



# Self-serving altruism? The lure of unethical actions that benefit others



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## ABSTRACT

In three experiments, we propose and find that individuals cheat more when others can benefit from their cheating and when the number of beneficiaries of wrongdoing increases. Our results indicate that people use moral flexibility to justify their self-interested actions when such actions benefit others in addition to the self. Namely, our findings suggest that when people's dishonesty would benefit others, they are more likely to view dishonesty as morally acceptable and thus feel less guilty about benefiting from cheating. We discuss the implications of these results for collaborations in the social realm.

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## 1. Introduction

It seems a day does not go by without a revelation of unethical behavior by a politician, a movie star, a professional athlete, or a high-ranking executive. To take one example, in 2007, Major League Baseball pitcher Andy Pettitte was accused of using human growth hormones, a substance banned by the league. Pettitte publicly confessed that he did not take the drugs “to try to get an edge,” but rather to try to get off the disabled list so that he “would not let his team down.” According to Pettitte, his unethical actions were motivated by the benefits that would accrue to others rather than by potential direct benefits to himself.

How does the presence of others who may benefit from our dishonesty influence our willingness to cross ethical boundaries? This paper suggests that the potential benefits dishonesty may create for others not only help people justify their bad behavior but also act as a (self-serving) motivator for it. We propose and find that by focusing on the social utility of others, people can more freely categorize their own actions in positive terms and avoid negative updating of their moral self-image (Baumeister, 1998; Mazar et al., 2008; Schweitzer and Hsee, 2002). As a result, people feel less guilty about their dishonest behavior when others (in addition to themselves) can benefit from it.

### 1.1. Cheating motivated by potential benefits to others

Ethical dilemmas often involve an apparent conflict: by behaving ethically, people can maintain their positive self-image; by behaving unethically, they can advance their self-interest (Gino et al., 2011; Mead et al., 2009). People often resolve this

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conflict through creative reassessments and self-serving rationalizations (Gino and Ariely, 2012; Shalvi et al., 2011), such that they can act dishonestly enough to profit from their unethicity but honestly enough to maintain a positive self-concept (e.g., Gino et al., 2009; Mazar et al., 2008). Recent research has found that when individuals have the opportunity to cheat when the probability of being caught and reputational costs are minimized, most people do cheat, but not as much as they could (e.g., Ayal and Gino, 2011; Gino et al., 2009). They cheat enough to benefit financially, but not to the extent that they feel obligated to negatively revise their self-image (Mazar and Ariely, 2006).

Using their creativity, people can recruit a variety of reasons to justify “minor” cheating (Gino and Ariely, 2012). For instance, they might decide that others would surely cheat under the same circumstances or that a little cheating would not hurt anyone. People may make these (self-serving) justifications to convince themselves and others that their behavior is in fact ethical (Diekmann, 1997; Gino and Ariely, 2012; Lewis et al., 2012). Wiltermuth (2011) found that people are more likely to behave unethically if they split the spoils of such behavior with another person than when they are the sole beneficiaries. They find it easier to discount the moral concerns associated with unethical behavior that benefits another person than to discount behavior that only benefits themselves (Wiltermuth, 2011; see also Erat and Gneezy, 2012; Gino and Pierce, 2010; Shalvi and Leiser, 2013). Overall, this research suggests that people use the potential benefits for others to justify their self-serving, often unethical actions. When dishonest actions only benefit the self, there can be little doubt that they were self-serving. But ambiguity clouds this clear motivation when others benefit from one’s cheating.

In addition to using others to justify selfish behavior, research shows that people truly care about improving the outcomes of their peers (Loewenstein et al., 1989). According to this research, the utility function that individuals gather from monetary outcomes is a composite of nonsocial utility (one’s own payment) and social utility (another’s payment) (Loewenstein et al., 1989; Messick and Sentis, 1985). Consistent with this explanation, research has found that concern for the outcomes and wellbeing of others can lead people to behave unethically when they feel empathy toward the beneficiaries of their dishonesty (Gino and Pierce, 2009) or feel similar to them (Gino et al., 2009).

