, cheating, or stealing),  $t(123) = 12.22$ ,  $p < .001$ ;  $M = 7.10$ ,  $SD = 1.92$  (73% of responses above the scale's midpoint; 7% below it), or lead an average person to behave immorally,  $t(123) = 3.26$ ,  $p = .001$ ;  $M = 5.50$ ,  $SD = 1.70$  (67% responses above the scale's midpoint; 21% below it).

The results of the pilot survey suggest that people believe they will endorse the same strict moral standards regardless of whether they are financially deprived. In Experiments 1-5, we experimentally manipulated deprivation and tested whether (1) people's moral decisions fell in line with their predictions, and (2) potential changes in their decisions were explained by shifts in the perceived acceptability of immorality due to deprivation (i.e., moral standards).

### **Experiment 1: Objective Manipulation of Financial Deprivation and Effects on Dishonesty**

We designed Experiment 1 to test the extent to which financial deprivation might provoke dishonest behavior. Though our pilot survey suggested that people have firm beliefs in their moral standards, we expected them to compromise those standards more willingly when they experienced financial deprivation. Thus, in Experiment 1, we manipulated people's objective financial position and measured their dishonesty on a subsequent task that offered the potential for monetary gains.

## **Method**

Eighty-nine U.S. university students (42 females, 47 males, age was not collected) volunteered to participate in this experiment in exchange for partial course credit. Participants completed two computer-based tasks described as *Slots* and *Dots* tasks. Both tasks had consequential payments that were carried out at the conclusion of the experimental session.

The Slots task required participants to “pull” the handle of a slot-machine that either earned or cost them \$2.50. The subsequent Dots task, although presented as a visual perception task consisting of 100 trials, was actually designed to measure whether participants would cheat for real financial gains (adapted from Mazar & Zhong, 2010). Participants followed this two-part procedure (Slots task followed by Dots task) four times, though they were not told that the tasks would be repeated when the experiment began. In addition, the Slots task was rigged so that participants in the deprived condition always (i.e. four times) lost \$2.50 on the Slots task, whereas those in the non-deprived condition always (i.e. four times) won \$2.50 on the Slots task.

For each of the 100 trials of the Dots task, participants watched a computer screen as 20 scattered dots appeared inside a box, which was bisected diagonally by a black line. On each

trial, the dots appeared on the screen for one second, after which participants were prompted to identify whether a greater number of dots appeared to the left or right side of the diagonal line. We told participants that most people find it easier to estimate the number of dots on the left rather than right side of the line, so they would earn half a cent for each trial on which they indicated having seen more dots on the left side, and five cents for each trial on which they indicated having seen more dots on the right side. If participants were 100% honest and accurate, they earned \$2.30; if 100% dishonest to maximize pay, they earned \$5. We instructed participants to be as accurate as possible because their results would be used in designing future studies, but we also emphasized that the computer paid them based on their response rather than on their accuracy. Participants therefore experienced a conflict of interest when they perceived more dots to the left of the diagonal line: they could either truthfully indicate what they saw (earning only half a cent), or dishonestly indicate that there were more dots on the right (earning 10 times as much). Our dependent variable was participants' *dishonesty rate*, calculated by subtracting the percent of trials that participants incorrectly identified as having more dots on the left (lower pay side) from the percent of trials that participants incorrectly identified as having more dots on the right (higher pay side). Scores greater than zero therefore suggested that participants, on average, provided more incorrect responses that yielded higher rather than lower pay.

The experiment followed a 2 x 4 mixed-subjects design, with participants' financial position on the Slots task (2 levels; non-deprived: winning \$2.50 on each of the four Slots tasks vs. deprived: losing \$2.50 on each of the four Slots tasks) manipulated between subjects, and the round of the Slot and Dots task sequence (4 levels; rounds 1, 2, 3, and 4) treated as a within-subjects factor.

## Results

As Figure 1 shows, participants behaved dishonestly in each of the four rounds of the Dots task regardless of whether or not they were deprived. Nonetheless, participants in the financially deprived condition on average had a higher dishonesty rate, and thus earned more money, than did participants in the non-deprived condition (repeated measures ANOVA, between-subjects main effect of financial position:  $F(1, 87) = 12.07, p < .001$ ). In addition, while dishonesty generally increased over the four rounds (within-subjects main effect of round:  $F(1, 87) = 28.91, p < .001$ ), this increase was significantly more pronounced among participants in the financially deprived condition than among participants in the non-deprived condition (interaction:  $F(1, 87) = 7.53, p < .01$ ).

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Insert Figure 1 about here

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Our main goal in Experiment 1 was to test the basic effect of deprivation on moral conduct. Diverging from the results of the pilot survey (self-focused moral predictions scale), in Experiment 1, participants who lost rather than won money during the Slots task seemed more willing to cheat for financial gains during the subsequent Dots task. We suggest that this main effect and, in particular, the observed interaction over the four rounds was linked to a sense of financial deprivation. However, a competing explanation is that the results had nothing to do

with deprivation, and that participants in the deprived condition simply tried to recoup losses from the Slots task by cheating in the Dots task. We therefore conducted Experiment 2, both to replicate the effect in Experiment 1 and to rule out the alternative explanation by using a subjective rather than objective manipulation of financial deprivation that we pre-tested beforehand. Since we expect people to behave dishonestly when they feel deprived, even subjective deprivation in the absence of real monetary loss should provoke dishonest behavior. We also tweaked the Dots task, including a hypothetical round of play, to assess a potential boundary condition: whether deprivation-induced dishonesty might diminish when dishonesty cannot help to alleviate deprivation.

