# Psychological Science

#### **Dishonesty in the Name of Equity**

Francesca Gino and Lamar Pierce Psychological Science 2009 20: 1153 DOI: 10.1111/j.1467-9280.2009.02421.x

The online version of this article can be found at: http://pss.sagepub.com/content/20/9/1153

Published by: \$SAGE

http://www.sagepublications.com

On behalf of:



Association for Psychological Science

Additional services and information for Psychological Science can be found at:

Email Alerts: http://pss.sagepub.com/cgi/alerts

Subscriptions: http://pss.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.com/journalsPermissions.nav

>> Version of Record - Sep 1, 2009

What is This?

#### Research Article

## Dishonesty in the Name of Equity

Francesca Gino<sup>1</sup> and Lamar Pierce<sup>2</sup>

<sup>1</sup>University of North Carolina at Chapel Hill and <sup>2</sup>Washington University in St. Louis

ABSTRACT—Under what conditions do people act dishonestly to help or hurt others? We addressed this question by examining the influence of a previously overlooked factor—the beneficiary or victim of dishonest acts. In two experiments, we randomly paired participants and manipulated their wealth levels through an initial lottery. We then observed how inequity between partners influenced the likelihood of one dishonestly helping or hurting the other, while varying the financial incentives for dishonest behavior. The results show that financial self-interest cannot fully explain people's tendency to dishonestly help or hurt others. Rather, such dishonesty is influenced by emotional reactions to wealth-based inequity, even when the dishonesty bears a personal financial cost. Envy evoked by negative inequity led to hurting behavior, whereas guilt induced by positive inequity motivated helping behavior. Finally, inequity between the partner and third parties triggered dishonest helping through empathy with the partner.

Fraud, theft, and corporate corruption are just a few examples of widespread unethical practices in today's society. People tend to assume that wrongdoers behave dishonestly purely in pursuit of monetary gains. Although financial incentives are certainly an important driver of deceptive behavior, individuals often act dishonestly in order to hurt or help others even when they receive no personal financial benefits or suffer financially from their dishonesty. Such dishonesty can occur when managers overstate employees' performance, when health-insurance administrators approve treatments not covered by a policy, or when employees lie to protect friends or coworkers. Under what conditions do people act dishonestly to help or hurt others? In this article, we address this question and report two experiments

Address correspondence to Francesca Gino, Kenan-Flagler Business School, University of North Carolina, Campus Box 3490, McColl Building, Chapel Hill, NC 27599-3490, e-mail: fgino@unc.edu, or to Lamar Pierce, Washington University in St. Louis, Olin Business School, Campus Box 1133, One Brookings Dr., St. Louis, MO 63130, e-mail: pierce@wustl.edu.

in which we investigated the mechanisms underlying dishonesty that helps or hurts other people.

### BEHAVING DISHONESTLY BY HELPING OR HURTING OTHER PEOPLE

Although many factors may influence the decision to behave dishonestly, two mechanisms are particularly important in accounting for dishonesty that favors or hurts other people. First, such dishonesty may arise when people seek to advance their own financial interests. Even when their actions appear to show concern for the fate of others, the appearance of such concern may be merely a by-product of their pursuit of financial gain. Psychological research has found that individuals driven by egoistic motives ignore others' interests and are reluctant to sacrifice their personal outcomes to benefit counterparts (Van Lange, 1999). Tenbrunsel (1998) showed that incentives increase individuals' willingness to misrepresent information to another party in a social exchange, a finding consistent with Lewicki's (1983) argument that individuals lie to the extent that lying benefits them. This research is consistent with traditional models of agency theory in economics, which posit that individuals make rational self-interested decisions to deceive on the basis of incentive structures (Jensen & Meckling, 1976; Prendergast, 1999). According to this account, an individual dishonestly helps or hurts others when doing so benefits him or her financially. When an individual's compensation is linked to others' performance, for example, the individual will have a motivation to misrepresent that performance because he or she will be directly rewarded by behaving dishonestly.