Taken together, these findings suggest two different mechanisms through which the presence of other beneficiaries of one’s own dishonesty may lead to increased cheating. First, the presence of other beneficiaries may help people easily justify their dishonesty. Second, people may genuinely care about the potential benefits of their actions for others. We conducted three experiments to investigate how these two mechanisms interact to affect dishonesty.

## 1.2. Predictions

Our research contributes to prior work demonstrating that the presence of beneficiaries influences one’s own likelihood to behave dishonestly (e.g., Gino and Pierce, 2009; Wiltermuth, 2011) by distinguishing among different mechanisms that may explain greater cheating when benefits are split with others. In addition, our research considers cases in which more than one other person can benefit from one’s cheating. Finally, unlike prior investigations, this paper directly examines the consequences of cheating that only benefits oneself versus cheating that benefits oneself and others on both one’s levels of guilt and moral self-image. We predicted that although participants would be more likely to behave unethically when others in addition to themselves could benefit from their dishonesty, they would also experience less guilt after their cheating and thus be better able to preserve their moral self-image. We tested these hypotheses in three experiments in which participants had the opportunity to cheat.

## 2. Experiment 1

### 2.1. Method

#### 2.1.1. Participants and design

Participants were 193 college and graduate students (105 male;  $M_{\text{age}} = 21$ ,  $SD = 1.75$ ) from local universities in a Midwestern U.S. city. The study employed two between-subjects manipulations: the possibility of cheating (control vs. shredder) and the party who stands to gain from the act of cheating (individual vs. dyad vs. group).

#### 2.1.2. Procedure

Participants received the entire set of instructions for the experiment, such that they knew exactly what it would involve. Each participant received a test sheet with 20 matrices and a separate collection slip on which to later write down how many of the matrices they solved correctly. Each matrix included a different set of 12 three-digit numbers (e.g., 6.18, see Mazar et al., 2008), and participants had 5 min to find two numbers per matrix that added up to 10. In all conditions, participants received \$0.50 for each matrix solved correctly.

In the individual-control condition, once the 5 min had passed, participants counted the number of matrices they had solved correctly and then wrote down that number on their collection slips. The experimenter verified the number once participants handed in their test sheet and paid them based on their performance.

In the individual-shredder condition, once the 5 min had passed, participants were asked to count the number of matrices they had correctly solved, place the test sheet into a shredder, and only then write down the number of correctly solved matrices on their collection slip. They then handed their collection slip to the experimenter and were paid based on their

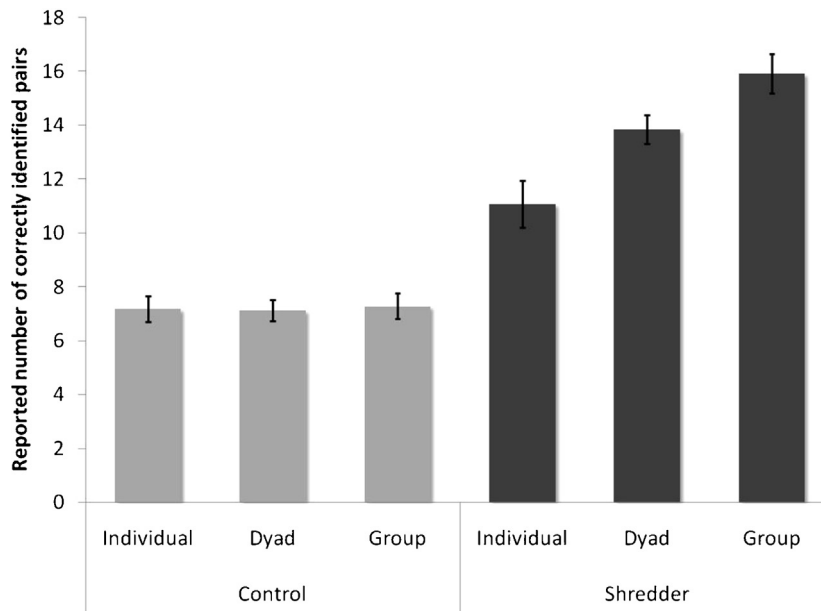


Fig. 1. Reported and actual number of correctly identified pairs by experimental condition (Experiment 1). Error bars represent standard errors.

reported performance without any verification process. The difference in performance between the control and shredder conditions measures participants' degree of dishonesty.