### **Experiment 2: Subjective Manipulation of Financial Deprivation and Effects on Dishonesty**

We designed Experiment 2 to replicate the basic effect of financial deprivation on dishonest behavior using a subjective rather than objective manipulation of deprivation. Thus, in Experiment 2, we led some participants to feel subjectively deprived relative to their peers without altering their objective financial standing. We manipulated financial deprivation by randomly assigning participants to one of two versions of a social comparison (Festinger, 1954) task, adopted from Schwarz and colleagues (1991), in which participants were asked to generate either two or 10 facts or examples that illustrated why they were financially worse off than their peers. This manipulation relies on the classic concepts of availability and accessibility – that people draw inferences based on how easy or difficult it is for them to recall instances (e.g., Tversky & Kahneman, 1973). Generally, people tend to make congruent rather than incongruent inferences when thought generation is relatively easy rather than difficult. Since generating two

examples is easier than generating 10 examples, we expected to induce a greater sense of financial inferiority among those who generated two (deprived condition; congruent inferences) rather than 10 examples (non-deprived condition; incongruent inferences) why they were worse off financially.

### **Pretest of Manipulation**

We conducted a pretest with 177 participants (98 females, 79 males,  $M_{\text{age}} = 34.20$  years,  $SD = 1.55$ , payment for participation: \$0.50) from MTurk to test whether the financial deprivation manipulation induced a sense of financial inferiority relative to a financially neutral, control condition. For our control conditions, we asked participants to generate facts or examples that illustrated why they were assertive. We selected this manipulation as a control for two main reasons: (1) we expected the manipulation to induce thoughts independent from participants' financial position, and (2) it allowed us to administer the same basic procedure (i.e., asking participants to generate 2 vs. 10 examples) in the experimental and control conditions. We chose to conduct this pretest, rather than administer the manipulation checks at the end of the experiment, to avoid self-generated validity (e.g., Bem, 1967; Feldman & Lynch, 1988), in which participants simply respond in a manner consistent with their earlier responses.

After exposing participants to either one of our two financial deprivation manipulations (2 vs. 10 examples why they were worse off financially) or to one of our two control conditions (2 vs. 10 examples why they were assertive), we administered an adapted version of Sharma and Alter's (2012) subjective financial wellbeing scale (for details see Appendix B in the supplementary material). We compared participants' responses to the scale with a 2 x 2 between-

subjects ANOVA. Results revealed a significant main effect of the number of examples (2 vs. 10) that participants generated,  $F(1, 173) = 4.80, p = .03$ , and a marginally significant main effect of the manipulation's content (reasons why participants were financially worse off vs. reasons why they were assertive),  $F(1, 173) = 3.18, p = .076$ . Critically, these effects were qualified by a significant interaction,  $F(1, 173) = 4.41, p = .037$ . Follow-up comparisons revealed that participants reported significantly lower wellbeing scores when asked to generate two ( $M = 4.68, SD = 1.78$ ) rather than 10 ( $M = 6.10, SD = 2.43$ ) examples why they were financially worse off,  $F(1, 173) = 10.15, p = .002$ ; whereas there were no differences in perceived financial wellbeing among those who generated two ( $M = 5.97, SD = 2.21$ ) rather than 10 ( $M = 6.00, SD = 2.31$ ) examples why they were assertive,  $F < 1$ . Furthermore, participants who listed two examples why they were financially worse off ( $M = 4.68, SD = 1.78$ ) felt significantly worse about their financial position than did those who listed two examples why they were assertive ( $M = 5.97, SD = 2.21; F(1, 173) = 8.23, p = .005$ ), and participants who listed 10 examples why they were financially worse off did not differ significantly from the two control conditions ( $F < 1$ ). These results suggested that our financial deprivation manipulations worked as intended, and relative to the control conditions.

## Method

Fifty university students in Canada (32 females, 18 males,  $M_{\text{age}} = 21.98$  years,  $SD = 3.88$ ) participated in this experiment in exchange for \$5. After we manipulated financial deprivation, we asked participants to complete the Dots task from Experiment 1. In contrast to Experiment 1, however, participants knew they would complete two 100-trial rounds of the Dots task one after



another, with the first round as a “practice” round with hypothetical pay. That is, only the answers in the second round were consequential and thus earned them real money according to the payment schedule (described in Experiment 1). We suggested that if dishonesty is an instrumental tool to alleviate the imbalance in people’s financial situation, then deprived participants should behave more dishonestly only in the second round, when their responses have real financial consequences. In contrast, deprived and non-deprived participants should behave similarly in the hypothetical practice round, when their responses are not tied to real financial outcomes.

Accordingly, the experiment followed a 2 x 2 mixed-subjects design that crossed the subjective manipulation of financial deprivation (between-subjects, 2 vs. 10 examples social comparison task: deprived vs. non-deprived) with the type of monetary outcome (within-subjects: hypothetical vs. real pay) manipulation.

