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## Cheating more when the spoils are split

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## ABSTRACT

Four experiments demonstrated that people are more likely to cheat when the benefits of doing so are split with another person, even an anonymous stranger, than when the actor alone captures all of the benefits. In three of the studies, splitting the benefits of over-reporting one's performance on a task made such over-reporting seem less unethical in the eyes of participants. Mitigated perceptions of the immorality of over-reporting performance mediated the relationship between split spoils and increased over-reporting of performance in Study 3. The studies thus showed that people may be more likely to behave dishonestly for their own benefit if they can point to benefiting others as a mitigating factor for their unethical behavior.

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## Introduction

Cheating is often a selfish act. We cheat to get ahead. We cheat to obtain things we could not obtain by playing by the rules. We cheat because we think others are cheating and we do not want to lose out on our share. But despite the selfishness that seems to motivate this form of dishonesty, the cheater is often not the only person to benefit from it. Students who illicitly collaborate on tests help one another. Athletes who take steroids help their team, and auditors who misrepresent client finances in order to help them keep those clients end up benefitting them (Dies & Giroux, 1992; Mautz & Sharaf, 1961). Even Bernie Madoff's elaborate Ponzi scheme financially benefitted some people, albeit only temporarily. So even when people act out of self-interest, their unethical actions can have consequences that positively affect others.

How do these third-party benefits of cheating influence whether an individual is likely to cheat? While previous research has shown that concern for the well-being of others can lead people to behave dishonestly when people feel empathy for, or a sense of connection with, the beneficiaries of that dishonesty (Gino & Pierce, 2009b, 2011), the present research proposes that such feelings toward the beneficiary need not exist for people to cheat more when others benefit from their dishonesty than when they alone capture all of the benefits. It posits that people may be more likely to behave unethically when their behavior benefits others not because people care about the social-utility created by helping others, but rather because helping others can enable them to be

more successful in justifying their behavior to themselves. The present research therefore puts forth a novel mechanism by which the presence of third-party beneficiaries may increase the likelihood that people will behave unethically.

## Drivers of unethical behavior

Researchers have invested considerable effort into understanding what leads people to behave unethically in the workplace (for reviews, see O'Fallon & Butterfield, 2005; Tenbrunsel & Smith-Crowe, 2008; Treviño, Weaver, & Reynolds, 2006). These inquiries have illustrated that both characteristics of the individual actors and characteristics of the situations in which these actors find themselves can affect the likelihood that an actor will behave unethically. For instance, cognitive moral development theory (Kohlberg, 1969; Rest, 1986) holds that we can, to a large extent, predict who will behave unethically by examining how advanced an individual is in his/her thinking about morality (Blasi, 1980; Treviño et al., 2006). Moreover, people who score highly on Machiavellianism, possess an external locus of control, and hold a relativistic instead of an absolutist moral philosophy all have been identified as people who are particularly likely to engage in unethical behavior (Kish-Gephart, Harrison, & Treviño, 2010; Treviño, 1992; Treviño & Youngblood, 1990; Treviño et al., 2006). Researchers examining situational factors have shown that unethical behavior is more likely to occur in egoistic ethical climates than in benevolent ethical climates (Barnett & Vaicys, 2000), and less likely to occur in organizations that have a code of conduct than it is in those without such codes of conduct (Hegarty & Sims, 1979; Izraeli, 1988; Kish-Gephart et al., 2010; McCabe, Treviño, &

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Butterfield, 1996; Treviño, Butterfield, & McCabe, 1998; but see Brief, Dukerich, Brown, and Brett (1996), Cleek and Leonard (1998) for studies showing no effect of codes of conduct). Moreover, even factors such as the lighting of an environment can affect the incidence of unethical behavior, with unethical behaviors occurring more often in darkness (Zhong, Bohns, & Gino, 2010). Similarly, the mere presence of wealth can induce the emotion of envy in people and therefore increase likelihood that they will cheat to obtain more money (Gino & Pierce, 2009a).

Characteristics of the moral issue can also influence the likelihood that an individual will behave immorally. Jones (1991) identified six distinct characteristics that affect the “moral intensity” of a behavior and, therefore, how likely people are to commit an unethical action. These characteristics include: 1. The magnitude of consequence stemming from unethical behaviors; 2. The social consensus behind the idea that the behavior is immoral; 3. The probability of effect, which is the probability that negative consequences will result from the potentially unethical behavior; 4. The temporal immediacy, which is the amount of time that passes before harm befalls someone as a result of the action; 5. The proximity, which is the psychological or physical nearness of the act; and 6. The concentration of effect, which is the inverse of how many people are negatively affected.

While Jones' (1991) model focuses on the negative consequences of unethical behavior and pays less attention to the benefits to be gained from unethical behavior, Rational Crime Theory takes a more balanced approach by also considering these benefits. It holds that people transgress if the benefits of doing so outweigh the costs (Allingham & Sandmo, 1972; Becker, 1968; Hill & Kochendorfer, 1969; Michaels & Miethe, 1989). In this framework any value the individual derives from having third-parties benefit from her unethical behavior is added to the value she obtains directly from behaving unethically (Loewenstein, Thompson, & Bazerman, 1989). This cumulative benefit is then compared to the costs of behaving unethically. If the individual derives some value from helping others, the benefits created for others would, all other things held equal, increase the likelihood that the individual behaves unethically.

Previous research has established that benefitting third-parties through unethical action does increase the likelihood that people will behave unethically. In particular, it shows that people become more likely to behave unethically if, by doing so, they may benefit others who evoke empathy. Demonstrating a “Robin Hood Effect”, Gino and Pierce (2011) found that inspectors responsible for vehicle emissions tests were more likely to act dishonestly by passing non-luxury cars that would not have otherwise passed than they were to pass luxury cars that would not have otherwise passed. As the same authors demonstrated in a series of laboratory studies, perceived inequity can produce emotional distress that leads people to behave dishonestly if the dishonesty benefits the victims of inequity – even if behaving dishonestly incurs a financial cost to the self (Gino & Pierce, 2009b, 2011). People have also been shown to sacrifice personal financial gain to punish or reward others who have demonstrated an intent to act unfairly or fairly toward someone else (Turillo, Folger, Lavelle, Umphress, & Gee, 2002).

People are also especially willing to behave dishonestly when their actions can benefit others close to them. Indeed, people become more willing to break rules when they have a prior relationship with the beneficiary of their action (Brass, Butterfield, & Skaggs, 1998; Gino, Ayala, & Arieli, 2009).

### Third-party beneficiaries and ease-of-justification

While previous research has demonstrated the existence of third-party beneficiaries can increase the likelihood of unethical

behavior when people feel empathy toward the beneficiaries or have a social relationship with them, the present research asserts that these social dynamics may not need to occur for the existence of third-party beneficiaries to increase the prevalence of unethical behavior. Benefitting others, even anonymous others who evoke no particular empathy from the actor and have no relationship with the actor, may affect how unethical and how greedy people perceive unethical action to be.

In interdependence theory, greed implies a desire either to maximize one's own outcomes or a desire to maximize outcomes relative to other people (Insko, Schopler, Hoyle, Dardis, & Graetz, 1990; Kelley & Thibaut, 1978). When cheating benefits only to the self, there is little doubt that the cheating is motivated by the desire to maximize one's own outcomes. When others benefit by the act of cheating, there may be ambiguity surrounding the motives behind cheating. Cheating is therefore likely to come across as less greedy than when the benefits also accrue to other people. Given that greed is often associated with immorality (Shaw, 2009; Sherman & Clore, 2009), actors may also see the act of dishonesty as more ethical than when they alone benefit. They may rationalize that their dishonesty helps others and therefore is both less greedy and less unethical than if they alone were to benefit from it.

People often perceive allocations that differ significantly from 50–50 as unfair when there are no justifications for other allocations (e.g., Güth, Schmittberger, & Schwarze, 1982). As such, different splits of the spoils may be more or less likely to lead to such unethical behavior. For example, if the actor received 99% of the spoils from cheating, he may not construe cheating as more ethical or less greedy than if he received 100% of the spoils. I therefore focus first on the equal distribution case and put forth:

**Hypothesis 1.** People view dishonest behavior as less unethical and less greedy when the benefits attributable to the dishonest behavior are split equally between the actor and a third-party than when the actor alone accrues the all of the benefits.