In the dyad-control condition, once the 5 min had passed, participants counted the number of matrices they had solved correctly and then wrote that number on their collection slips. Participants were next asked to find their "partner"—a fellow participant with the same ID number at the top of his or her collection slip, but on a different color paper. Once a dyad was united, the two dyad members were asked to show each other their collection slips. Next, they each summed up their dyad's total performance and wrote this figure down on their own collection slips. Finally, each dyad approached the experimenter together and submitted their collection slips and worksheets, and then each dyad member was paid according to half of their joint performance, which was verified by the experimenter.

In the dyad-shredder condition, once the 5 min had passed, participants individually counted the number of matrices they had solved correctly, placed the test sheet into a shredder, and only then wrote down the number of correctly solved matrices on their collection slips. Participants were next asked to find their partner. The rest of the procedure was the same as that used in the dyad-control condition, but without any verification process.

Finally, the procedure in the three-person group conditions was the same as in the dyad conditions but with three people, each of whom received one-third of the total group payment.

## 2.2. Results

We computed the average reported performance for each of the conditions (individual, dyad, and group), and used it as the dependent variable in a 2 (possibility of cheating)  $\times$  3 (group type) between-subjects ANOVA. This analysis revealed a significant main effect for both the possibility of cheating ( $F[1, 78] = 169, p < .001, \eta^2 = .69$ ) and group size ( $F[2, 78] = 8.06, p = .001, \eta^2 = .17$ ), as well as a significant interaction ( $F[2, 78] = 7.52, p = .001, \eta^2 = .16$ ).

Performance was similar across the three control conditions ( $F < 1$ ), suggesting that group size did not increase motivation or ability to perform on the problem-solving task (see Fig. 1). In contrast, when cheating was possible, "performance" was higher and varied depending on the number of beneficiaries ( $F[2, 39] = 10.93, p < .001, \eta^2 = .36$ ). Participants in the dyad-shredder condition reported a higher performance ( $M = 13.83, SD = 2.65$ ) than did those in the individual-shredder condition ( $M = 11.07, SD = 3.24; p < .01$ ). In addition, participants in the group-shredder condition reported a higher performance ( $M = 15.92, SD = 2.07$ ) than did those in either the dyad-shredder condition ( $p < .05$ ) or the individual-shredder condition ( $p < .001$ ).

## 2.3. Discussion

The results of our first experiment show that whenever cheating benefits other people (as in the dyad-shredder or in the group-shredder conditions), dishonesty increases, and that this increase is influenced by the number of people who stand to benefit from one's own unethical actions. The more people can benefit from an individual's unethical actions, the greater

the cheating. This result is consistent with our predictions and suggests that the presence of other beneficiaries facilitates dishonest behavior.

### 3. Experiment 2

Our second experiment examines whether focusing on the benefits of one's cheating for others can help people maintain a positive moral self-image. In addition, this second study allows us to test the plausibility of an alternative explanation for the results of Experiment 1. Notably, increased group size meant a lower financial benefit from cheating (Individual: the full benefit of cheating; Dyad: half the benefit; Group: a third of it). Thus, the increase in cheating observed in Experiment 1 might be a result of the change in financial incentives across conditions. Finally, to eliminate any expectation of reciprocity participants may have had in Experiment 1, we also modified the study procedure so that the potential beneficiaries of one's own cheating were randomly selected participants from another experiment instead of group members participating in the same study.

#### 3.1. Method

##### 3.1.1. Participants and design

One hundred and seven college students at a university in the Southeastern United States (58 male;  $M_{\text{age}} = 20.64$ ,  $SD = 1.56$ ) participated in the study for pay (\$3 show-up fee plus the money they could earn throughout the study). Participants were randomly assigned to one of three conditions: self-only high-payoff condition, self-only low-payoff condition, and self-and-other payoff condition.