A second explanation for dishonesty that favors or hurts other people hinges on inequity concerns. According to Adams's (1965) equity theory, people evaluate the fairness of their situation in a given setting (e.g., an organization) by comparing the ratio of their own inputs and outcomes with the ratio of inputs and outcomes of a referent (a coworker or a peer). Individuals experience emotional distress from inequity in these ratios and are motivated to relieve this distress by modifying their inputs and outcomes, changing their referent other, distorting their perceptions, or quitting the task. Supporting equity theory, several studies have shown that an individual's perception of

outcomes as unfair can translate into poor performance (Greenberg, 1988), increased turnover and absenteeism (Schwarzwald, Koslowsky, & Shalit, 1992), and lower commitment to the organization (Schwarzwald et al., 1992). In addition, the effects of negative inequity (i.e., being underrewarded relative to referent others) have been found to be stronger than those of positive inequity (i.e., being overrewarded relative to others) in motivating performance (e.g., Bloom, 1999).

Related research in economics has demonstrated that individuals care about fairness and reciprocity, are willing to change the distribution of outcomes at a personal cost, and are willing to reward people who behave cooperatively and to punish those who do not (e.g., Camerer, 2003; Fehr & Schmidt, 1999, 2003). In ultimatum-game settings, for example, individuals tend to reject very uneven proposals, thus preferring no payment to an amount of money that is significantly lower than the counterpart's payoff (Fehr & Gachter, 2000).

Distress from perceived inequity can lead to different emotional reactions that motivate individuals to dishonestly favor or hurt others. Research has demonstrated that emotions can override rational thinking and decision making (Vohs, Baumeister, & Loewenstein, 2007) and might play an important role in driving unethical decisions (Schweitzer & Gibson, 2008). Related work has shown that emotions are important predictors of helping behavior toward members of high- and low-status groups (e.g., Cuddy, Fiske, & Glick, 2007; Cuddy, Rock, & Norton, 2007), suggesting that comparing oneself to a referent other might produce powerful emotional reactions.

Negative inequity may produce feelings of envy toward a referent other, and these feelings, in turn, might motivate the individual to hurt the referent other through dishonest acts. Conversely, positive inequity may generate guilt that, in turn, might motivate the individual to dishonestly help the referent other. Emotional distress may also arise from inequity that does not directly affect an individual. When one feels empathy toward another person, one may experience emotional distress from inequity between that referent person and a third party or group. Such empathy allows one to understand and share the referent person's distress as if one were suffering personally from the inequity. Although such distress may be weaker than that caused by personal inequity, empathy may motivate dishonest behavior that helps the referent other.

In summary, the financial self-interest and equity explanations provide different predictions about the likelihood of dishonest behavior that helps or hurts referent others. The financial self-interest explanation suggests that decisions to dishonestly help or hurt another person are predicted by their compatibility with financial incentives. The equity explanation suggests that perceptions of inequity produce emotional distress (resulting in different emotional reactions) that increases the propensity to act dishonestly. These two mechanisms may either conflict or coincide depending on whether the financial incentives and equity concerns motivate dishonest behavior in the same direction.

#### THE PRESENT STUDY

We conducted two laboratory experiments to investigate how these two mechanisms influence individuals' likelihood of dishonestly helping and hurting others. In the two experiments, participants were randomly assigned to one of two roles: solver or grader. Each solver was also randomly assigned to a grader. Participants in both roles became either "wealthy" or "poor" through a lottery in which they had a 50% probability of winning \$20. This lottery, together with the random pairing of solvers and graders, created four pair types: wealthy grader and wealthy solver (equity condition), poor grader and poor solver (empathetic-inequity condition), wealthy grader and poor solver (positive-inequity condition), and poor grader and wealthy solver (negative-inequity condition). After the lottery, solvers solved multiple anagrams. Graders then graded solvers' work. Graders had the opportunity to dishonestly help or hurt solvers by misreporting their performance, a form of dishonesty observable to us after the experiment. If a grader overstated a solver's performance, then the solver earned undeserved money. If the grader understated the solver's performance, then the solver did not earn deserved money.

Our two experiments varied whether there were monetary incentives or costs for graders to dishonestly help solvers. In Experiment 1, a grader's compensation increased with the solver's performance, aligning financial self-interest with the helpful overstatement of the solver's performance. In Experiment 2, a grader's compensation decreased with the solver's performance, aligning financial self-interest with the hurtful understatement of the solver's performance. The two experiments allowed us to test how the two proposed mechanisms, financial self-interest and emotional reactions to inequity, motivate dishonest behavior that helps or hurts other individuals.

## EXPERIMENT 1: EFFECTS OF EMOTIONAL REACTIONS TO INEQUITY

The first experiment employed a 2 (solver: wealthy vs. poor)  $\times$  2 (grader: wealthy vs. poor) between-subjects design. The four conditions differed in the wealth of the solver and of the grader within the same pair, as determined by the initial lottery.