One reason people do not cheat more frequently is that people have a need to see themselves as moral beings lest they suffer self-condemnation (e.g., Gino et al., 2009; Tsang, 2002). Supporting this possibility, Mazar, Amir, and Arieli (2008) found that even without the risk of being caught, most people cheated only on a relatively small percentage of the items in a series of experiments and did not cheat nearly as much as they could have done. Having cheated only a little, participants could “stretch” the truth and continue to see themselves as moral. However, if their cheating exceeded a self-imposed threshold, participants would have been forced to update their self-concept to reflect their dishonesty – an act that would run counter to most people's desire to see themselves as honest and moral (Greenwald, 1980; Griffin & Lee Ross, 1991; Sanitioso, Kunda, & Fong, 1990). Participants could therefore rationalize cheating “a little” but could not rationalize cheating “a lot.” As Kunda (1990) contends in her theory of motivated reasoning, people reason in ways that allow them to conclude that their behavior is moral but are only able to avoid self-condemnation through this motivated reasoning when they can construct reasonable justifications for their behavior.

People's need to see themselves as moral not only constrains how likely they are to behave dishonestly on particular tasks, but also in which circumstances they behave dishonestly. For example, when negotiators hold private information that is elastic (i.e. vague and uncertain) and unfavorable to them, they are more likely to behave opportunistically by misrepresenting that information than they are when they hold inelastic (i.e. unambiguous and certain) information (Schweitzer & Hsee, 2002). When the private information is inelastic people find it more difficult to justify using self-serving interpretations of the information than they do when the

information is elastic – even when they need only justify the interpretation to themselves. Similar processes affect the likelihood of people discriminating against outgroup members and minorities. Specifically, people are more likely to act discriminatorily when they can “camouflage” their discriminatory behavior or prejudicial attitudes behind socially acceptable reasons (Crandall & Eshleman, 2003; Dovidio, Smith, Donnell, & Gaertner, 1997; Esses, Dietz, & Bhardwaj, 2006; Gaertner & Dovidio, 1977, 2000; Gaertner, Dovidio, & Johnson, 1982; Uhlmann & Cohen, 2005). For example, Snyder, Kleck, Strenta, and Mentzer (1979) found that when participants were asked to choose between watching a movie in either a room in which there was a disabled confederate or a room in which there was a non-disabled confederate, slightly more than half chose the room in which there was a disabled confederate when they were told exactly the same movies were playing. However, when they were told that the movies were different, an overwhelming majority chose to sit in the room with the non-disabled confederate. Thus, when participants could attribute their choice of rooms to a socially acceptable reason (i.e., the desire to see a different movie), participants were likely to avoid the disabled confederate.

If people are able to attribute a part of their motivation for acting unethically to benefitting others, they may reduce how unethical they perceive their behavior to be. As a result, they may be less likely to condemn themselves for behaving dishonestly. Given that fear of self-condemnation limits how frequently people behave dishonestly (Mazar et al., 2008), people should be more likely to cheat when they can avoid this self-condemnation by sharing equally in the spoils of unethical behavior. Splitting the spoils of dishonest behavior could therefore increase the prevalence of dishonesty even when the third-party beneficiaries of the dishonesty are not: (1) accomplices to the unethical behavior, (2) victims of any particular inequity, or (3) socially connected to the actor. I therefore put forth:

**Hypothesis 2.** People are more likely to act dishonestly when the benefits of doing so are split equally between themselves and another person than when they accrue all of the benefits.

I expect that the mitigated perceptions of how greedy and unethical the dishonest behavior is will explain the relationship between splitting the spoils of dishonest behavior and the increased incidence of dishonest behavior. I therefore put forth:

**Hypothesis 3.** Individuals are more likely to behave unethically when the benefits are split equally between themselves and another person if they believe splitting the benefits reduces the immorality of their actions.

It is important to note that the prediction that splitting the spoils of unethical behavior equally with someone unknown to the actor contrasts with Rational Crime Theory (Becker, 1968). For self-interested individuals who value improvements to their own well-being more than they value improvements to others' well-being, the incentive to cheat under split spoils would not be as strong as if the individual were able to directly capture all of the benefits created by cheating. Moreover, even if the individual were not particularly self-interested and valued helping others more than she valued benefiting herself, rational choice theory (e.g., Becker, 1968) would predict that she would be no more likely to behave unethically when forced to split the spoils of cheating in a particular distribution than when she could accrue all of the spoils of cheating and later decide how to allocate some of those benefits to others. In other words, the cheater could give away the money she earned later and still derive a warm-glow benefit from giving, assuming that she could do so easily and without fear of detection and punishment. Whether the allocation occurs as a

direct result of the unethical act or as a result of giving away some of the proceeds of the unethical act should therefore not affect an individual's utility. Thus, a purely rational model of unethical behavior would not predict that splitting the spoils of unethical behavior should increase people's likelihood of behaving unethically.

## Overview of experiments

In summary, I hypothesize that people may be more likely to engage in such acts as lying, cheating, or stealing if they split the spoils of such behaviors with other people. I reason that people may be more likely to engage in such acts when others profit from them because people will find it easier in such instances to discount the moral concerns associated with behaving dishonestly. In essence, they will deem the dishonest act to be less unethical than when they alone benefit. I further propose that these mitigated perceptions of immorality will mediate the relationship between split spoils and the increased propensity to cheat.

Four experiments test these hypotheses. Study 1 examines whether people perceive the act of taking on new investors into a hypothetical Ponzi scheme to be less unethical when the rewards are split between the actor and previous investors than when the rewards are captured by the actor alone. Study 2 examines whether participants cheat more to gain money when the additional money is split between themselves and another person than when they alone accumulate that money. It also replicates the finding that people see cheating as less unethical when the spoils are split. Study 3 demonstrates that the relationship between splitting the spoils and the increased frequency of cheating is mediated by the perception that cheating is less unethical and less greedy when the spoils are split. Study 4 tests whether participants need to share the spoils equally in order for sharing the spoils of unethical behavior to increase the incidence of that behavior. It also tests whether sharing the spoils increases cheating when the spoils are split with a participant whose morality is described in unfavorable terms (i.e., someone who seems prejudiced against racial minorities).

## Study 1: predicted unethical behavior

### Method

One-hundred-twenty-four individuals (67% female; Age:  $M = 34.8$ ) in a subject pool managed by a large, private university on the West Coast of the United States participated in the online study in exchange for the chance to win a drawing for a gift certificate. Each participant read the following scenario, which was created based on an account of Charles Ponzi's original scheme (Zuckoff, 2005): “While trying to build a legitimate business, you stumbled upon a plan to attract money for a company that would invest in International Reply Coupons, a convenient form of postage for international shipping. You started accumulating small amounts of money from investors, who were very excited for the 50% return you mentioned that your investment system would generate within 45 days. Before too long you were raking in more cash than you could invest in the project. You did not invest much of the money, as the potential for profit was limited.”

### Manipulation of beneficiary

Participants were randomly assigned to one of two conditions. In the self-alone benefits condition, participants read: “If you were to take on new investors you would benefit from the investment system you set up because you would have the cash from the investors' money. You would keep that money for yourself. No

one else, including the original shareholders would benefit.” In the self-and-other benefits condition, participants read: “You know that by taking on new investors you could maintain some cash and repay the original investors. If you were to take on new investors you would benefit from the investment system you set up because you would have cash on hand from the investors’ money. Some of that benefit would be split with the original investors though.” Participants indicated how selfish, unethical, greedy, and moral it would be to take on cash from new investors using seven-point Likert scales. They also indicated whether they would take on new investors.

Results

Participants’ ratings of how moral and how unethical (reverse scored) it would be to take on new investors were combined into one measure of ethicality ( $\alpha = .92$ ). Similarly, ratings of selfishness and greediness were combined into one measure ( $\alpha = .93$ ). Gender did not affect rates of cheating.

Participants in the self-and-other benefit condition rated the act of taking on new investors as less unethical ( $M = 2.55, SD = 1.75$  vs.  $M = 3.22, SD = 1.85, t(116) = -2.02, p = .05$ ) and less greedy/selfish ( $M = 4.98, SD = 1.79$  vs.  $M = 5.80, SD = 1.73, t(116) = -2.53, p = .01$ ) than did participants in the self-alone condition. They were also more likely to endorse taking on new investors (33.9%) than were participants (17.9%) in the self-alone benefits condition ( $B = 0.86, SD = .44, Wald = 3.79, Exp(B) = .42, p = .05$ ).