##### 3.1.2. Procedure

We used the same problem-solving task as in Experiment 1, but we modified the procedure so that we could directly track who cheated by over-reporting performance on the task. In this study, participants did not shred their test sheets but instead put their test sheets, which were seemingly anonymous, into a recycle box. All participants received the same matrices to solve in the 5-min time period, except for a single number that was unique for each participant. One of the three-digit numbers in the matrix used as an example on the back of each collection slip matched the unique number on the corresponding test sheet. This allowed us to match the worksheet with the collection slip of each participant at the end of the study (without learning the identity of the participant) and compute the difference between self-reported and actual performance. This difference score was our main dependent variable.

##### 3.1.3. Payoff manipulation

Across conditions, we manipulated the payoff structure. In the self-only high (low) payoff condition, participants were told they would receive \$2 (\$1) for each correctly solved problem. In the self-and-other payoff condition, participants were told they would receive \$1 for each correctly solved problem and that another participant randomly selected from a group of participants from another experiment would also receive \$1 for each correctly solved problem. We included two self-only-payoff conditions (high and low) to ensure that the differences observed in our first experiment were not driven by the perception that cheating for a larger payoff (\$2 to the self instead of just \$1) is more unethical.

##### 3.1.4. Guilt and moral self-image

After filling out their collection slips, participants answered a short questionnaire. In addition to answering some bogus questions, participants indicated the extent to which they felt remorse, guilt, and regret ( $\alpha = .90$ ) on a 7-point scale (1 = not at all, 7 = to a great extent). These emotions capture state guilt (Marschall et al., 1994). Participants also indicated "how good of a person" they felt they were (7-point scale, 1 = not at all, 7 = very much).

#### 3.2. Results

##### 3.2.1. Cheating

The percentage of participants who cheated by over-reporting performance on the problem-solving task varied by condition,  $\chi^2(2, N = 107) = 9.70$ ,  $p < .01$  (see Table 1). Fifty-six percent (20/36) cheated in the self-and-other payoff condition; 28% (10/36) cheated in the self-only-high-payoff condition; and 23% (8/35) cheated in the self-only-low-payoff condition. Mirroring these results, the average number of matrices by which participants overstated their performance varied by condition ( $F[2, 125] = 6.31$ ,  $p < .01$ ,  $\eta^2 = .11$ ). On average, participants cheated more in the self-and-other-payoff condition as compared to both the self-only-high-payoff condition ( $p < .01$ ) and the self-only-low-payoff condition ( $p < .01$ ). The difference in the level of cheating between these last two conditions was not significant ( $p = .79$ ).

##### 3.2.2. Guilt and moral self-image

We then examined the extent to which participants felt guilty and perceived themselves as moral after cheating across conditions. For these analyses, we only considered people who cheated. Participants reported less guilt in the self-and-other-payoff condition as compared to both the self-only-high-payoff condition ( $p < .01$ ) and the self-only-low-payoff condition

**Table 1**  
Means (and standard deviations) for the main variables measured in Experiment 2.

	Percent of participants who cheated by over-reporting performance on the problem-solving task (%)	Number of matrices by which participants overstated their performance (considering all participants)	Self-reported guilt (considering only participants who cheated)	Moral self-image (considering only participants who cheated)
Self-and-other payoff condition	56	3.47 (3.42)	3.90 (0.97)	4.10 (1.02)
Self-only-high-payoff condition	28	1.44 (2.55)	5.03 (0.92)	3.30 (0.95)
Self-only-low-payoff condition	23	1.26 (2.74)	4.88 (0.82)	3.13 (1.13)

( $p < .02$ ),  $F(2, 35) = 6.29$ ,  $p < .01$ ,  $\eta^2 = .26$ . The difference in guilt between these last two conditions was not significant ( $p < .72$ ). Similarly, participants rated themselves as being better people in the self-and-other payoff condition as compared to both the self-only-high-payoff ( $p = .05$ ) and the self-only-low-payoff condition ( $p < .05$ ),  $F(2, 35) = 3.54$ ,  $p < .05$ ,  $\eta^2 = .17$ .<sup>2</sup>