The experiment consisted of the lottery and the anagram task. During the lottery, participants earned either \$20 or nothing, as determined by computer-simulated coin flips visible to all participants. In the anagram task, each solver earned \$2 for each of four letter series (rounds) for which he or she reached the goal of creating 10 valid words (in addition to a \$2 payment for participating in the experiment). The goal was based on the results of a pilot study conducted with a nonoverlapping population (N=40). Each grader's compensation for grading was tied to that of his or her partner: Graders were paid \$2 for participation and an additional \$2 for each round in which their partner reached the goal. Given this incentive structure, graders helped

both themselves and their partners when they overstated solvers' performance, and they hurt both themselves and their partners when they understated it.

Because graders' compensation was linked to solvers' performance, graders had a financial incentive to help. The financial self-interest account predicted dishonest helping in each condition. Additionally, it predicted stronger helping behavior when the grader was poor than when he or she was wealthy, as individuals without money tend to value additional dollars more than do those with existing wealth (i.e., the decreasing marginal utility of wealth). Thus, this account predicted that the levels of dishonest helping would show the following pattern: poorgrader/wealthy-solver condition  $\approx$  poor-grader/poor-solver condition > wealthy-grader/wealthy-solver condition  $\approx$  wealthy-grader/poor-solver condition.

If equity considerations instead dominated the decision to behave dishonestly, we would observe a different pattern of results. According to the equity mechanism, dishonest hurting would occur in the negative-inequity (poor-grader/wealthysolver) condition, in which the grader was expected to experience envy toward the solver, but not in any other conditions. Thus, the levels of dishonest hurting would be expected to show the following pattern: poor-grader/wealthy-solver condition > wealthy-grader/poor-solver condition ≈ wealthy-grader/wealthysolver condition  $\approx$  poor-grader/poor-solver condition. By contrast, dishonest helping would be expected when the grader experienced guilt (wealthy-grader/poor-solver condition) or empathy (poor-grader/poor-solver) toward the solver. Finally, equity was expected to produce happiness and no emotional distress in the grader, so no dishonesty was expected in the wealthy-grader/wealthy-solver condition. Thus, dishonest helping was expected to show the following pattern: poor-grader/ poor-solver condition  $\approx$  wealthy-grader/poor-solver condition >wealthy-grader/wealthy-solver condition ≈ poor-grader/wealthysolver condition.

The two mechanisms conflicted in their predictions of how the solver's wealth would influence a grader's behavior under conditions of negative inequity. Equity theory predicted hurting in the poor-grader/wealthy-solver condition, whereas the financial self-interest account predicted helping in this condition. The equity account, unlike the financial self-interest account, also predicted that helping would be greater in the positive-inequity condition than in the equity condition (i.e., wealthy-grader/poorsolver condition) wealthy-grader/wealthy-solver condition).

#### Method

#### **Participants**

One hundred seventy-eight individuals (51% male, 49% female; mean age = 23 years, SD = 5.52) participated in the study. Most participants (83%) were students from local universities. Participants were randomly assigned to one of two roles (grader or

solver) and were made either wealthy or poor through an initial lottery.

#### Design and Procedure

The study was conducted in a large classroom at Carnegie Mellon University. Before beginning the study, the experimenter placed the following materials on each table where a participant would work (1 participant per table): a consent form, a pen, a copy of the general instructions, and a colored transparent plastic lanyard. In addition, a Scrabble dictionary was placed at each grader's table. As participants entered the room, they randomly received an index card with an ID number on it, together with a lanyard. Graders and solvers sat at opposite sides of the room, and their lanyards differed in color. The experimenter asked participants to wear their lanyards around their necks for the duration of the experiment. Participants were told they would receive money during the study and would need to place the money in their lanyards.

As the experimenter explained to participants, the study included three stages. All participants first played in a lottery. Depending on the outcome of a visible virtual (and fair) coin toss, each participant received either \$20 (wealthy condition) or \$0 (poor condition). Lottery winners were asked to put the \$20 in their lanyard, such that the money was visible to the other participants for the rest of the experiment.

In the second stage of the study, the solvers completed an anagram task, while the graders completed a filler task. In the anagram task, solvers were asked to create words from each of four series of seven letters; the task was performed under time pressure (60 s per round). They reported the words they created in each round in a workbook.