I conducted a binary logistic regression using a bootstrapping technique (Preacher & Hayes, 2004) to analyze whether the perceived immorality of taking on new investors mediated the relationship between splitting the funds brought in by new investors and an increased willingness to take on new investors. This regression is displayed in Table 1. Participants in the self-and-other benefit condition perceived taking on new investors to be less unethical than did those in the self-alone benefits condition. The perceived immorality of taking on new investors correlated negatively with the likelihood that the participants indicated that they would take on new investors. Accounting for these altered perceptions of immorality reduced the previously significant relationship between condition and willingness to take on new investors to non-significance. A bootstrap analysis revealed that the 95% bias-corrected confidence interval for the size of the indirect effect excluded zero (.006, 1.43), which suggested a significant indirect effect (MacKinnon, Fairchild, & Fritz, 2007; Preacher & Hayes, 2004). Controlling for gender in this analysis did not affect results (95% CI of the indirect effect: .04, 1.56).

Discussion

Study 1 participants were more willing to accept new investors into a Ponzi scheme when told that they would have to share the benefits of doing so with the original investors than when told that they alone would benefit. This increased willingness was mediated by participants’ beliefs that the act of taking on new investors was less unethical if doing so would benefit the original investors. While this study highlights the role other beneficiaries may play in licensing unethical behavior, there are two chief concerns. First, the study was hypothetical. Participants stood to make no actual gains by acting unethically. Second, participants may have felt obligated to repay the original investors. As such, the data demonstrate only that people cheat more when the benefits are shared and they already feel obligated to the other beneficiaries. Studies 2, 3, and 4 address these concerns.

Study 2 also tests whether a social-utility perspective (Gino et al., 2009) or ease-of-justification perspective best explains why people may cheat more when the benefits of unethical behavior are split than when they are captured by the actor alone. A social-utility perspective would explain such results by contending that people derive greater value from benefitting others than they do from capturing the entire benefit themselves; an ease-of-justification perspective would contend that people come to see their behavior as less unethical because others share in the benefits. To determine whether an ease-of-justification perspective best explains the increased prevalence of dishonest behavior when spoils are split, it may be helpful to look at how frequently people cheat when the self-interest motive is absent. If people behaved dishonestly as often when third-parties accrued all of the benefits of their dishonesty and they personally received no direct benefit, the evidence could suggest that people derive greater value from benefitting others than from benefitting themselves. If, on the other hand, people did not behave dishonestly as often when the third-party captured all of the benefits as when the benefits were shared, the case for a social-utility perspective would be weakened relative to an ease-of-justification perspective.

Study 2: splitting the spoils with friends and unknown others

Method

Two-hundred-sixty-two participants (62% female;  $M_{age} = 34.3$ ) in an online pool managed by a private university on the West Coast of the US participated in a study that ostensibly examined decision-making and timing. In a task inspired from Cameron

Table 1  
Mediation analyses for Studies 1 and 3.

Study 1									
Dependent variable	Taking on investors			Perceived ethicality		Taking on investors			Exp (B)
	B	SE	Exp (B)	B	SE	B	SE		
Constant	-1.53**	0.35	0.22	2.55**	0.24	-4.66**	0.82	0.01	
Split proceeds	0.86†	0.44	2.36	0.67*	0.33	0.59	0.56	1.80	
Perceived ethicality						0.95†	0.18	2.58	
Study 3									
Dependent variable	Unsolvable grids reported solved		Perceived unethicality		Unsolvable grids reported solved				
	B	SE	B	SE	B	SE			
Constant	0.68**	0.16	6.06**	0.18	0.78**	0.57			
Self-and-other benefit	0.46†	0.22	-0.51*	0.25	0.38	0.23			
Perceived unethicality					-0.17†	0.09			

†  $p < .10$ .  
\*  $p < .05$ .  
\*\*  $p < .01$ .

and Miller (2009), participants were told that they would be paid three dollars for participating in the study but may earn additional money by unscrambling word jumbles. The instructions indicated that the word jumbles must be solved in the order they appeared, noting: “if you successfully unscramble the first three word jumbles but not the fourth, you will be paid only for the first three – even if you also successfully unscramble the fifth, sixth, and seventh word jumbles.”

#### Manipulation of beneficiary

Participants were randomly assigned to one of five conditions that were designed to test *Hypotheses 1 and 2*. Specifically, I included one condition in which the self and a friend benefited from over-reporting performance, one condition in which the self and a randomly-selected participant from another experiment benefited, and one condition in which only the randomly-selected participant from another experiment benefited. I also included two conditions in which only the self benefited from cheating. Participants in the self-alone high benefit condition had twice the financial incentive to report solving word jumbles than did participants in the conditions in which the benefits were split between the self and another person. Participants in the self-alone low benefit condition had the same incentive to report solving word jumbles that did participants in the conditions in which the benefits were split between the self and another person. I included this latter condition to ensure that participants did not cheat less in the self-alone condition because they viewed cheating for larger dollar amounts as more unethical and greedier than they saw cheating for smaller dollar amounts. Participants read the instructions regarding payoffs before they engaged in the task. The instructions regarding payoffs for each condition were as follows:

*Self-alone low benefit:* You will receive \$1 per word jumble solved.

*Self-alone high benefit:* You will receive \$2 per word jumble solved.

*Self-and-friend benefit:* You will receive \$1 per word jumble solved and a friend of your choosing will also receive \$1 per word jumble solved. (Participants in this condition were asked to list the name of their friend before participating in the main exercise and were told that we would ask them for that friend's email address in a separate email.)

*Self-and-other benefit:* You will receive \$1 per word jumble solved. Additionally, a randomly-selected participant from another experiment will also receive \$1 per word jumble solved.

*Other-alone benefit:* Your performance will not affect the payment you will receive. However, a randomly-selected participant from another experiment will receive \$2 per word jumble solved.

#### The word-jumble task

Participants saw nine word jumbles, which are displayed in *Table 2*. Unbeknownst to the participants, the third word jumble could only be unscrambled to spell the obscure word “taguan.”<sup>1</sup> In pre-testing, none of the thirty participants successfully unscrambled this word jumble. Thus, it would be unlikely that participants acting honestly would report having solved this jumble.

The frequency with which participants reported solving the third word jumble served as the dependent measure of cheating. Solving the third word jumble allowed participants to be paid for solving the very solvable fourth through eighth word jumbles.

**Table 2**  
Word jumbles used in Studies 2 and 4.

Jumbles	Correct words
Unhted	Hunted
Eoshu	House
Unaagt	Taguan
Ythoid	Thyroid
Olarc	Coral/carol
Jnipmug	Jumping
Hgitwe	Weight
Claslou	Callous
Yomseevld	Semovedly

The ninth word jumble “semovedly” was also difficult to solve, as it is a rarely-used synonym for separately. As such, participants had an incentive to cheat on the third word jumble that could reach \$12 in the self-alone high benefit condition and \$6 in the other conditions, as they could have solved an additional six word jumbles (i.e. word jumbles 3–8) if they solved the third jumble and the remaining jumbles.

Participants indicated which word jumbles they successfully unscrambled but were not asked to write out the unscrambled words. They then indicated on a seven-point Likert scale whether they would have preferred that they or a friend receive an additional dollar per word jumble unscrambled. I asked this question to rule out the possibility that participants would cheat more in the self-and-friend condition than in the self-alone high- and low-benefits conditions simply because they would derive more value from having a friend receive the benefits of cheating than they would if they received the additional dollar per jumble themselves. Finally, all participants used a seven-point Likert scale 1 (not at all) to 7 (very much) to the respond to the questions “How unethical (greedy) do you think it would be for someone to cheat on the word unscrambling task if their cheating also benefitted another person?” and “How unethical (greedy) do you think it would be for someone to cheat on the word unscrambling task if they were the only person to benefit from cheating?”

#### Results

##### Frequency of over-reporting results

*Table 3* displays the frequency with which participants reported solving the third (i.e., unsolvable) word jumble in each condition. The overall chi-square examining the effect of beneficiary condition (self-alone low benefit vs. self-alone high benefit vs. self-and-friend benefit vs. self-and-other benefit vs. other-alone benefit) on rates of over-reporting performance was significant,  $\chi^2(4) = 12.76$ ,  $p = .02$ . *Hypothesis 2* posited that people would act dishonestly more frequently when the benefits of doing so were split equally between themselves and another person than when they accrued all of the benefits. Supporting this hypothesis, participants in the self-and-friend benefit condition were twice as likely to report solving the unsolvable word jumble (43%) than were participants in the self-alone high benefit condition, 21%,  $\chi^2(1) = 6.81$ ,  $p = .01$ . Participants in the self-and-other benefit condition were also more likely to report solving the unsolvable word jumble (37%) than were participants in the self-alone high benefit condition, 21%,  $\chi^2(1) = 3.88$ ,  $p = .05$ .