### 3.2.3. Mediation analysis

Using mediation analysis (Preacher and Hayes, 2004), we next tested whether participants who cheated on the problem-solving task in the self-and-other-payoff condition were better able to maintain a moral self-image because they experienced lower levels of guilt compared to those who cheated in the other two conditions. The effect of the self-and-other-payoff condition on perceived moral self-image was reduced to non-significance (from  $\beta = .41$ ,  $p = .011$ , to  $\beta = -0.04$ ,  $p = .71$ ) when experienced guilt was included in the equation, and guilt was a significant predictor of participants' perceived moral self-image ( $\beta = -0.87$ ,  $p < .001$ ; 95% bias-corrected CI = [0.45, 1.49]), providing support for mediation (MacKinnon et al., 2007).<sup>3</sup>

### 3.3. Discussion

The results of Experiment 2 indicate that participants cheated more when others could benefit from their dishonesty than when they alone benefited, and experienced less guilt after their cheating. As a result, they more easily preserved their moral self-image. In addition, the lack of significant difference in the level of cheating (as well as in guilt and perceived moral self-image) between the self-only-high-payoff condition and the self-only-low-payoff condition suggests that the amount of financial incentive was not the main driver of participants' decisions to cheat, nor of their consequent guilt and perceived moral self-image.

## 4. Experiment 3

So far, we found that when other individuals benefit from one's dishonesty, cheating increases, but one's moral self-image is not impacted as much as when only the self benefits. What drives this increased willingness to behave unethically in such situations? One possibility is that when others can also benefit from one's own dishonesty, individuals more easily categorize their own unethical actions (cheating) in positive terms (creating financial benefits for others) and therefore cheat to a larger degree. Alternatively, it is possible that people truly care about such benefits and social utility.

In Experiment 3, we further varied the payoff structure to test whether the increased cheating we observed in Experiments 1 and 2 is more likely attributed to an increased ability to justify dishonest behavior or to true concern for potential benefits to others.

### 4.1. Method

#### 4.1.1. Participants and design

One hundred and twenty-eight college and graduate students from local universities (65 male;  $M_{age} = 21.35$ ,  $SD = 2.89$ ) in a Southeastern U.S. city participated in the study for pay (\$3 show-up fee and the opportunity to earn more throughout the study). Participants were randomly assigned to one of three conditions: self-only payoff, self-and-other payoff, and other-only payoff.

#### 4.1.2. Procedure

The study included two tasks: a math task (used to assess cheating) and a final questionnaire that included questions regarding the perceived ethicality of acts of cheating.

<sup>2</sup> We found no significant differences in guilt across conditions for participants who did not cheat on the problem-solving task,  $F(2, 66) = 1.04$ ,  $p = .36$ ,  $\eta^2 = .03$ . Similarly, we found no significant differences in moral self-image across conditions,  $F(2, 66) < 1$ .

<sup>3</sup> These results also help to rule out the possibility that participants are not automatically bolstering their moral self-image after cheating by telling themselves that normally they are good, ethical people.

#### 4.1.3. Cheating task

Participants engaged in a computer-based mental-arithmetic task in which they had to calculate the answers to 20 different problems (e.g.,  $2+5+23-17+13-8+11-5+9-3=?$ ) presented individually (adapted from von Hippel et al., 2005). The experimenter informed participants that the computer had a special feature: As they were working on each problem, the correct answer would appear on the screen unless they stopped it from being displayed by pressing the space bar right after the problem appeared. The experimenter also informed participants that although she would not monitor whether they pressed the space bar or not, they should try to solve the problems on their own. In fact, the program automatically recorded participants' number of space-bar presses. Following prior research (Jordan et al., 2011; Shu and Gino, 2012; von Hippel et al., 2005; Vohs and Schooler, 2008), we used the number of times participants did not press the space bar, thus allowing the correct answer to appear, as our measure of cheating.<sup>4</sup>

#### 4.1.4. Payoff manipulation

Across the three conditions, we implemented different allocations of the total payoff. In the self-only-payoff condition, participants were told they would receive \$2 for each correctly solved problem. In the self-and-other-payoff condition, participants were told they would receive \$1 for each correctly solved problem. In addition, they were told that another participant randomly selected from a group of participants from another experiment would also receive \$1 for each correctly solved problem. Finally, in the other-only-payoff condition, participants were told that their performance on the task would not influence their payment in the study, but that another participant randomly selected from a group from another experiment would receive \$2 for each correctly solved problem.<sup>5</sup>

#### 4.1.5. Perceived unethicality

After being paid for the task, participants received a one-page questionnaire. The instructions informed them that because of the programming feature, "some participants may intentionally decide not to press the space bar so that they can see the correct answer and successfully solve the problem." Using 7-point scales, participants then indicated how unethical, wrong, and morally unacceptable it would be for a participant not to press the space bar in two different instances: (1) when the participant was paid \$2 for every correctly solved problem ( $\alpha = .78$ ) and (2) when the participant and another randomly chosen participant from another study were both paid \$1 for every correctly solved problem ( $\alpha = .80$ ).