After the anagram task, participants entered the third stage of the study. Each solver was randomly assigned to a grader who would grade that solver's anagram task. As the experimenter announced the random pairings, each solver walked to the grader with whom he or she was paired and left his or her lanyard and workbook on the grader's desk. Each grader thus fully observed the wealth condition of his or her referent solver. The experimenter handed each grader an envelope containing eight \$1 bills and told the graders how to grade the work. Each grader then completed the assigned solver's answer sheet by indicating whether the solver reached the given goal (i.e., 10 valid words) in each round, placed the solver's workbook in a recycling box, and paid the solver based on his or her performance by placing money from the envelope in the solver's lanyard. While the graders were grading, the solvers returned to their own tables and completed a filler task. Graders recorded their own ID numbers and the ID numbers of their solvers on the answer sheets. Given that solvers reported their ID numbers on their workbooks, we were able to match each solver's workbook with his or her answer sheet when the experiment was finished.

Once graders finished grading and paid their solvers, the experimenter collected the answer sheets and the solvers' lan-

yards. The graders were handed receipts to record the payments they had made, were paid accordingly, and were told to leave the envelopes with any remaining money on their tables. When the solvers completed their filler task, a second experimenter returned their lanyards to them, together with a receipt on which they recorded their payment.

As their final task, all participants filled out a questionnaire measuring their emotional reactions to their partners' lottery outcome. We measured four different emotions: envy, empathy, happiness, and guilt. For each emotion, we used a 7-point Likert-type scale anchored at 1 (strongly disagree) and 7 (strongly agree). Envy was measured using a previously validated scale (Moran & Schweitzer, 2008) that includes items such as "I feel envy toward my counterpart" ( $\alpha = .92$ ). We assessed empathy with a scale adapted from Batson (1998;  $\alpha = .97$ ). We measured guilt ( $\alpha = .89$ ) and happiness ( $\alpha = .88$ ) by creating a three-item scale for each emotional state (e.g., "The thought of my counterpart's lottery outcome makes me feel guilty").

As they completed this final task, participants returned the receipts to the experimenter and left with their earned money (including their \$2 participation fee).

#### Results

For each grader, we coded any underreporting or overreporting of the goal being met as hurting or helping, respectively. Figure 1 depicts the percentage of graders who engaged in helping, hurting, and honest reporting in each condition. All three categories of graders' behavior differed significantly across the four conditions—helping behavior,  $\chi^2(3, N=89)=57.59, p<.001$ ; honest reporting:  $\chi^2(3, N=89)=47.79, p<.001$ ; hurting behavior:  $\chi^2(3, N=89)=19.59, p<.001$ . Helping was much

more prevalent than hurting, which was consistent with financial self-interest.

The results presented in Table 1 show that equity considerations dominated financial self-interest in predicting helping and hurting behavior. Financial incentives to help led to at least one helper in each condition, but only in the positive-inequity condition (wealthy grader, poor solver) and the empathy condition (poor grader, poor solver) was dishonest helping widespread. In these two conditions, the predictions of financial incentives were aligned with those of equity theory (i.e., both accounts predicted helping). In the one condition in which financial incentives and equity considerations conflicted because the former suggested helping and the latter suggested hurting (poor-grader/wealthy-solver condition), a large number of graders hurt solvers, despite this behavior's financial cost. This result demonstrates people's willingness to act against financial selfinterest in order to reduce emotional distress from inequity. In essence, reducing negative inequity was worth real money to poor graders.

We next examined the types of emotional distress (or lack thereof) experienced in the four conditions, using graders' answers to the items measuring their emotional reactions to their referent solvers' lottery outcomes. As expected, empathy ratings were higher in the poor-grader/poor-solver condition compared with all other pairings combined, t(87) = 15.84, p < .001. Envy ratings were higher in the poor-grader/wealthy-solver condition compared with all other pairings combined, t(87) = 8.31, p < .001. Guilt ratings were higher in the wealthy-grader/poor-solver condition compared with all other pairings combined, t(87) = 5.67, p < .001. Finally, happiness ratings were higher in the wealthy-grader/wealthy-solver condition compared with all other pairings combined, t(87) = 12.15, p < .001, a finding consistent with equitable wealth bringing the most happiness.