Results supported the notion that participants would be most likely to cheat when they had both a personal financial stake in the outcome and could benefit someone else by overstating their performance. Specifically, participants in the self-and-other high benefit condition cheated significantly more often (37%) than did those in the other-alone benefits condition, 16%,  $\chi^2(1) = 5.59$ ,  $p = .02$ . Consistent with *Mazar et al.'s (2008)* findings, individuals

<sup>1</sup> Taguan is a large nocturnal flying squirrel, *Petaurista petaurista*, of high forests in the East Indies that uses its long tail as a rudder.

**Table 3**  
Unsolvable word jumbles reported solved in Study 2.

	N	% Reporting unscrambling "Taguan" (%)	Anagrams reported solved		Payment claimed for		
			Mean	Std. dev.	Self	Friend	Other
Self-alone (low benefit)	30	26.7 <sup>a</sup>	3.50	2.56	3.50	–	–
Self-alone (high benefit)	67	22.4 <sup>a</sup>	3.18	2.32	6.37	–	–
Self-and-friend	51	43.1 <sup>b</sup>	4.45	2.91	4.45	4.45	–
Self-and-other	60	36.7 <sup>b</sup>	3.93	2.71	3.93	–	3.93
Other-alone	49	16.3 <sup>a</sup>	2.86	2.16	–	–	5.71
Total	261	28.7	3.58	2.58	3.81	0.87	1.98

<sup>a,b</sup> Numbers within a column with different letters are significantly different from each other.

did not cheat more or less often when their personal benefit from cheating was high (27%) than they did when their personal benefit was low, 21%,  $\chi^2(1) = .37$ ,  $p = .56$ .

I also analyzed whether condition affected participants' likelihood of indicating that they successfully unscrambled the word "semovedly", a rarely-used synonym for separately that was the ninth word jumble. The overall chi-square examining the effect of beneficiary condition (self-alone low benefit vs. self-alone high benefit vs. self-and-friend benefit vs. self-and-other benefit vs. other-alone benefit) on rates of over-reporting performance on this word jumble was marginally significant,  $\chi^2(4) = 8.60$ ,  $p = .07$ . Participants in the self-and-other benefit condition were more likely to report solving the ninth word jumble (12%) than were participants in the self-alone high benefit condition, 1%,  $\chi^2(1) = 5.97$ ,  $p = .02$ . Participants in the self-and-friend benefit condition were marginally more likely to report solving the ninth word jumble (8%) than were participants in the self-alone high benefit condition,  $\chi^2(1) = 3.13$ ,  $p = .08$ .

#### Perceived ethicality of over-reporting results

I then tested Hypothesis 1, which holds that people view dishonest behavior as less unethical and less greedy when the benefits attributable to the dishonest behavior are split between the actor and a third-party than when the actor alone accrues the all of the benefits. As expected, a within-subjects analysis revealed that participants viewed over-reporting results as less unethical ( $M = 5.84$ ,  $SD = 1.44$  vs.  $M = 6.10$ ,  $SD = 1.25$ ,  $t(254) = -4.35$ ,  $p = .001$ ; Wilcoxon signed rank  $z = 4.56$ ,  $p < .01$ ) and less greedy ( $M = 5.66$ ,  $SD = 1.47$  vs.  $M = 6.07$ ,  $SD = 1.18$ ,  $t(254) = -5.64$ ,  $p = .001$ , Wilcoxon signed rank  $z = 5.54$ ,  $p < .01$ ) when told that the over-reporting also benefited another person than when told that over-reporting benefited only the self. Notably, participants rated the act of over-reporting for the benefit of the self and cheating for the benefit of the self-and-others to be above 5.83 on a seven point scale ranging from 1 (not unethical at all) to 7 (very unethical). They also rated the act of over-reporting to be above 5.66 on a seven point scale ranging from 1 (not greedy at all) to 7 (very greedy). While the differences were small, participants perceived the act of over-reporting performance as unethical and greedy, regardless of who benefitted from the over-reporting of performance. Participants who reported solving the third anagram indicated that they viewed over-reporting performance for the benefit of the self-alone to be less greedy ( $M = 5.81$ ,  $SD = 1.63$  vs.  $M = 6.18$ ,  $SD = 1.09$ ,  $t(114) = 2.06$ ,  $p = .04$ )<sup>2</sup> and less unethical ( $M = 5.88$ ,  $SD = 1.42$  vs.  $M = 6.20$ ,  $SD = 1.17$ ,  $t(117) = 1.72$ ,  $p = .09$ , Wilcoxon signed rank  $z = 4.00$ ,  $p < .01$ ) than did those who did not cheat. They also viewed over-reporting performance for the benefit of the self and another person to be less greedy ( $M = 5.37$ ,  $SD = 1.55$  vs.  $M = 5.78$ ,  $SD = 1.42$ ,  $t(128) = 1.97$ ,  $p = .05$ ) and less

unethical ( $M = 5.47$ ,  $SD = 1.67$  vs.  $M = 6.00$ ,  $SD = 1.31$ ,  $t(114) = 2.47$ ,  $p = .02$ ) than did those who did not cheat.

#### Greater value from earning money for others?

I tested whether participants simply placed a higher value on having their friends benefit than they did on having themselves benefit. To account for this possibility, participants indicated on a seven-point Likert scale whether they would prefer to (1) have a friend receive a dollar per word jumble they solved or (7) receive an additional dollar themselves. One-sample  $t$ -tests relative to scale midpoints of four revealed that participants would rather receive an additional dollar themselves than have a friend receive that dollar ( $M = 5.19$ ,  $SD = 2.22$ ),  $t(254) = 8.55$ ,  $p < .001$ .

#### Post-hoc analysis of gender effects

Numerous researchers have posited that men and women take different approaches to ethical reasoning and are therefore differentially likely to exhibit competitive behavior (Croson & Gneezy, 2009) and to behave unethically (Barnett & Karson, 1987; Dobson & White, 1995; Gilligan, 1982; O'Fallon & Butterfield, 2005; Vermeir & Van Kenhove, 2008). These researchers hold that while men are primarily concerned with an ethic of justice, women are more concerned with an ethic of care (Gilligan, 1982; Gilligan, Ward, Taylor, & Bardige, 1988; Lyons, 1983; White, 1992). Consistent with Social Role Theory (Eagly, 1987), they argue that people think and behave in ways consistent with stereotypes and reflect how they are socialized, with women placing a greater emphasis on care, compassion, and harmonious relationships, and men placing a greater emphasis on agency, justice, and fairness. Although empirical studies have not consistently shown that women behave less unethically than men on the whole (Schoderbek & Deshpande, 1996; Sikula & Costa, 1994), Jaffe and Hyde's (2000) meta-analysis suggests that women emphasize an ethic of care slightly more than do men. Indeed, Bowles, Babcock, and McGinn (2005) hypothesized and found that women negotiate much more successfully when acting in a representational role for a mentee than when acting on behalf of themselves. Their results indicated that "women felt particularly energized in negotiations in which they felt a personal sense of responsibility or obligation to represent the interests of another person" (p. 959).

To determine if women also felt more motivated to behave unethically by over-reporting performance in the present task when they were responsible for the payoffs of a friend, I conducted a binomial logistic regression that regressed reported solving of the unsolvable word jumble on gender, dummy variables for each of the conditions in which someone other than the self benefits (i.e., self-and-friend-benefit, self-and-other benefit, and other-alone benefit), and the interaction of dummy variables and gender. Conditions in which only the self benefitted served as the baseline. This analysis was conducted post-hoc and is displayed in Table 4. The analysis revealed a significant positive main effect for the self-and-other benefit condition and a marginally significant positive

<sup>2</sup> Levene's test of homogeneity was marginally significant. The adjusted  $t$ -test was used in this  $t$ -test and all  $t$ -tests with a Levene test producing a  $p$ -value  $< .10$ .

**Table 4**  
Study 2 regression analysis.

	Unsolvable anagrams	
	Reported solved	
	B	SE
Constant	−1.15**	0.24
Self-and-other benefit	0.77*	0.37
Self-and-friend benefit	0.71†	0.40
Only other benefits	−0.50	0.47
Male	0.33	0.24
Male × self-and-other	0.25	0.37
Male × self-and-friend	−0.84*	0.40
Male × only other	0.10	0.47

†  $p < .10$ .

\*  $p < .05$ .