### 4.2. Predictions

The payoff manipulation enables us to juxtapose the effects of the ability to justify unethical behavior as appropriate and true concern about others' benefits. Specifically, while both mechanisms predict an increase in cheating in the self-and-other-payoff condition compared to the self-only-payoff condition, they make different predictions about the level of cheating in the other-only-payoff condition. In fact, as compared to the self-and-other-payoff condition, there is no direct self-interest (money or justification) at play in the other-only-payoff condition, but only an increased potential benefit to another person from one's own cheating.

Thus, if individuals use the potential benefits for others merely to justify their own unethical actions, we would expect the level of cheating to be eliminated in the other-only-payoff condition, as any cheating in the other-only-payoff condition would not benefit the self and thus eliminate the need for self-justification.

In contrast, if individuals only care about others' utility, then we would expect the level of social utility to be higher in the other-only-payoff condition (when others benefit 100% from an individual's cheating) than in the self-and-other-payoff condition (when others benefit 50%).

Finally, if these two factors work in concert to promote dishonesty, cheating should be highest in the self-and-other-payoff condition and lower but not eliminated in the other two conditions.

### 4.3. Results

#### 4.3.1. Cheating

The number of times participants did not press the space bar across conditions (our measure of cheating) varied significantly by condition ( $F[2, 125] = 4.23, p < .05, \eta^2 = .06$ ). Participants cheated more frequently in the self-and-other-payoff condition ( $M = 11.29, SD = 4.92$ ) as compared to both the self-only-payoff condition ( $M = 8.40, SD = 5.83, p < .05$ ) and the other-only-payoff condition ( $M = 8.16, SD = 5.71, p = .01$ ). The amount of cheating did not significantly differ in these last two conditions ( $p = .85$ ).

<sup>4</sup> By allowing the answers to appear on the screen, participants disobeyed the experimenter's rules and walked away with greater payment than they would have earned by solving the problems on their own.

<sup>5</sup> In this study, participants in the other-only-payoff condition received \$5 in addition to their show-up fee as compensation. We conducted another study using the same design and procedure in which participants in the other-only-payoff condition received either \$2 or \$8 in addition to their show-up fee as compensation. The nature and significance of the results did not change with different levels of fixed pay.

Since cheating occurred by omission rather than commission in this task, and since the task included multiple rounds (in each of which participants could cheat), most participants cheated in at least a few rounds on this task (as in [Shu and Gino, 2012](#)). The percentage of participants who cheated varied by condition,  $\chi^2(2, N = 128) = 7.07, p < .05$ . Ninety-eight percent (41/42) cheated in the self-and-other-payoff condition; 79% (34/43) cheated in the self-only-payoff condition; and 88% (38/43) cheated in the other-only-payoff condition.

#### 4.3.2. Perceived unethicality

Next, we examined the responses to the follow-up questions regarding perceived unethicality to test whether participants considered dishonest behavior to be less morally problematic when it benefited other people in addition to the self rather than the self alone. A within-subjects analysis revealed that participants rated cheating on the task as more unethical when they were told only they themselves would benefit ( $M = 5.17, SD = 0.74$ ) than when they were told others would also benefit ( $M = 4.51, SD = 1.07$ ),  $F(1, 127) = 38.84, p < .001, \eta^2 = .23$ .