## Results

A 2 x 2 mixed ANOVA revealed a marginally significant main effect of the financial deprivation manipulation,  $F(1, 48) = 3.11, p = .084$ , and a significant main effect of monetary outcome (hypothetical vs. real),  $F(1, 48) = 12.97, p < .001$ . Critically, these main effects were qualified by a significant interaction,  $F(1, 48) = 4.10, p = .049$ . As Figure 2 illustrates, in the round with real pay, participants in the deprived condition had a significantly higher dishonesty rate than did participants in non-deprived condition,  $F(1, 48) = 4.18, p = .046$ . However, in the round with hypothetical pay, the dishonesty rates did not significantly differ by our financial deprivation manipulation,  $F(1, 48) = 1.28, p = .26$ . Furthermore, the dishonesty rates of non-

deprived participants did not differ significantly between the hypothetical ( $M = 8.70\%$ ,  $SD = 14.61$ ) and real pay ( $M = 13.23$ ,  $SD = 25.12$ ) rounds,  $\text{paired-}t(24) = 1.55$ ,  $p = .135$ , but did so for the deprived participants (hypothetical pay:  $M = 15.97\%$ ,  $SD = 28.58$  vs. real pay:  $M = 32.13$ ,  $SD = 38.77$ ),  $\text{paired-}t(24) = 3.27$ ,  $p = .003$ .

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Insert Figure 2 about here

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The results in the real-pay round replicated and extended those in Experiment 1, as dishonesty also emerged when people experienced financial deprivation that was manipulated subjectively rather than objectively. The contrasting results in the hypothetical-pay and real-pay rounds suggested that deprivation selectively induced dishonesty in service of alleviating deprivation. Specifically, people seemed willing to compromise their normally stringent moral standards (as reported in the pilot survey) only when it helped overcome the aversive state of financial deprivation (i.e. in the real-pay round but not in the hypothetical-pay round).

Together, Experiments 1 and 2 demonstrated the basic effect – that financial deprivation can change moral decisions. Though we did not set out to examine the role of fairness in these studies, it is possible that fairness perceptions contributed to the effects. In Experiment 1, since participants in the deprived condition actually lost money on the Slots task, their increased levels of cheating may have arisen because they felt it was unfair to experience a loss. Moreover, deprived participants might have viewed four consecutive losses in the Slots task as particularly unfair since it did not resemble the outcome people typically expect for a fair 50/50 game of luck

(Tversky & Kahneman, 1971). Thus, this could be one reason why cheating escalated more rapidly in the deprived condition over time. In addition, in Experiment 2, greater cheating among deprived participants only occurred in the round of the Dots task that included real rather than hypothetical pay, demonstrating a selective compromise in people's moral conduct based on the consequences of the immoral conduct. Thus, it is possible that participants felt dishonesty was more acceptable when it could alleviate deprivation but not otherwise. We can only speculate, however, since we did not set out to examine these possibilities in either Experiment 1 or 2.

In brief, Experiments 1 and 2 demonstrated that both objective and subjective manipulations of financial deprivation can compromise moral decisions. To extend these findings, we next aimed to gather more direct evidence about the role of fairness perceptions in the process. Thus, we designed Experiment 3 to manipulate both deprivation and fairness perceptions and test for their influence on moral decisions.

### **Experiment 3: Financial Deprivation and Fairness Perceptions**

We designed Experiment 3 to directly examine the effects of financial deprivation and fairness perceptions on moral behavior. If deprivation heightens the acceptability of immoral conduct in part because of a desire to restore the perceived unfairness in people's financial state, then dishonest behavior should be attenuated when deprived people believe their financial situation is actually fair or deserved. We tested this possibility by manipulating perceived deprivation and fairness, and measuring participants' levels of cheating on a subsequent task that offered a monetary gain of \$1.

## Method

Two hundred and one U.S. university students (90 females, 111 males,  $M_{\text{age}} = 19.88$  years,  $SD = 1.21$ ) participated in this experiment in exchange for partial course credit. The study followed a two-part procedure in which we first manipulated financial deprivation and then measured cheating on a subsequent task that offered money.

To show that our effects persisted beyond a single experimental context, we used a new financial deprivation manipulation – an adapted version of a social comparison task from prior research (Sharma & Alter, 2012). Specifically, we asked participants to write about a time when they compared their financial state to that of their peers. We randomly assigned participants to one of three such conditions: a deprived-unfair condition, a deprived-fair condition, and a control condition. In the deprived-unfair condition, we asked participants to recall a situation in which they were financially worse off relative to their peers, and felt that it was unfair for them to be in that state. We indicated that it could be any time when they felt financially inferior and, at the same time, that their state was unfair, unreasonable, or undeserved. We gave identical directions to participants in the deprived-fair condition, except we replaced the words “unreasonable,” “unfair,” and “undeserved” with “reasonable,” “fair,” and “deserved.” While we still expected to induce feelings of relative financial inferiority in the deprived-fair condition, we also expected to elicit the sense that the inferiority was fair, which we expected would attenuate the perceived acceptability of immoral conduct and thus participants’ willingness to engage in immoral conduct to alleviate their state. In the control condition, we asked participants to write about a time when they felt their financial state was fairly similar to that of their peers. We considered the possibility that the social comparison manipulation might have differed in difficulty across

conditions. Therefore, at the end of the experiment, we, asked participants to rate the difficulty of writing about the scenario described.. Participants' ratings did not differ by condition ( $ps > .05$ ).