\*\*  $p < .01$ .

main effect for the self-and-friend benefit condition. The main effect for the self-and-friend benefit condition was qualified by a significant gender × self-and-friend benefit condition interaction. Decomposing this interaction revealed that women in the self-and-friend benefit condition were more likely to report solving the unsolvable word jumble (52%) than were women in the self-alone benefit conditions, 18%,  $\chi^2(1) = 9.48$ ,  $p = .01$ . Men in the self-and-friend benefit condition were not significantly more likely to report solving the unsolvable word jumble 28%,  $\chi^2(1) = .37$ ,  $p = .56$  than were men in the self-alone conditions 26%,  $\chi^2(1) = .02$ ,  $p = .88$ . No other main effects or interactions were significant.

### Discussion

Study 2 participants cheated more when the benefits of doing so were split with a friend, or even with a randomly-selected participant from another experiment than when they alone accrued the benefits. While participants explicitly stated that they would prefer that they (rather than their friend) receive the additional dollar per word jumble solved, their actual behavior revealed that they were *more* willing to cheat when the additional dollar went to a friend or even someone they did not know and would never meet. Study 2 also tested whether self-interest plays a necessary role by including a condition in which only a randomly-selected participant from another experiment benefited from improved performance. Cheating was highest when actors and the unknown others split the spoils of the actor's dishonesty because actors in this case would have both a self-interest motive and a way to rationalize away some of the immorality of their behavior. Without a self-interest motive, some participants may have lacked the motivation to cheat, and without a way to rationalize away the ethical concerns some participants may have had qualms about cheating for their own benefit.

The results support the ease-of-justification perspective, which contends that splitting the benefits of dishonest behavior can increase the prevalence of that behavior because it mitigates the perceived immorality of the dishonest behavior. As hypothesized, participants viewed over-reporting results to be significantly less unethical and less greedy when they split the benefits of over-reporting their results. While the effect sizes were quite small on the explicit within-subject measures of perceived greediness and unethicality, it is likely that these mitigated perceptions of the immorality of over-reporting results licensed people to report solving word jumbles they did not actually solve.

The finding that it was primarily women who became much more likely to cheat when their cheating benefitted a friend highlights the possibility that a representational role may act as a gen-

der trigger that makes women especially more likely to behave unethically in pursuit of their goals when their efforts would also benefit their friends. The results are consistent with Bowles, Babcock, and McGinn's (2005) findings that acting in a representational role for a mentee allowed women to negotiate more successfully. In both cases women seemed more motivated to act in pursuit of their desired outcomes when their efforts benefited someone they cared about. Consistent with Cross and Madson's (1997) theory that women strive harder when they feel responsible for someone, women were not more likely than men to over-report their performance on behalf of someone for which they did not feel responsible. Thus, benefitting a randomly-selected participant did not have a stronger effect on women's likelihood to over-report performance than it did on men's likelihood to do so. Future research should examine this gender effect more systematically.

### Study 3: mediation by perceived immorality

Study 2 demonstrated people are more likely to cheat when the benefits of doing so are split with another person than when the actor alone benefits. It also indicated that people view over-reporting as less greedy and less unethical when the benefits do not go solely to the actor. Study 3 attempts to provide support for Hypothesis 3, which asserts that these mitigated perceptions of how unethical it is to over-report results mediate the relationship between split spoils and increased cheating. It also demonstrates the effect using a different task.

#### Method

One-hundred-twelve online participants (63% female;  $M_{age} = 33.7$ ) participated in a study that ostensibly examined decision-making and timing. They were told that they would be paid based on their performance on a number matrix task but that everyone would receive a gift certificate worth at least three dollars for their participation. After completing the number matrix task, participants answered a short questionnaire about the task.

#### Number matrix task

In a task taken from Mazar et al. (2008), each participant saw 20 matrices of 12 three-digit numbers (e.g., 2.19). They were instructed that they would be paid for each matrix in which they found two numbers that summed exactly to 10.00. They were also told that they did not have to solve the matrices in order and that they would have 5 min to complete this task. Participants were not asked to circle the number pair; instead they were asked only to indicate online whether or not they found the matching pair for each matrix. As such, participants were led to believe that the experimenter could not check whether they actually solved each matrix that they indicated solving. Unbeknownst to participants, however, five of the matrices did not contain number pairs that added to 10.00. If a participant reported finding the number pair in one of these matrices it was clear that he or she had cheated on that matrix.

#### Manipulation of beneficiary

Participants were randomly assigned to one of two conditions. In the self-and-other benefit condition, participants were instructed that they would receive \$.35 per number pair found and a randomly-selected participant from another experiment (who would never learn the identity of the participant) would also receive \$.35 per number pair found. In this condition, participants therefore had the opportunity to earn \$7.00 ( $20 \times \$.35$ ) for themselves and \$7.00 for a randomly selected anonymous participant in another experiment. In the self-alone benefits condition

participants received \$0.70 per number pair found, so participants in this condition had the opportunity to earn \$14.00 ( $20 \times \$0.70$ ) for themselves.

#### *Dependent variables*

The number of times the participants indicated finding a number pair that added to ten in a matrix in which no such number pairs existed served as the primary dependent variable. I was also interested in the total number of grids the participants reported solving. After participants reported their results, participants rated on a seven-point Likert scale how unethical and how greedy it would be for someone to over-report their performance on the number matrix task. While ratings of unethicality and greediness of over-reporting performance were administered as within-subjects measures in Study 2, they were between-subjects measures in Study 3. I made this change because I wanted to ensure that any demand effects present within a within-subjects administration did not explain the differences in perceived ethicality and perceived greediness when the spoils are split equally relative to when the spoils are garnered by one person alone.

#### *Results and discussion*

##### *Frequency of over-reporting results*

**Hypothesis 2** predicted that people would be more likely to cheat when the benefits of doing so were split equally between themselves and another person. As predicted, a *t*-test revealed that participants in self-and-other benefits condition reported solving more unsolvable grids ( $M = 1.14$ ,  $SD = 1.25$ ) than did those in the self-alone benefits condition ( $M = 0.68$ ,  $SD = 1.86$ ),  $t(89.2) = 2.18$ ,  $p = .04$ .<sup>3</sup> A Mann–Whitney non-parametric test conducted to verify the robustness of this contrast was marginally significant, Mann–Whitney = 967.5,  $z = 1.79$ ,  $p = .07$ . Participants also reported solving more grids overall ( $M = 7.49$ ,  $SD = 3.97$ ) than did those in the self-alone benefits condition ( $M = 5.57$ ,  $SD = 3.74$ ),  $t(87.0) = 2.50$ ,  $p = .01$ .

I conducted a 2 (beneficiary condition: self-alone vs. self-and-other)  $\times$  2 (gender: male vs. female) ANOVA to determine whether gender interacted with condition to predict the incidence of cheating. This analysis revealed only a significant main effect for beneficiary condition ( $F(1, 94) = 5.21$ ,  $p = .03$ ), indicating that participants over-reported their performance more frequently when they and a randomly-selected participant from another experiment benefitted than when they alone benefitted. Gender did not interact with beneficiary condition ( $p > .3$ ) and the main effect of gender was not significant,  $p > .6$ .

##### *Perceived ethicality of over-reporting results*

Consistent with **Hypothesis 1**, participants in the self-and-other benefits condition indicated that they viewed over-reporting performance on the number matrix task to be less unethical ( $M = 5.60$ ,  $SD = 1.49$  vs.  $M = 6.08$ ,  $SD = 0.95$ ;  $t(101.4) = -2.44$ ,  $p = .05$ ) and less greedy ( $M = 5.52$ ,  $SD = 1.49$  vs.  $M = 6.10$ ,  $SD = 0.91$ ;  $t(100) = -2.50$ ,  $p = .02$ ) than did participants in the self-alone benefits condition. To test the robustness of these differences I conducted a Mann–Whitney non-parametric test. Condition had a marginally significant effect on perceptions of ethicality (Mann–Whitney = 1010,  $z = 1.71$ ,  $p = .09$ ) and a significant effect on perceptions of greediness, Mann–Whitney = 904,  $z = 2.46$ ,  $p = .02$ .