We conducted the same within-subjects ANOVA, but this time we included whether or not the participant cheated as a control variable. We did so because participants who cheat are likely to be motivated to report that cheating is not very morally wrong ([Shu et al., 2011](#)). Given that more participants cheated in the self-and-other-payoff condition than in the other two conditions, this motivation to justify their behavior may have produced the previously discussed result that cheating to benefit others is perceived as less unethical. However, this analysis also revealed a significant within-subject effect,  $F(1, 126) = 9.57, p < .01, \eta^2 = .07$  which thus excluded this interpretation. Finally, in contrast to the two aforementioned analyses in which we considered all participants, we conducted an additional within-subjects analysis by focusing only on participants who cheated on the task (i.e., a subsample). We again found a significant within-subject effect,  $F(1, 112) = 39.26, p < .001, \eta^2 = .26$  ( $M_{\text{only-self}} = 5.18, SD = 0.74$  vs.  $M_{\text{other}} = 4.47, SD = 1.06$ ). Together, these results suggest that participants who cheated rated their behavior as more unethical when they were told only they themselves would benefit rather than when they were told others would also benefit.

#### 4.4. Discussion

These results show that participants cheated the most when given the opportunity to favor another participant in addition to the self, even if this beneficiary was an anonymous stranger. In the other-only-payoff condition, where there was no benefit to the self from behaving dishonestly, we still observed some cheating, but it was significantly lower than in the self-and-other-payoff condition and slightly lower than in the self-only-payoff condition.

This finding suggests that people do care about the benefits of their actions for others. However, this caring has a much larger effect on their dishonesty when such actions also accrue benefits to the self. The presence of beneficiaries encourages individuals to maximize their social utility while allowing them to boost their own utility and more easily justify their unethical behavior. Indeed, participants in all three conditions also rated their unethical actions as more morally acceptable when others could benefit from them as compared to when they created benefits only for the self.

### 5. General discussion

We are all familiar with the excuses that wrongdoers, ranging from Martha Stewart to Bernard Madoff, offer for their transgressions. People often stress how their actions benefit others, such as clients, shareholders, or their organizations. In this paper, we tested whether such claims are only justifications or whether they could also reflect genuine concern for others. The results demonstrate that when the outcome of an individual's dishonesty could benefit another person, the level of individual cheating increased. Even when cheating only benefited another person and not the self (i.e., the other-only-payoff condition in Experiment 3), some cheating was still present. The fact that cheating was not eliminated in this condition seems to indicate that people truly care for the social utility of others. However, individuals were more likely to behave unethically when dishonesty benefited others in addition to the self (i.e., the self-and-other-payoff condition). These results suggest that social utility and justification work in concert and that these two factors have an additive effect in promoting individuals' dishonesty.

This research contributes to the ethical decision making literature by suggesting that dishonesty should be studied not only at the individual level but also at the group level, where members can influence one another through both their ethical and unethical behavior. As our results show, even when each individual works on a different task, the presence of others who may benefit from our unethical behavior can sway our moral compass. A more nuanced understanding of cheating within group contexts would be a promising path for future research that may examine the best "choice architecture" ([Thaler and Sunstein, 2008](#)) and identify techniques for gaining the benefits of collaboration without paying the cost of increased dishonesty.