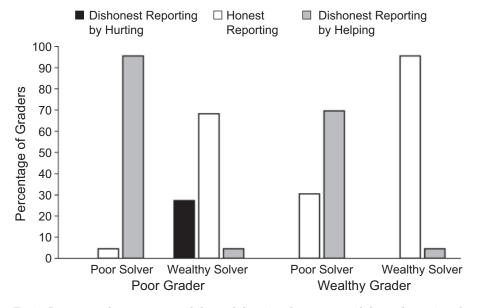


Fig. 1. Percentage of overstatements (dishonest helping), understatements (dishonest hurting), and honest reporting in each condition (combination of grader and solver) of Experiment 1.

**TABLE 1**Summary of Predictions and Results in Experiments 1 and 2

	Predi	Results		
Dishonest behavior and type of inequity	Equity theory	Financial self-interest	Fisher exact test statistic	Theory supported
	Expe	riment 1		
Helping	•			
Positive inequity	$WG/PS \approx PG/PS > 0$	WG/PS < PG/PS	.047	Both
• •	WG/PS > WG/WS	$WG/PS \approx WG/WS$	.000	Equity
Empathetic inequity	PG/PS > WG/WS	PG/PS > WG/WS	.000	Both
Negative inequity	$PG/WS \approx 0$	PG/WS > 0	1.000	Equity
Equity	$WG/WS \approx 0$	WG/WS > 0	1.000	Equity
Hurting				
Negative inequity	PG/WS > PG/PS	$PG/WS \approx PG/PS \approx 0$	.021	Equity
	PG/WS > WG/WS	$PG/WS \approx WG/WS \approx 0$	.021	Equity
	Expe	riment 2		
Helping				
Positive inequity	$WG/PS \approx PG/PS > 0$	$WG/PS \approx 0$	.155	Equity
	WG/PS > WG/WS		.000	Equity
Empathetic inequity	PG/PS > WG/WS	$PG/PS \approx 0$	.000	Equity
Negative inequity	$PG/WS \approx 0$	$PG/WS \approx 0$	1.000	Both
Equity	$WG/WS \approx 0$	$WG/WS \approx 0$	1.000	Both
Hurting				
Negative inequity	PG/WS > PG/PS		.001	Equity
	PG/WS > WG/WS	PG/WS > WG/WS	.001	Both
Empathetic inequity	$PG/PS \approx WG/WS \approx 0$	PG/PS > WG/WS	1.000	Equity
Positive inequity	WG/PS $\approx 0$	WG/PS > 0	1.000	Equity

Note. Each condition is referred to by the combination of grader and solver: WG = wealthy grader, WS = wealthy solver, PG = poor grader, and PS = poor solver. All Fisher exact tests were conducted on counts of graders who helped and graders who hurt their partners.

Finally, we examined whether emotional reactions to inequity mediated the effects of the wealth manipulation on an individual's choice to engage in dishonest helping or hurting. As recommended by MacKinnon and Dwyer (1993), we used a mediation analysis with standardized coefficients from logistic regressions to test for mediation. In each condition, our wealth manipulation was a significant predictor of the dependent variable of interest, and the effect of the wealth manipulation was reduced to nonsignificance when the corresponding predicted emotion was included in the logistic regression model. The results, summarized in Table 2, suggest that specific emotions mediate the effects of inequity on dishonest behavior that helps or hurts referent others (e.g., envy mediates the effect of negative inequity on hurting).

#### Discussion

Overall, these results provide support for the predictions based on emotional reactions to inequity. Individuals do help in conditions of equity, which suggests that financial self-interest drives some dishonest behavior, but emotional reactions to positive and negative inequity appear to have a much stronger influence on the decision to dishonestly report performance. Poor graders rarely dishonestly helped wealthy solvers, despite the fact that this would increase their own financial earnings. Instead, they were often willing to dishonestly hurt wealthy solvers at a further financial cost to themselves.

#### **EXPERIMENT 2: EFFECTS OF COSTS OF HELPING**

Although Experiment 1 shows that emotional reactions to inequity drive both dishonest helping and dishonest hurting behavior, all graders in this experiment had a financial incentive to dishonestly help. Consequently, we conducted Experiment 2 to examine the role of self-interest and equity concerns when graders incurred monetary costs from helping and instead gained from hurting. We used a limited pool of money to compensate both the grader and the solver within each dyad, such that graders' payoffs decreased with increases in solvers' reported performance. Thus, graders hurt themselves when they helped their partners by overstating performance and helped themselves when they hurt their partners by understating performance.