I conducted an OLS regression using a bootstrapping technique (Preacher & Hayes, 2004) to analyze whether the perceived immo-

rality or perceived greediness of over-reporting performance mediated the relationship between splitting the spoils with a randomly-selected participant from another experiment and increased cheating. This regression is displayed in Table 1. Participants in the self-and-other benefits condition perceived over-reporting performance to be less unethical than did those in the self-alone benefits condition. The perceived immorality of over-reporting performance correlated negatively with the degree to which participants over-reported performance. Accounting for these altered perceptions of immorality reduced the previously significant relationship between condition and incidence of cheating to non-significance. A bootstrap analysis revealed that the 95% bias-corrected confidence interval for the size of the indirect effect excluded zero (.001, .303), which suggested a significant indirect effect (MacKinnon et al., 2007; Preacher & Hayes, 2004). **Hypothesis 3** therefore received support. To test the robustness of the finding, I then repeated the bootstrapping technique inserting gender as a control variable. Controlling for gender had little effect, although the 95% bias-corrected confidence interval for the size of the indirect effect did include zero when gender was included (–.0003, .308). Perceptions of greediness did not mediate the relationship between splitting the spoils of over-reporting performance and the likelihood of over-reporting performance, as the correlation between perceived greediness and likelihood of over-reporting performance was not significant,  $p > .3$ .

#### **Study 4: unequal splitting and moderation by beneficiary**

In Studies 2 and 3 people were more likely to cheat when the benefits of doing so were split equally with another person than when they alone benefitted. Study 4 tests whether people must share the benefits equally with others in order for sharing the spoils to increase the incidence of unethical behavior. It also examines whether splitting the spoils increases cheating when the spoils of unethical behavior are split with someone whose morality is described in unfavorable terms (i.e., someone who seems prejudiced against racial minorities). Because people may see little moral value in benefitting someone who is described as prejudiced, sharing the spoils with such people may not make them more likely to cheat than if they alone were to capture all of the benefit from unethical behavior. I therefore put forth:

**Hypothesis 4.** Splitting the spoils of unethical behavior will increase the incidence of unethical behavior only when the beneficiary is not described in immoral terms.

#### *Method*

Two-hundred-twenty-three participants (63% female;  $M_{age} = 34.2$ ) in an online pool managed by a private university on the West Coast of the US participated in a study that ostensibly examined decision-making and timing. Participants completed the word-jumble task that was used in Study 2.

##### *Manipulation of beneficiary*

Participants were randomly assigned to one of three conditions. In the self-alone benefit condition participants were told that they would receive \$1.80 per word jumble solved. In the self-and-other benefit condition participants were told that they would receive \$1.20 per word jumble solved and a randomly-selected participant would receive \$.60 per word jumble solved. In the self-and-prejudiced-other benefit condition participants were told that they would receive \$1.20 per word jumble solved and a randomly-selected participant would receive \$.60 per word jumble solved. They were also told that the other participant “will be randomly selected

<sup>3</sup> Levene's test of homogeneity was marginally significant for these *t*-tests; adjusted *t*-tests were therefore used.



**Table 5**  
Unsolvable word jumble reported solved in Study 4.

Beneficiary	N	% Reporting unscrambling "Taguan" (%)	Anagrams reported solved		Payment claimed for		Post-exercise donations to other	
			Mean	Std. dev.	Self	Other	Pct Giving (%)	Average Donation <sup>c</sup>
Self-alone	69	29.0 <sup>a</sup>	4.72	2.66	8.50	–	15.4	\$3.07
Self-and-other	88	44.3 <sup>b</sup>	5.40	2.91	6.48	3.24	8.2	\$0.94
Self-and-prejudiced-other	60	31.7 <sup>a,b</sup>	4.58	2.44	5.50	2.75	13.3	\$1.28
Total	217	35.9	4.96	2.72	6.85	2.07	11.9	\$1.75

<sup>a,b</sup> Numbers within a column with different letters are significantly different from each other.

<sup>c</sup> Average calculated by analyzing amounts of those choosing to donate.

from a group of participants whose responses indicated that they are highly prejudiced against racial minorities."

#### Dependent variables

As in Study 2, the frequency with which participants reported solving the third word jumble served as the dependent measure of cheating. All participants used a seven-point Likert scale 1 (not at all) to 7 (very much) to the respond to the questions "How unethical (greedy) do you think it would be for someone to cheat on the word unscrambling task if their cheating also benefitted another person?" and "How unethical (greedy) do you think it would be for someone to cheat on the word unscrambling task if they were the only person to benefit from cheating?" Most participants were also asked how much of their earnings they wanted to give away to another participant.<sup>4</sup>

## Results

#### Treatment of variables

Six participants' results were thrown out for completing the study too quickly.

#### Frequency of over-reporting results

Table 5 displays the frequency with which participants reported solving the third (i.e., unsolvable) word jumble in each condition. The overall chi-square examining the effect of beneficiary condition (self-alone benefit vs. self-and-other benefit vs. self-and-prejudiced-other benefit) on rates of over-reporting performance was marginally significant,  $\chi^2(2) = 4.61$ ,  $p = .10$ . Participants in the self-and-other benefit condition were significantly more likely to report solving the unsolvable word jumble (44%) than were participants in the self-alone benefit condition, 29%,  $\chi^2(1) = 3.88$ ,  $p = .05$ . Participants in the self-and-prejudiced-other benefit condition were non-significantly less likely to report solving the unsolvable word jumble (32%) than were participants in the self-and-other benefit condition,  $\chi^2(1) = 2.44$ ,  $p = .12$ . A supplementary 3 (beneficiary condition: self-alone benefit vs. self-and-other benefit vs. self-and-prejudiced other benefit)  $\times$  2 (gender: male vs. female) ANOVA revealed that gender did not have a significant main effect on cheating and did not interact with condition,  $p$ 's  $> .4$ .

I also analyzed whether condition affected participants' likelihood of indicating that they successfully unscrambled the ninth word jumble. The overall chi-square examining the effect of beneficiary condition on rates of over-reporting performance on this word jumble was marginally significant,  $\chi^2(2) = 5.00$ ,  $p = .08$ . Participants in the self-and-other benefit condition were more likely to report solving the ninth word jumble (13%) than were partici-

pants in the self-alone high benefit condition, 3%,  $\chi^2(1) = 4.59$ ,  $p = .03$ . The incidence of reporting having solved the ninth anagram in the self-and-prejudiced-other benefit condition did not differ from either of the two other conditions.

#### Perceived ethicality of over-reporting results

Although the differences were in the predicted direction, a between-subjects analysis revealed that participants did not view over-reporting results to be significantly less unethical ( $M = 5.93$ ,  $SD = 1.29$  vs.  $M = 6.16$ ,  $SD = 1.21$ ,  $t(152) = -1.14$ ,  $p = .25$ ) or less greedy ( $M = 5.83$ ,  $SD = 1.44$  vs.  $M = 6.03$ ,  $SD = 1.30$ ,  $t(152) = -0.89$ ,  $p = .37$ ) when told that the over-reporting also benefitted another person than when told that over-reporting benefited only the self. Moreover, ratings of greediness and immorality in the self-and-prejudiced-other did not differ from either of the other two conditions, all  $p$ 's  $> .35$ . While participants who reported solving the third anagram indicated that they viewed over-reporting performance for the benefit of the self-alone to be somewhat less greedy ( $M = 5.74$ ,  $SD = 1.54$  vs.  $M = 6.05$ ,  $SD = 1.19$ ,  $t(128.3) = 1.53$ ,  $p = .10$ ) and somewhat less unethical ( $M = 5.89$ ,  $SD = 1.42$  vs.  $M = 6.07$ ,  $SD = 1.33$ ,  $t(212) = 0.91$ ,  $p = .36$ ), neither effect was significant.

#### Giving money to another participant after the task?

After participants had completed the word-jumble task, they indicated whether they wanted to give any of their earnings to a randomly-selected participant. As Table 3 indicates, no more than 15.4% of participants in any condition wished to donate some of their earnings to a randomly-selected participant from another study. Those six participants in the self-alone benefit condition who opted to donate some of their earnings to others donated an average of \$3.07; the averages in the self-and-other benefit and self-and-prejudiced-other conditions were \$0.94 and \$1.28 respectively. Participants who reported solving the nearly impossible third anagram were not more likely to choose to donate some of their money to another person and did not donate significantly more money than did participants who did not report solving the third anagram,  $p$ 's  $> .70$ .

## Discussion

Study 4 indicated that participants need not split the spoils of unethical behavior equally for splitting the spoils to increase the incidence of unethical behavior. Participants who earned a \$1.20 per anagram for themselves and \$.60 per anagram for a randomly-selected participant cheated more often than did participants who earned \$1.80 per anagram for themselves. However, splitting the spoils only increased the incidence of cheating when the beneficiary did not have reputation for being immoral. When the randomly-selected beneficiary was believed to be prejudiced against racial minorities, participants splitting the spoils did not cheat more often than did those benefitting only themselves.

<sup>4</sup> A study programming error omitted this question from 57 participants' questionnaires.