Next, we measured participants' willingness to cheat on a subsequent task. As a cover story, we told participants that we appreciated their contribution to our research and were thus offering them an opportunity to win \$1 in a quick game of chance that offered a 50% chance of winning. We adapted the procedure developed by Batson and colleagues (1997; 1999) in their examination of moral hypocrisy. In these original studies, participants were asked to decide whether they or an anonymous partner should complete an appealing task, while the other person completed a relatively unappealing task. The experimenter gave participants a coin to assist them in determining the outcome of this task assignment procedure. The presence of a coin offered enough ambiguity for participants to assign themselves to the more favorable outcome without seeming self-interested. In this design, honest coin flips should lead roughly 50% of participants to assign themselves the positive task, and positive deviations from 50% would suggest moral hypocrisy.

Building on this procedure, we used two methods in the game of chance: some participants received a coin (a quarter) and others received a square game spinner that was divided in half by a line. Participants determined their outcome (winning or not winning) by either flipping their coin or spinning the arrow on their game spinner, respectively. Both methods were conceptually equivalent and offered a 50% chance of winning. We used two different methods solely because we experienced an unforeseen increase in participation due to a rescheduling of experimental sessions and unexpectedly ran out of game spinners. There were no significant differences between the samples depending on the method of chance we used, so we do not discuss differences between these methods further.

Consistent with Batson and colleagues' (1997; 1999) procedure, we intentionally told all participants they did not have to specify which side (either on the coin or on the game spinner) they picked to correspond to which outcome (winning vs. not winning); they simply had to let us know whether they won. This design permitted an opportunity to obscure cheating, and the dependent measure was the percentage of participants who indicated winning. If participants report their outcomes honestly, the proportion of participants who report winning should not differ from 50%; however, positive deviations from 50% would suggest dishonest reporting. Since we expected participants in the deprived-unfair condition to be more willing to cheat for financial gains, we expected the percentage of participants who reported winning to (1) exceed 50% in the deprived-unfair condition, and (2) be higher in the deprived-unfair condition than in the deprived-fair and control conditions.

Participants who indicated winning indeed received \$1 at the end of the game of chance. When the game was over, we asked participants to respond to several follow-up questions: fairness manipulation checks, financial wellbeing manipulation checks, and demographic information. We included three fairness manipulation checks, each of which asked participants to rate the financial situation they wrote about earlier in the task on one dimension: how (1) reasonable, (2) fair, and (3) deserved it was. Participants indicated their responses using 12-point scales (i.e., 1 = *very unreasonable, unfair, undeserved*; 12 = *very reasonable, fair, deserved*). For our subjective financial wellbeing manipulation checks, we asked participants to respond to a subset of three questions adapted from the manipulation check pretest used in Experiment 2. Specifically, participants rated their "financial position," their "ability to spend money freely," and their "material possessions" relative to their peers using a 12-point scale (1 = *much worse*; 12 = *much better*). We chose to administer a subset of those questions solely to keep the number

of wellbeing and fairness manipulation checks the same while managing the length of our experiment.

## Results

Participants' responses to the three subjective financial wellbeing measures (Cronbach's  $\alpha = .87$ ) indicated that our deprivation manipulation worked as intended. Participants in the deprived-unfair ( $M = 5.28$ ,  $SD = 1.85$ ) and deprived-fair ( $M = 5.69$ ,  $SD = 2.04$ ) conditions did not differ in their wellbeing scores,  $F(1, 199) = 1.57$ ,  $p = .21$ . However, as intended, participants in the deprived-unfair condition ( $M = 5.28$ ,  $SD = 1.85$ ) reported lower wellbeing scores than did participants in the control condition ( $M = 6.87$ ,  $SD = 1.63$ ),  $F(1, 199) = 23.62$ ,  $p < .0001$ , and participants in the deprived-fair condition ( $M = 5.69$ ,  $SD = 2.04$ ) reported lower wellbeing scores than did participants in the control condition ( $M = 6.87$ ,  $SD = 1.63$ ),  $F(1, 199) = 11.72$ ,  $p = .001$ .

Participants' responses to the three fairness measures (Cronbach's  $\alpha = .87$ ) indicated that our fairness manipulation also worked as intended. Participants in the deprived-fair ( $M = 8.39$ ,  $SD = 2.50$ ) and control ( $M = 8.35$ ,  $SD = 1.99$ ) conditions did not differ in the perceived fairness of their financial wellbeing,  $F < 1$ . However, as intended, participants in the deprived-unfair condition ( $M = 5.52$ ,  $SD = 2.39$ ) perceived their financial position to be more unfair relative to participants in the deprived-fair condition ( $M = 8.39$ ,  $SD = 2.50$ ),  $F(1, 199) = 49.87$ ,  $p < .0001$ , and relative to participants in the control condition ( $M = 8.35$ ,  $SD = 1.99$ ),  $F(1, 199) = 47.55$ ,  $p < .0001$ . To examine the possibility that our deprivation and fairness manipulations influenced mood, we administered an adapted version of the PANAS questionnaire (Watson, Clark, & Tellegan, 1988). We did not find significant effects of our independent variables on

positive or negative affect ( $ps > .05$ ; we also administered the PANAS in Experiment 5 and found consistent results), so we do not discuss mood effects further.