#### Method

#### **Participants**

One hundred sixty-four students (56% male, 44% female; mean age = 21 years, SD = 1.60) from local universities participated in the study. Participants were randomly assigned to one of two

**TABLE 2**Outcomes of the Mediation Analyses in Experiments 1 and 2

Regression coefficient or test statistic	Wealthy-grader/ wealthy-solver condition: M = happiness; DV = honest reporting		Poor-grader/poor- solver condition: M = empathy; DV = helping		Poor-grader/wealthy- solver condition: M = envy; DV = hurting		Wealthy-grader/poor- solver condition: M = guilt; DV = helping	
	Expt 1	Expt 2	Expt 1	Expt 2	Expt 1	Expt 2	Expt 1	Expt 2
Coefficient a	.59	.61	.65	.46	.54	.49	.36	.51
Coefficient $b$	.72	.33	.88	.56	.14	.27	.55	.64
Coefficient $c'$	.30	.68	.07	.58	.88	.78	.08	08
Coefficient $c$	.82	.98	.82	.98	.98	.98	.33	.27
Sobel test statistic $(Z)$	2.73**	3.52**	2.74**	2.19*	2.12*	1.98*	3.43**	2.08*

Note. In each analysis, the independent variable (IV) was a dummy variable for the indicated condition. Each dummy was equal to 1 when the variable matched the condition of interest and 0 otherwise. Dummies for the other conditions were included as control variables. Regression coefficients were standardized for comparisons across types of models. Before standardization, a was obtained from an ordinary least squares regression, whereas b, c, and c' were obtained from logistic regressions. Coefficient a refers to the effect of the IV on the mediator (M); coefficient b refers to the effect of M on the dependent variable (DV) when controlling for IV; coefficient c refers to the effect of IV on DV when controlling for M. For each mediation analysis, only the emotion listed was a significant mediator; the remaining three emotions were not, Zs < 1, ps > .10. Expt = Experiment.

\*a0.5. \*\*a0.0.

roles (grader or solver) and were made either wealthy or poor through a lottery.

#### Design and Procedure

The study was conducted in a large classroom at the University of North Carolina in Chapel Hill. Experiment 2 used the same design and procedure as Experiment 1, with the one difference being that graders experienced financial costs for dishonestly helping solvers. Both graders and solvers were paid a \$2 participation fee. In addition, graders were given \$8 to use to pay both their assigned solvers and themselves. They were told that solvers would receive \$2 for each round in which they reached the goal, and that each grader would receive whatever money remained out of the \$8 after he or she paid the assigned solver. As in Experiment 1, all participants first took part in a lottery with a 50% chance to earn \$20.

The equity implications for dishonest helping and hurting remained the same as in Experiment 1. However, financial self-interest now predicted dishonest hurting in each condition because graders incurred costs from financially compensating solvers. Additionally, because of decreasing marginal utility of money, financial self-interest predicted stronger hurting behavior when the grader was poor than when he or she was wealthy (i.e., poor-grader/wealthy-solver condition  $\approx$  poor-grader/poor-solver condition > wealthy-grader/wealthy-solver condition  $\approx$  wealthy-grader/poor-solver condition).

#### Results

Figure 2 depicts the percentage of graders who engaged in helping, hurting, and honest reporting in each condition. All three categories of graders' behavior differed significantly across the four conditions—helping behavior:  $\chi^2(3, N=82)=51.50, p<.001$ ; honest reporting:  $\chi^2(3, N=82)=33.28, p<.001$ ; hurting behavior:  $\chi^2(3, N=82)=26.37, p<.001$ .

Contrary to financial self-interest arguments, helping was much more prevalent than hurting.

The results summarized in Table 1 show that equity considerations dominated financial self-interest in predicting helping and hurting behavior. Dishonest hurting occurred only in the one condition in which it was predicted by the equity account (poor grader, wealthy solver). In all other conditions, although financial self-interest was aligned with hurting, graders either helped solvers or reported solvers' performance honestly.

We next examined graders' emotional reactions to the lottery outcomes of their referent solvers. As expected, empathy ratings ( $\alpha = .96$ ) were higher in the poor-grader/poor-solver condition compared with all other pairings combined, t(80) = 5.25, p < .001. Envy ratings ( $\alpha = .96$ ) were higher in the poor-grader/wealthy-solver condition compared with all other pairings combined, t(80) = 8.04, p < .001. Guilt ratings ( $\alpha = .97$ ) were higher in the wealthy-grader/poor-solver condition compared with all other pairings combined, t(80) = 10.42, p < .001. Finally, happiness ratings ( $\alpha = .92$ ) were higher in the wealthy-grader/wealthy-solver condition compared with all other pairings combined, t(80) = 15.83, p < .001.