Although participants became more likely to cheat when benefiting others served as camouflage, they were not especially likely to choose to give away their spoils after having cheated.

## General discussion

People over-reported their performance more often when the benefit of doing so was split between themselves and another person, even if they did not know the other beneficiary and had no interaction with her/him. The results indicate that because people see cheating as greedier and less ethical when the cheater alone benefits than when others also benefit, splitting the spoils of cheating can make people more likely to cheat. Armed with the knowledge that their unethical behavior benefited not only themselves but other people as well, people in the present experiments became more willing to behave dishonestly. However, this effect vanished when people knew that the other beneficiary of their behavior was less than moral (i.e., he/she seemed to be prejudiced against racial minorities).

These findings make a couple of important contributions to the understanding of unethical behavior. Chiefly, they indicate that people may be most susceptible to engage in such activities as lying, cheating, or stealing when others can share in the benefits of those transgressions. When individuals would stand to gain all of the rewards of their dishonesty, their own need to see themselves as moral may stop them from behaving unethically. When they could attribute some of their behavior to the desire to benefit others, they may be able to see themselves as moral even as they behave in ways most people would deem immoral. So while the present research is by no means the first to demonstrate that people behave in ways that are inconsistent with the predictions of rational models of behavior (cf. Gino & Pierce, 2011; Kahneman & Tversky, 1979), it does contribute to our understanding of how people deviate systematically from such models. As such, it may allow people to guard more effectively against unethical behavior by specifying when such behavior is most likely to occur. These results suggest specifically that people looking to monitor and curtail unethical behavior may be well-advised to pay heightened attention to those instances in which people may not only benefit themselves but also others by acting unethically. For instance, an individual employee may be likely to act fraudulently when the doing so would benefit not only that individual employee but the company's other stakeholders. This may be the case even if the other stakeholders would have advised the employee against acting fraudulently if they were involved in the decision.

Second, the results indicate that the beneficiaries need not be friends or family for the existence of those beneficiaries to heighten the likelihood that people will act unethically. Cheating rates increased when another beneficiary shared in the benefits even when that beneficiary was a randomly-selected participant from another experiment. While previous research has shown that empathy can lead people to behave unethically to help others (Gino & Pierce, 2009b, 2011), this research is the first to establish that people need not know or interact with the beneficiaries of their unethical behavior for the existence of those beneficiaries to heighten the likelihood of unethical behavior.

The incentives to cheat in the current studies were small relative to the probable wealth of study participants. It is somewhat surprising that manipulating the beneficiary of unethical behavior could have significant effects on the prevalence of cheating given how little was at stake. It would be interesting to see how splitting the spoils would affect cheating when the incentives to cheat are relatively large (e.g., \$5000). Because such research would be extremely costly to conduct in a laboratory setting, field research may offer the best approach to determining how incentive size

interacts with allocation of spoils to affect people's likelihood of cheating.

Similarly, research could also examine how splitting the spoils of unethical behavior when the unethical behavior occurred in a face-to-face setting rather than in a depersonalized online context. While it is likely that people would cheat less often in face-to-face settings (Naquin, Kurtzberg, & Belkin, 2010), it is also possible that the moral camouflage stemming from splitting the spoils could be all the more important when one has to face a live person while committing unethical behavior.

Future research could also examine how different allocations of spoils affect the prevalence of unethical behavior. It is entirely possible that splits more favorable to the third-party beneficiaries could lead to even more unethical behavior if those splits made cheating seem less unethical. It is also entirely possible that splits that are extremely favorable to the actor (and less favorable to the third-party) would lead people to behave more unethically, as the self-interest motive would be stronger in such cases than in the 50–50 splits and 67–33 splits used in the present experiments.

Research might also productively explore how elements of people's personalities might affect how the allocation of rewards from cheating affects their likelihood to cheat. For instance, people who are particularly prone to guilt may be much more likely to cheat when the spoils are shared than when they alone capture the benefits, whereas those who are not particularly prone to guilt may not show the same increase in likelihood to cheat when the spoils are shared. Moreover, people who consider being a moral person central to their identity might be particularly likely to cheat more when the spoils are split than when they accrue all of the spoils because it is these people, who would score highly on Aquino and Reed's (2002) measure of moral identity, that have the greatest need to see themselves as moral.

It would also be worth investigating whether people would become less likely to act unethically for the benefit of others when the beneficiaries of their transgressions would, by receiving those gains, learn that their gains were ill-gotten. Previous research has shown that third-party monitoring of behavior increases moral awareness and reduces the prevalence of unethical behavior (Treviño & Victor, 1992; Victor, Treviño, & Shapiro, 1993). If actors perceived third-party beneficiaries as monitors and potential condemners of dishonest behavior, it is possible that they would cheat less often than they would if they could accrue all of the benefits and not alert others to their dishonesty.

The present research demonstrated that splitting rewards can lead people to behave dishonestly in pursuit of goals by changing how unethical and greedy people perceived dishonest acts to be. It is also possible that splitting rewards may spur more honest forms of effort. If people feel that accomplishing a task is more important when the rewards of accomplishing the task are split with another person, they may increase their own effort even as their own personal rewards from exerting effort are reduced. Such a result would be consistent with Grant's (2008) finding that task significance can materially increase the effort people apply toward the task. While the findings presented here do not support this possibility, they also do not rule out the possibility that under different conditions people may exert more effort. Additional studies could therefore productively examine whether split rewards not only change perceptions of immorality but also task significance.

## Conclusion

Self-interest clearly motivates people to behave unethically (e.g., Becker, 1968). However, the studies here indicate that people may actually be more likely to behave unethically when they do not capture all of the benefits that the unethical behavior yields.

Because most of us have a need to ourselves ourselves as moral (e.g., Tsang, 2002), we face limits in how unethically we can behave lest we lose the view of ourselves as moral people. When we can rationalize that our unethical behavior benefits others as well, we may be able to simultaneously act unethically and preserve our positive view of our selves.