Next, we examined the effect of the deprivation manipulations on the proportion of participants who reported winning using three planned contrasts. Specifically, we examined the contrast between the proportion of participants who reported winning in (1) the deprived-unfair condition versus the deprived-fair condition, (2) the deprived-unfair condition versus the control condition, and (3) the deprived-fair versus the control condition. We conducted these planned contrasts using contrast coding in a binary logistic regression.

The breakdown of participants who reported winning per condition was as follows: 51.61% (control condition), 47.83% (deprived-fair condition), and 67.14% (deprived-unfair condition). As we predicted, a greater proportion of participants reported winning in the deprived-unfair (67.14%) condition relative to the deprived-fair (47.83%) condition, Wald  $\chi^2(201) = 5.20, p = .023$ , and also relative to the control (51.61%) condition, though this difference only reached marginal significance, Wald  $\chi^2(201) = 3.39, p = .066$ . The proportion of participants who reported winning did not differ significantly in the deprived-fair and control conditions,  $p > .05$ . Furthermore, the only condition in which the proportion of participants who reported winning significantly exceeded 50% was the deprived-unfair condition,  $t(69) = 3.03, p = .003$  (other  $ts < 1$ ), suggesting that participants in the deprived-unfair condition, and only in that condition, cheated to win money. Though participants in the deprived-fair condition also felt their financial position was worse relative to the control condition (based on the manipulation check), they did not feel their situation was unfair, which presumably attenuated the effect of deprivation on the perceived acceptability of acting immorally.



In Experiments 1 and 2, we found that financial deprivation led participants to behave dishonestly. We suggested that these effects might have occurred because deprived people found it more acceptable to compromise their moral conduct to return themselves to a fairer, more balanced financial state. Experiment 3 provided additional support for this account, as deprivation only induced dishonesty when people felt their financial situation was unfair or undeserved. These findings suggest that deprivation changed the perceived acceptability of behaving dishonestly when doing so could improve the imbalance in a deprived individual's financial state.

Thus far, we have only examined how deprivation influenced decisions about people's own immoral conduct. In Experiments 4 and 5, we examined the effect of deprivation on morality from a different angle, using a new context in which deprived people's immoral conduct would yield them no direct benefit. Specifically, we turned to a sentencing paradigm in which we examined whether and why deprived people change their moral judgments regarding others who have behaved dishonestly. We suspected that if deprivation changes people's moral standards, then people should still exhibit compromised moral decisions when they judge the immoral conduct of another deprived person. To examine this possibility, in Experiment 4, we manipulated financial deprivation, and required participants to sentence criminals who had committed moral transgressions. Critically, we manipulated both whether participants and the described moral offenders were deprived and examined whether immoral conduct seemed differentially immoral depending on the criminals' state of deprivation and participants' own state of deprivation at the time.

#### **Experiment 4: Leniency Towards Moral Offenders**

In Experiment 4 we tested whether deprived people would evaluate the morally questionable actions of deprived actors with greater leniency than they would otherwise. We expected deprived participants to judge the deprived immoral actors less harshly than the non-deprived actors, whereas we expected non-deprived participants to judge deprived actors just as harshly as non-deprived actors. To investigate whether fairness perceptions affected these judgments, we conducted a posttest to examine how financial deprivation influenced the perceived fairness of the offenders' crimes.

## **Method**

Ninety-six U.S. participants (71 females, 25 males,  $M_{\text{age}} = 37.08$  years,  $SD = 13.32$ ) from MTurk completed this experiment in exchange for 50 cents. First, we manipulated financial deprivation using a similar version of the social comparison procedure described in Experiment 2. Next, we asked participants to play the role of a judge, and decide how leniently or severely to sentence four people who had committed crimes (e.g., stealing money, overstating tax-exempt expenses). For each participant, two of these offenders were financially deprived and two were non-deprived, counterbalanced so that the deprived criminal offenders committed different offenses across different versions of the experiment. Participants indicated what they believed was an appropriate sentence for each offender's crime using a 12-point scale (1 = *most lenient sentence for the crime*, 12 = *the maximum sentence for the crime*; for the complete scenarios see Appendix C in the supplementary material). The experiment followed a 2 x 2 mixed-subjects design, with participants' financial position (our subjective manipulation of financial

deprivation: deprived vs. non-deprived) manipulated between subjects, and the described financial position of criminal offenders manipulated within subjects.

## Results

The mean sentences suggested for the two deprived criminal offenders ( $r = .64, p < .001$ ) and the two non-deprived criminal offenders ( $r = .68, p < .001$ ) served as our dependent measures. There was no main effect of the criminal offenders' financial position ( $F < 1$ ) or participants' manipulated state of financial deprivation,  $F(1, 94) = 1.99, p = .16$ , on participants' sentencing severity. However, as Figure 3 shows, we found the anticipated interaction,  $F(1, 94) = 6.22, p = .01$ . Specifically, participants in the deprived condition assigned more lenient sentences to financially deprived criminal offenders than to non-deprived offenders,  $F(1, 94) = 14.74, p < .001$ , whereas participants in the non-deprived condition did not differ in their sentencing of deprived and non-deprived offenders,  $F(1, 94) = 1.99, p = .16$ . Accordingly, financially deprived participants were more lenient towards immoral actors, but only when confronted with the immoral actions of a similarly deprived criminal offender.