As in Experiment 1, we conducted mediation analyses to examine whether emotional reactions to inequity mediated the effects of the wealth manipulation on dishonest helping and hurting. In each condition, the effect of the wealth manipulation was reduced to nonsignificance when the corresponding predicted emotion was included in the equation, and our wealth manipulation was a significant predictor of the dependent variable of interest (see Table 2).

#### Discussion

Consistent with the findings of Experiment 1, these results suggest that financial self-interest and egoistic motives cannot

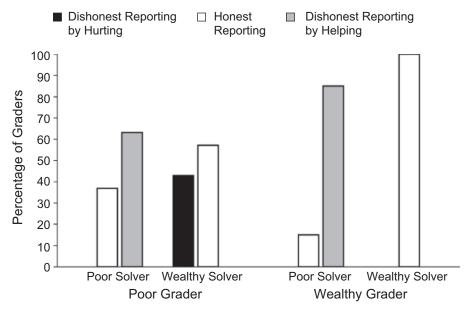


Fig. 2. Percentage of overstatements (dishonest helping), understatements (dishonest hurting), and honest reporting in each condition (combination of grader and solver) of Experiment 2.

entirely explain the likelihood of individuals' engaging in helpful or hurtful dishonesty. Emotional reactions to inequity appear to have a much stronger influence on dishonest reporting of performance than does financial self-interest. Indeed, although graders incurred a cost when they helped solvers, we still observed high levels of dishonest helping when the solver did not win the initial lottery (wealthy-grader/poor-solver and poor-grader/poor-solver conditions). Again, when faced with a choice between financial gain and restoring equity, individuals chose equity.

#### GENERAL DISCUSSION AND CONCLUSION

The results of our two experiments show that people engage in dishonest behavior to relieve emotional distress from wealth-based inequity. Individuals increase hurting behavior and reduce helping behavior when they experience negative inequity (i.e., when they are worse off than the referent other), and they increase dishonest helping when they experience positive inequity (i.e., when they are better off than the referent other). Inequity produces real emotional reactions that appear to drive dishonest behavior, both through direct comparisons with others and through empathetic concern for referent partners. Our results also demonstrate that although these dishonest behaviors are influenced by financial self-interest, this motivation is weaker than the need to reduce inequity at the small compensation levels in our study. Remarkably, individuals are willing to pay, or forgo pay, in order to relieve emotional distress.

Taken together, the findings highlight the importance of emotional reactions to pay equity and inequity in driving dishonest behaviors. This work joins the stream of research examining the "when" and "why" of dishonesty. Prior research has found that both motives and characteristics of the perpetrators (Ford & Richardson, 1994; Loe, Ferrell, & Mansfield, 2000), as well as organizational and environmental pressures (Flannery & May, 2000; Schweitzer & Croson, 1999; Weaver, Trevino, & Cochran, 1999), can influence individuals' unethical behavior. Although these factors are important variables in the study of dishonesty, our evidence shows that circumstances of the victims and beneficiaries of ethically questionable actions, a previously overlooked factor, can also have significant explanatory power. Our findings suggest that negative emotional reactions to inequity (such as envy) are powerful drivers of dishonest behavior that hurts a referent other. But, as our results show, even positive emotions (such as empathy) can have negative consequences when they drive dishonest behavior that is economically or socially costly (e.g., helping a referent other might actually be costly to a third party or organization).

The results have important practical implications. They suggest that organizations and their managers should pay close attention to inequities, because inequities are likely to result in dishonesty in the workplace. Dishonesty is particularly worrisome when it consists of a person hurting the performance of another, but dishonest helping can also be costly to organizations when it accommodates poor performance or covers up weakness or lack of motivation in individuals.

Acknowledgments—The authors thank Max Bazerman, Kurt Dirks, Jeffrey Edwards, Hillary Anger Elfenbein, Adam Grant, Don Moore, Maurice Schweitzer, and Laurie Weingart for their helpful comments and three anonymous reviewers for their useful suggestions and guidance during the revision process. The authors greatly appreciate the support and facilities of the

Center for Behavioral Decision Research at Carnegie Mellon University and the Center for Decision Research at the University of North Carolina in Chapel Hill.