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## References

- Ayal, S., Gino, F., 2011. [Honest rationales for dishonest behavior](#). In: Mikulincer, M., Shaver, P.R. (Eds.), *The Social Psychology of Morality: Exploring the Causes of Good and Evil*. American Psychological Association, Washington, DC.
- Baumeister, R.F., 1998. The self. In: Gilbert, D.T., Fiske, S.T., Lindzey, G. (Eds.), *Handbook of Social Psychology*, 4th ed., McGraw-Hill, New York. pp. 680–740.
- Diekmann, K.A., 1997. [Implicit justifications and self-serving group allocations](#). *Journal of Organizational Behavior* 18, 3–16.
- Erat, S., Gneezy, U., 2012. [White lies](#). *Management Science* 58 (4), 723–733.
- Gino, F., Ayala, S., Ariely, D., 2009. [Contagion and differentiation in unethical behavior: the effect of one bad apple on the barrel](#). *Psychological Science* 20 (3), 393–398.
- Gino, F., Pierce, L., 2009. [Dishonesty in the name of equity](#). *Psychological Science* 20 (9), 1153–1160.
- Gino, F., Pierce, L., 2010. [Lying to level the playing field: why people may dishonestly help or hurt others to create equity](#). *Journal of Business Ethics* 95 (1), 89–103.
- Gino, F., Ariely, D., 2012. [The dark side of creativity: Original thinkers can be more dishonest](#). *Journal of personality and social psychology* 102 (3), 445–459.
- Gino, F., Schweitzer, M., Mead, N., Ariely, D., 2011. [Unable to resist temptation: how self-control depletion promotes unethical behavior](#). *Organizational Behavior and Human Decision Processes* 115 (2), 191–203.
- Jordan, J., Mullen, E., Murnighan, J.K., 2011. [Striving for the moral self: the effects of recalling past moral actions on future moral behavior](#). *Personality and Social Psychology Bulletin* 37, 701–713.
- Lewis, A., Bardis, A., Flint, C., Mason, C., Smith, N., Tickle, C., Zinser, J., 2012. [Drawing the line somewhere: an experimental study of moral compromise](#). *Journal of Economic Psychology* 33 (4), 718–725.
- Loewenstein, G.F., Thompson, L., Bazerman, M.H., 1989. [Social utility and decision making in interpersonal contexts](#). *Journal of Personality and Social Psychology* 57 (3), 426–441.
- MacKinnon, D.P., Fairchild, A.J., Fritz, M.S., 2007. [Mediation analysis](#). *Annual Review of Psychology* 58, 593–614.
- Marschall, D., Sanftner, J., Tangney, J.P., 1994. [The State Shame and Guilt Scale](#). George Mason University, Fairfax, VA.
- Mazar, N., Ariely, D., 2006. [Dishonesty in everyday life and its policy implications](#). *Journal of Public Policy and Marketing* 25 (1), 117–126.
- Mazar, N., Amir, O., Ariely, D., 2008. [The dishonesty of honest people: a theory of self-concept maintenance](#). *Journal of Marketing Research* 45, 633–644.
- Mead, N., Baumeister, R.F., Gino, F., Schweitzer, M., Ariely, D., 2009. [Too tired to tell the truth: self-control resource depletion and dishonesty](#). *Journal of Experimental Social Psychology* 45 (3), 594–597.
- Messick, D.M., Sentis, K.P., 1985. [Estimating social and nonsocial utility functions from ordinal data](#). *European Journal of Social Psychology* 15, 389–399.
- Preacher, K.J., Hayes, A.F., 2004. [SPSS and SAS procedures for estimating indirect effects in simple mediation models](#). *Behavior Research Methods, Instruments, and Computers* 36, 717–731.
- Shalvi, S., Dana, J., Handgraaf, M.J.J., De Dreu, C.K.W., 2011. [Justified ethicality: observing desired counterfactuals modifies ethical perceptions and behavior](#). *Organizational Behavior and Human Decision Processes* 115, 181–190.
- Shalvi, S., Leiser, D., 2013. [Moral firmness](#). *J. Econ. Behav. Organ* 93, 400–407.
- Schweitzer, M.E., Hsee, C.K., 2002. [Stretching the truth: elastic justification and motivated communication of uncertain information](#). *Journal of Risk and Uncertainty* 25, 185–201.
- Shu, L., Gino, F., 2012. [Sweeping dishonesty under the rug: how unethical actions lead to forgetting of moral rules](#). *Journal of Personality and Social Psychology* 102 (6), 1164–1177.
- Shu, L.L., Gino, F., Bazerman, M.H., 2011. [Dishonest deed, clear conscience: when cheating leads to moral disengagement and motivated forgetting](#). *Personality and Social Psychology Bulletin* 37 (4), 330–349.
- Thaler, R.H., Sunstein, C.R., 2008. [Nudge: Improving Decisions about Health, Wealth, and Happiness](#). Yale University Press, New Haven.
- Vohs, K.D., Schooler, J.W., 2008. [The value of believing in free will: encouraging a belief in determinism increases cheating](#). *Psychological Science* 19, 49–54.
- von Hippel, W., Lakin, J.L., Shakarchi, R.J., 2005. [Individual differences in motivated social cognition: the case of self-serving information processing](#). *Personality and Social Psychology Bulletin* 31, 1347–1357.
- Willemuth, S.S., 2011. [Cheating more when the spoils are split](#). *Organizational Behavior and Human Decision Processes* 115, 157–168.