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Insert Figure 3 about here

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## Posttest

To gain a better understanding of whether fairness perceptions contributed to deprived participants' selective leniency towards deprived offenders, we ran a separate study to examine whether deprivation changed how fair participants believed it was for the offenders to behave immorally. The posttest was identical to Experiment 4 but for one change: rather than indicating the appropriate sentence for each offender's crime, participants assessed the fairness of each offender's crime, using a 12-point scale (i.e., "To what extent do you agree with the following statement: 'It was only fair for [the offender] to do what he did;'" 1 = *strongly disagree*, 12 = *strongly agree*).

One hundred and eighty-seven U.S. participants (137 females, 50 males,  $M_{age} = 21.96$  years,  $SD = 4.01$ ) from MTurk completed this experiment in exchange for 50 cents. Consistent with the main study, there were no main effects of the criminal offenders' financial position ( $F(1, 185) = 1.96, p = .16$ ) or participants' perceived financial position ( $F < 1$ ), but there was a significant interaction effect,  $F(1,185) = 4.11, p = .044$ . Follow-up comparisons revealed that participants in the deprived condition thought it was fairer for the deprived offenders ( $M = 3.31, SD = 2.23$ ) rather than the non-deprived offenders ( $M = 2.87, SD = 2.22$ ) to commit their crimes,  $F(1, 185) = 5.85, p = .017$ , whereas participants in the non-deprived condition did not think differently about the fairness of the deprived ( $M = 3.03, SD = 2.22$ ) and non-deprived offenders' ( $M = 3.11, SD = 2.23$ ) actions,  $F < 1$ . Not surprisingly, the means in all conditions were relatively low, suggesting that participants generally regarded the criminal actions to be unfair (consistent with the pilot survey). Nonetheless, deprived participants were notably more accepting towards deprived offenders than towards non-deprived offenders when they considered the fairness of the immoral actions.

In Experiment 4, financial deprivation changed people's moral decisions, even when the outcomes of the moral decisions were not self-serving. The results of the posttest suggested that perceptions of fairness might have contributed to these effects. Together, these results paralleled those found earlier in Experiment 3, where deprived participants did not behave dishonestly when they felt their financial position was fair but behaved dishonestly when they felt their financial position was unfair.

In addition, Deprived participants in Experiment 4 were more forgiving of the deprived (vs. non-deprived) offenders' actions, which they rated as more fair than those of the non-deprived offenders. Deprived participants might not have sentenced deprived offenders more leniently had they felt the deprived offenders were blameworthy for their deprivation (or that their deprivation was fair or deserved). In addition, in Experiment 4, the moral offenses committed were all instrumental in alleviating financial deprivation. Since, in Experiment 2, deprived participants did not behave dishonestly when they did not stand to gain financially (i.e. in the hypothetical round), we would expect deprived participants to be less lenient toward deprived offenders who committed crimes that did not directly alleviate deprivation.

With converging evidence that deprivation compromises moral conduct, we designed Experiment 5 to directly examine the process underlying the changes in people's moral decisions.

### **Experiment 5: The Mediating Role of Moral Standards**

In Experiments 1, 2, 3, and 4, financial deprivation led participants to compromise the moral standards they firmly endorsed in the pilot survey. Specifically, deprived participants

cheated for financial gains and judged other deprived offenders less harshly than non-deprived offenders. Our evidence thus far suggests that these effects occurred at least in part due to shifts in the perceived acceptability of immoral conduct, as the effects attenuated when deprivation seemed fair or deserved (Experiment 3) and when behaving immorally seemed less fair (Experiment 4 posttest). Experiment 5 was designed to test this assumption directly by investigating whether a shift in moral standards (the perceived acceptability of deprivation-induced dishonesty) mediated the relationship between deprivation and compromised moral decisions.

## **Method**

Two hundred and thirty-five U.S. participants (142 females, 93 males,  $M_{\text{age}} = 30.87$  years,  $SD = 11.64$ ) from MTurk completed this experiment in exchange for 50 cents. To manipulate financial deprivation, we reverted to a version of the social comparison procedure used in Experiment 3. Specifically, we instructed participants to write about a time when they felt financially worse off (deprived condition) or better off (privileged condition) relative to their peers.

Next, we gave participants the same criminal sentencing task from Experiment 4, with one change. In contrast to Experiment 4, participants did not sentence both deprived and non-deprived criminal offenders. Instead, half of the participants sentenced four deprived criminal offenders and the other half sentenced four non-deprived criminal offenders. Afterwards, we administered the *subjective financial wellbeing* scale from Experiment 2's pretest (12-point scale) as a manipulation check, followed by the *moral standards* scale from the pilot survey

(using a 12-point scale), which we included as a potential mediator. To reiterate, the moral standards scale assessed people's beliefs about whether financial deprivation is an acceptable excuse for immoral behavior.

The experiment followed a 2 x 2 design, with participants' perceived financial position (deprived vs. privileged) and the described financial position of criminal offenders (deprived vs. non-deprived) manipulated between subjects.