#### REFERENCES

- Adams, J.S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 2, pp. 267–299). New York: Academic Press.
- Batson, C.D. (1998). Altruism and prosocial behavior. In D.T. Gilbert, S.T. Fiske, & G. Lindzey (Eds.), The handbook of social psychology (4th ed., Vol. 2, pp. 282–316). New York: McGraw-Hill.
- Bloom, M. (1999). The performance effects of pay dispersion on individuals and organizations. Academy of Management Journal, 42, 25–40.
- Camerer, C.F. (2003). Behavioral game theory: Experiments in strategic interaction. Princeton, NJ: Princeton University Press.
- Cuddy, A.J.C., Fiske, S.T., & Glick, P. (2007). The BIAS map: Behaviors from intergroup affect and stereotypes. *Journal of Per*sonality and Social Psychology, 92, 631–648.
- Cuddy, A.J.C., Rock, M., & Norton, M.I. (2007). Aid in the aftermath of Hurricane Katrina: Inferences of secondary emotions and intergroup helping. Group Processes and Intergroup Relations, 10, 107–118.
- Fehr, E., & Gachter, S. (2000). Fairness and retaliation: The economics of reciprocity. *Journal of Economic Perspectives*, 14, 159–181.
- Fehr, E., & Schmidt, K.M. (1999). A theory of fairness, competition and co-operation. Quarterly Journal of Economics, 114, 817–868.
- Fehr, E., & Schmidt, K.M. (2003). Theories of fairness and reciprocity: Evidence and economic applications. In M. Dewatripont, L.P. Hansen, & S. Turnovski (Eds.), Advances in economics and econometrics: Theory and applications, Eighth World Congress (Vol. 1, pp. 208–257). Cambridge, England: Cambridge University Press.
- Flannery, B., & May, D. (2000). Environmental ethical decision making in the U.S. metal-finishing industry. Academy of Management Journal, 43, 642–662.
- Ford, R.C., & Richardson, W.D. (1994). Ethical decision making: An overview of the empirical literature. *Journal of Business Ethics*, 13, 205–221.

- Greenberg, J. (1988). Equity and workplace status: A field experiment. Journal of Applied Psychology, 73, 600–613.
- Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Fi*nancial Economics, 3, 305–360.
- Lewicki, R.J. (1983). Lying and deception: A behavioral model. In M.H. Bazerman & R.J. Lewicki (Eds.), Negotiating in organizations (pp. 68–90). Beverly Hills, CA: Sage.
- Loe, T.W., Ferrell, L., & Mansfield, P. (2000). A review of empirical studies assessing ethical decision making in business. *Journal of Business Ethics*, 25, 185–204.
- MacKinnon, D.P., & Dwyer, J.H. (1993). Estimating mediated effects in prevention studies. Evaluation Review, 17, 144–158.
- Moran, S., & Schweitzer, M.E. (2008). When better is worse: Envy and the use of deception. Negotiation and Conflict Management Research, 1, 3–29.
- Prendergast, C. (1999). The provision of incentives in firms. Journal of Economic Literature, 37, 7–63.
- Schwarzwald, J., Koslowsky, M., & Shalit, B. (1992). A field study of employees' attitudes and behaviors after promotion decisions. *Journal of Applied Psychology*, 77, 511–514.
- Schweitzer, M.E., & Croson, R. (1999). Curtailing deception: The impact of direct questions on lies and omissions. *International Journal of Conflict Management*, 10, 225–248.
- Schweitzer, M.E., & Gibson, D.E. (2008). Fairness, feelings, and ethical decision making: Consequences of violating community standards of fairness. *Journal of Business Ethics*, 77, 287–301.
- Tenbrunsel, A. (1998). Misrepresentation and expectations of misrepresentation in an ethical dilemma: The role of incentives and temptation. *Academy of Management Journal*, 41, 330–339.
- Van Lange, P.A.M. (1999). The pursuit of joint outcomes and equality in outcomes: An integrative model of social value orientations. *Journal of Personality and Social Psychology*, 77, 337–349.
- Vohs, K.D., Baumeister, R.F., & Loewenstein, G. (2007). Do emotions help or hurt decision making? A hedgefoxian perspective. New York: Russell Sage Foundation Press.
- Weaver, G., Trevino, L., & Cochran, P. (1999). Corporate ethics practices in the mid-1990's: An empirical study of the Fortune 1000. Journal of Business Ethics, 18, 283-294.

(RECEIVED 10/20/08; REVISION ACCEPTED 1/31/09)