## Results

Participants' responses to the financial wellbeing scale (Cronbach's  $\alpha = .82$ ) indicated that our manipulation worked as intended. Participants in the privileged condition ( $M = 7.24$ ,  $SD = 1.95$ ) reported higher wellbeing scores than did participants in the deprived condition ( $M = 4.67$ ,  $SD = 1.70$ ),  $F(1, 231) = 111.74$ ,  $p < .001$ , suggesting that participants in the deprived versus privileged condition felt financially inferior. No other effects were significant.

Next, we examined participants' responses to the sentencing task in a 2 x 2 between-subjects ANOVA. The mean response over the four criminal offender-cases (Cronbach's  $\alpha = .82$ ) served as our dependent measure. Results revealed a marginally significant effect of participants' perceived financial position (deprived vs. privileged),  $F(1, 231) = 3.28$ ,  $p = .071$ , and no main effect of the criminal offenders' financial positions (deprived vs. non-deprived),  $F(1, 231) = 1.08$ ,  $p = .30$ . More importantly, as Figure 4 shows, we found the anticipated interaction effect,  $F(1, 231) = 5.81$ ,  $p = .017$ . Follow-up comparisons revealed patterns consistent with those in Experiment 4. Participants in the financially deprived condition assigned more lenient sentences to financially deprived offenders than to non-deprived offenders,  $F(1, 231) = 5.65$ ,  $p = .018$ . In

contrast, participants in the financially privileged condition did not sentence deprived and non-deprived offenders differently,  $F < 1$ .

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Insert Figure 4 about here

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Next, we examined participants' responses to the 4-item *moral standards* scale (Cronbach's  $\alpha = .78$ ). We found no main effects ( $F$ 's  $< 1$ ), but a significant interaction emerged between participants' and criminal offenders' financial position,  $F(1, 231) = 4.58, p = .033$ . Among participants in the financially deprived condition, moral standards were more relaxed for those who sentenced the financially deprived offenders ( $M = 8.20, SD = 2.70$ ) in comparison to the non-deprived offenders  $M = 9.13, SD = 2.59, F(1, 231) = 4.17, p = .042$ . In contrast, the moral standards of participants in the financially privileged condition did not differ between those who sentenced deprived criminal offenders ( $M = 9.03, SD = 2.19$ ) and those who sentenced non-deprived criminal offenders,  $M = 8.61, SD = 2.14, F(1, 231) = 1.54, p = .23$ .

Finally, we followed Preacher and Hayes' (2004) bootstrapping procedure to test whether the moral standards scale mediated the effect of our independent variable (the participants' state of financial deprivation x criminal offender's financial position interaction term) on our dependent variable (sentencing severity). Results supported the predicted mediation, as the 95% confidence interval for the indirect effect of the interaction term on sentencing severity, via the moral standards scale, did not include zero (95% CI = -.129, -.002). These results suggest that deprived participants who extended more lenient sentences to deprived



in comparison to non-deprived criminal offenders did so in part because they applied a more relaxed set of moral standards when those offenders were deprived.

### **General Discussion**

Recent organizational research (Barnes et al., 2011) has discussed the importance of identifying antecedents of immoral and unethical conduct, especially antecedents that vary over time. In five experiments, we showed that transient states of financial deprivation increased participants' willingness to cheat for financial gains and grant more lenient sentences to others who engaged in immoral conduct for financial gains, and that these effects arose in part because deprived participants perceived the immoral conduct of deprived actors (themselves and others) as more acceptable. Interestingly, these effects were not limited to contexts in which behaving immorally was purely self-serving (Experiments 4-5). Factors that influenced fairness perceptions – both whether people believed a deprived actor's financial state was fair (e.g., Experiment 3) and whether they believed an immoral act was fair (e.g., Experiments 4-5) – contributed to these effects. Moreover, these results emerged despite the fact that people in general believed they were unlikely to behave more dishonestly and grant leniency to deprived immoral actors under conditions of financial deprivation (pilot survey). Together, these findings contribute to the literatures on subjective wellbeing, morality, and human decision processes by revealing one potential consequence of financial deprivation and shedding light on potential tradeoffs between people's moral and financial standing. Furthermore, this pattern of responses also suggests one reason why workplace theft is so common (e.g., Harper, 1990): because employees who feel deprived relative to the corporations and executives they work for might perceive their own and their colleagues' willingness to steal through lenient eyes. Not only are

these employees redressing a perceived economic imbalance, but they also judge their actions through a more forgiving moral lens.

Our findings raise questions about individual integrity. While some researchers conclude that the construct of integrity remains vague and ill-defined (e.g., Rieke and Guastello, 1995), one common viewpoint is that it represents the extent to which individuals adhere, in action, to their noble and just beliefs in the face of emotional or situational pressures (i.e. they practice what they preach; see e.g., Becker, 1998; Mayer et al., 1995; Monin & Merritt, 2011). Given the observed sensitivity of people's moral decisions to transient financial states, one might conclude that in general people do not have strong individual integrity. Yet, Becker (1998) argues that integrity does not eliminate the possibility of change. In fact, "It is not a breach of integrity, but a moral obligation, to change one's views if one finds that some idea he holds is wrong. It *is* a breach of integrity to know that one is right and then proceed (usually with the help of some rationalization) to defy the right in practice" (Peikoff, 1991, p. 260). Our findings suggest that the change in participants' moral behavior under financial deprivation was mediated by a change in their morals standards. Thus, participants exhibited changed behavior, but that behavior was consistent with their transient "new" moral standards. The question thus becomes whether the experienced situational pressure (transient financial deprivation) is a relevant factor for the change to occur. What is more, an objectivist definition of integrity would ask which of the two sets of standards (the one in the non-deprived state versus the one in the deprived state) is the morally justifiable one "... that promotes the long-term survival and well-being of individuals as rational beings (Becker, 1995, p. 157).

In addition, one interesting question that our work sheds light on is the extent to which people might be conscious of their, what appears like, moral hypocrisy (not practicing what one

preaches; e.g., Barden, Rucker, & Petty, 2005; Stone & Fernandez, 2008) in the context of financial deprivation. Given the discrepancy between people's predicted moral behavior in a context void of social or reputational concerns (pilot study) and their actual behavior (Experiments 1-5), we suggest that people are generally unaware of their vulnerability to this behavioral inconsistency. Upon behaving immorally, however, it is possible that people may recognize their apparent hypocrisy. Even so, they might be compelled to justify or rationalize their behavior so as not to compromise their moral self-concept (and the perceived fairness of one's financial state may serve as one mechanism to disengage internal moral control; see Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Mazar, Amir, & Ariely, 2008). Thus, to the extent people can reconcile their longer-term moral beliefs with their actions, they might not fully recognize the inconsistency of their conduct. Future research could examine to what extent and why people differ in their propensity to adjust their moral standards in the face of varying situational pressures, and how immoral conduct and its consequences vary across those different types of individuals.

Notably, our examination of financial deprivation spans instances in which people temporarily feel financially insecure due to objective monetary losses (Experiment 1) as well as subjective peer comparisons (Experiments 2-5). However, in this work, we do not examine how chronic or prolonged states of deprivation influence moral decisions and are thus limited in our ability to generalize to those situations. Similarly, we are limited in our ability to discuss the duration of these effects, as we measured immediate consequences of our manipulations. Despite these limitations, we suspect that effects similar to the ones we found occur in the real world, as individuals are likely to experience transient states of deprivation when they consider their financial state relative to superior financial standards at least sometimes.

In practical terms, these results are highly relevant in today's world economy. For example, the U.S. financial system is recovering from an enduring recession (although some economic uncertainty still remains; e.g., unemployment, see Gallup 2013), while several countries in Europe find themselves in the midst of major financial turmoil. To the extent that these circumstances contribute to people's feelings of financial deprivation, our research suggests that people might engage in workplace sabotage, pilfering, and other dishonest conduct. Meanwhile, economic policies that further entrench this degree of inequality, including regressive tax plans and high income tax cuts, are likely to encourage immoral transgressions both within and beyond the workplace. In addition, the relationship between deprivation and dishonesty might be bi-directional. For example, to the extent that immoral conduct in the workplace can damage business (e.g., hurt reputation, trust, or profits), it can surely contribute to increased financial insecurity. The possibility of a bi-directional relationship between deprivation and immorality makes for a cycle that could be damaging for individuals as well as organizations. The relationship between financial deprivation and immoral conduct might be less troubling if people were able to anticipate that deprivation shifts their moral standards. Instead, our pilot study suggests that people are generally unable to foresee that deprivation encourages them to behave immorally, while also encouraging them to judge other deprived immoral actors more leniently. This lack of foresight weakens policies that are designed to discourage people from behaving immorally when they experience deprivation.

Finally, our findings suggest considerable implications for people who interpret a wide range of laws and policies—those in judicial systems, corporations, and the economy at large (see also Amir et al., 2005; Mazar & Ariely, 2006). For example, law enforcers are often in the position to judge others who act under financial duress. While many perspectives exist about

why people's standing should be taken into account in a court of law (Kolber, 2009), our work suggests that law enforcers might not fully anticipate their susceptibility to doing so.

Specifically, it is possible for law enforcers' judgments to be inconsistent and disproportionate across equally blameworthy moral offenders who differ only in financial standing, based on temporary changes in their own financial position. Similarly, the effects examined in our work could influence corporate policy issues regarding those who are jobless (e.g., the generosity of unemployment packages), in addition to macroeconomic fiscal policies (e.g., the frequency and size of stimulus packages). In all of these contexts, meaningful differences might exist between the judgments of those who develop, enforce, and interpret laws and those who are affected by them. Accordingly, major reforms—whether in corporations, the judicial system, or the economy at large—ought to account for the degree to which people might make decisions differently if they experienced a sense of financial deprivation. Better estimates of the effects of financial wellbeing should help individuals and organizations predict, understand, and manage moral judgments and decisions in the heat of financial deprivation.

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## Figure Legends

**Figure 1.** Dishonesty rates as a function of an objective manipulation of financial deprivation across the four rounds of the Dots tasks in Experiment 1.

Note: \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ . Comparisons are within each round between deprived and non-deprived participants.

**Figure 2.** Dishonesty rates as a function of a subjective manipulation of financial deprivation and type of monetary outcome in Experiment 2.

Note: \*  $p < .05$ .

**Figure 3.** Mean sentences suggested for deprived and non-deprived criminal offenders as a function of a subjective manipulation of financial deprivation in Experiment 4.

Note: \*  $p < .05$ .

**Figure 4.** Mean sentences suggested for deprived and non-deprived criminal offenders as a function of a subjective manipulation of financial deprivation in Experiment 5.

Note: \*  $p < .05$ .