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## References

- Allingham, M., & Sandmo, A. (1972). Income tax evasion: A theoretical analysis. *Journal of Public Economics*, 1, 323–338.
- Aquino, K., & Reed, A. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, 83(6), 1423–1440.
- Barnett, J. H., & Karson, M. J. (1987). Personal values and business decisions: An exploratory investigation. *Journal of Business Ethics*, 6, 371–382.
- Barnett, T., & Vaicys, C. (2000). The moderating effect of individuals' perceptions of ethical work climate on ethical judgments and behavioral intentions. *Journal of Business Ethics*, 27, 351–362.
- Becker, G. S. (1968). Crime and punishment: An economic approach. *Journal of Political Economy*, 76(2), 169–217.
- Blasi, A. (1980). Bridging moral cognition and moral action: A critical review of the literature. *Psychological Bulletin*, 88, 1–45.
- Bowles, H. R., Babcock, L., & McGinn, K. L. (2005). Constraints and triggers: Situational mechanics of gender in negotiation. *Journal of Personality and Social Psychology*, 89(6), 951–965.
- Brass, D. J., Butterfield, K. D., & Skaggs, B. C. (1998). Relationships and unethical behavior: A social network perspective. *Academy of Management Review*, 23, 14–31.
- Brief, A. P., Dukerich, J. M., Brown, P. R., & Brett, J. F. (1996). What's wrong with the Treadway Commission Report? Experimental analyses of the effects of personal values and codes of conduct on fraudulent financial reporting. *Journal of Business Ethics*, 15, 183–198.
- Cameron, J. S., & Miller, D. T. (2009). Different ethical standards in gain versus loss frames. In D. de Cremer (Ed.), *Psychological perspectives on ethical behavior and decision making* (pp. 91–106). Charlotte, NC: Information Age Publishing.
- Cleek, M. A., & Leonard, S. L. (1998). Can corporate codes of ethics influence behavior? *Journal of Business Ethics*, 17, 619–630.
- Crandall, C. S., & Eshleman, A. (2003). A justification-suppression model of the expression and experience of prejudice. *Psychological Bulletin*, 129, 414–446.
- Crosno, R., & Gneezy, U. (2009). Gender differences in preferences. *Journal of Economic Literature*, 47(2), 448–474.
- Cross, S. E., & Madson, L. (1997). Models of the self: Self-construals and gender. *Psychological Bulletin*, 122, 5–37.
- Dies, D., & Giroux, G. (1992). Determinants of audit quality in the public sector. *Accounting Review*, 67, 462–479.
- Dobson, J., & White, J. (1995). Toward the feminine firm: An extension to Tomas white. *Business Ethics Quarterly*, 5, 463–478.
- Dovidio, J. F., Smith, J. K., Donnell, A. G., & Gaertner, S. L. (1997). Racial attitudes and the death penalty. *Journal of Applied Social Psychology*, 27, 1468–1487.
- Eagly, A. (1987). *Sex differences in social behavior: A social-role interpretation*. Hillsdale, NJ: Erlbaum.
- Esses, V. M., Dietz, J., & Bhardwaj, A. (2006). The role of prejudice in the discounting of immigrant skills. In R. Mahalingham (Ed.), *The Cultural Psychology of Immigrants* (pp. 113–130). Mahwah, NJ: Erlbaum.
- Gaertner, S. L., & Dovidio, J. F. (1977). The subtlety of white racism, arousal, and helping behavior. *Journal of Personality and Social Psychology*, 35, 695–707.
- Gaertner, S. L., & Dovidio, J. F. (2000). *Reducing intergroup bias: The common ingroup identity model*. Philadelphia: Psychology Press.
- Gaertner, S. L., Dovidio, J. F., & Johnson, G. (1982). Race of victim, nonresponsive bystanders, and helping. *Journal of Social Psychology*, 117, 69–71.
- Gilligan, C. (1982). *In a different voice. Psychological theory and women's development*. Cambridge, MA: Harvard University Press.
- Gilligan, C., Ward, J. V., Taylor, J., & Bardige, B. (1988). *Mapping the moral domain*. Cambridge, MA: Harvard University Press.
- Gino, F., & Pierce, L. (2011). Lying to level the playing field: Why people may dishonestly help or hurt others to create equity. *Journal of Business Ethics*, in press [Special issue on Regulating ethical failures: Insights from Psychology].
- Gino, F., Ayal, 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. (2009a). The abundance effect: Unethical behavior in the presence of wealth. *Organizational Behavior and Human Decision Processes*, 109(2), 142–155.
- Gino, F., & Pierce, L. (2009b). Dishonesty in the name of equity. *Psychological Science*, 20(9), 1153–1160.
- Grant, A. M. (2008). The significance of task significance. Job performance effects, relational mechanisms, and boundary conditions. *Journal of Applied Psychology*, 93, 108–124.
- Greenwald, Anthony. G. (1980). The totalitarian ego: Fabrication and revision of personal history. *American Psychologist*, 35(7), 603–618.
- Griffin, Dale W., & Ross, Lee (1991). Subjective construal, social inference, and human misunderstanding. In Mark P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 24, pp. 319–359). New York: Academic Press.
- Güth, W., Schmittberger, R., & Schwarze, B. (1982). An experimental analysis of ultimatum games. *Journal of Economic Behavior and Organization*, 3, 367–388.
- Hegarty, W. H., & Sims, H. P. Jr., (1979). Organizational philosophy, policies and objectives related to unethical decision behavior: A lab experiment. *Journal of Applied Psychology*, 64, 331–338.
- Hill, J., & Kochendorfer, R. A. (1969). Knowledge of peer success and risk of detection as determinants of cheating. *Developmental Psychology*, 1(3), 231–238.
- Insko, C. A., Schopler, J., Hoyle, R. H., Dardis, G. J., & Graetz, K. A. (1990). Individual-group discontinuity as a function of fear and greed. *Journal of Personality and Social Psychology*, 58(1), 68–79.
- Izraeli, D. (1988). Ethical beliefs and behavior among managers: A cross-cultural perspective. *Journal of Business Ethics*, 7, 263–271.
- Jaffe, S., & Hyde, J. (2000). Gender differences in moral orientation: A meta-analysis. *Psychological Bulletin*, 126(5), 703–726.
- Jones, T. M. (1991). Ethical decision making by individuals in organizations: An issue-contingent model. *Academy of Management Review*, 16, 366–395.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decisions under risk. *Econometrica*, 47, 313–327.
- Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations*. New York: Wiley.
- Kish-Gephart, J. J., Harrison, D. A., & Treviño, L. K. (2010). Bad apples, bad cases, and bad barrels: Meta-analytic evidence about sources of unethical behavior at work. *Journal of Applied Psychology*, 95(1), 1–31.
- Kohlberg, L. (1969). Stage and sequence. The cognitive-developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialization theory and research*. Chicago, IL: Rand McNally.
- Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, 108(3), 480–498.
- 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.
- Lyons, N. (1983). The perspectives: On self, relationships, and morality. *Harvard Educational Review*, 53, 125–145.
- MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation analysis. *Annual Review of Psychology*, 58, 593–614.
- Mautz, R. K., & Sharaf, H. A. (1961). *The philosophy of auditing*. Sarasota, FL: American Accounting Association.
- Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people. *Journal of Marketing Research*, 45, 633–644.
- McCabe, D. L., Treviño, L. K., & Butterfield, K. D. (1996). The influence of collegiate and corporate codes of conduct on ethics-related behavior in the workplace. *Business Ethics Quarterly*, 6, 461–476.
- Michaels, J., & Miethe, T. (1989). Academic effort and college grades. *Social Forces*, 68(1), 309–319.
- Naquin, C. E., Kurtzberg, T. R., & Belkin, L. Y. (2010). The finer points of lying online: E-mail versus pen and paper. *Journal of Applied Psychology*, 95(2), 387–394.
- O'Fallon, M. J., & Butterfield, K. D. (2005). A review of the empirical ethical decision-making literature: 1996–2003. *Journal of Business Ethics*, 59, 375–413.
- 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.
- Rest, J. (1986). *Development in judging moral issues*. Minneapolis, MN: University of Minnesota Press.
- Sanitioso, Rasyid., Kunda, Ziva., & Fong, Geoffrey. T. (1990). Motivated recruitment of autobiographical memories. *Journal of Personality and Social Psychology*, 59(2), 229–241.
- Schoderbek, P., & Deshpande, S. (1996). Impression management, overcalming, and perceived unethical conduct: the role of male and female managers. *Journal of Business Ethics*, 15(4), 409–414.
- 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.
- Shaw, W. H. (2009). Marxism, business ethics, and corporate social responsibility. *Journal of Business Ethics*, 84(4), 565–576.
- Sherman, G. D., & Clore, G. L. (2009). The color of sin: White and black are perceptual symbols of moral purity and pollution. *Psychological Science*, 20(8), 1019–1025.
- Sikula, A. Sr., & Costa, A. (1994). Are women more ethical than men? *Journal of Business Ethics*, 13(11), 859–871.
- Snyder, M. L., Kleck, R. E., Strenta, A., & Mentzer, S. J. (1979). Avoidance of the handicapped: An attributional ambiguity analysis. *Journal of Personality and Social Psychology*, 37, 2297–2306.
- Tenbrunsel, A. E., & Smith-Crowe, K. (2008). Ethical decision making: Where we've been and where we're going. *Academy of Management Annals*, 2, 545–607.
- Treviño, L. K. (1992). Moral reasoning and business ethics: Implications for research, education, and management. *Journal of Business Ethics*, 11, 445–459.

- Treviño, L. K., Butterfield, K. D., & McCabe, D. L. (1998). The ethical context in organizations: Influences on employee attitudes and behaviors. *Business Ethics Quarterly*, 8, 447–477.
- Treviño, L. K., & Victor, B. (1992). Peer reporting of unethical behavior: A social context perspective. *Academy of Management Journal*, 35(1), 38–64.
- Treviño, L. K., Weaver, G. R., & Reynolds, S. J. (2006). Behavioral ethics in organizations: A review. *Journal of Management*, 32, 951–990.
- Treviño, L. K., & Youngblood, S. A. (1990). Bad apples in bad barrels: A causal analysis of ethical decision-making behavior. *Journal of Applied Psychology*, 75, 378–385.
- Tsang, J. (2002). Moral rationalization and the integration of situational factors and psychological processes in immoral behavior. *Review of General Psychology*, 6(1), 25–50.
- Turillo, C. J., Folger, R., Lavelle, J. J., Umphress, E. E., & Gee, J. (2002). Is virtue its own reward? Self-sacrificial decisions for the sake of fairness. *Organizational Behavior and Human Decision Processes*, 89(1), 839–865.
- Uhlmann, E. L., & Cohen, G. L. (2005). Constructed criteria: Redefining merit to justify discrimination. *Psychological Science*, 16, 474–480.
- Vermeir, I., & Van Kenhove, P. (2008). Gender differences in double standards. *Journal of Business Ethics*, 81, 281–295.
- Victor, B., Treviño, L. K., & Shapiro, D. (1993). Peer reporting of unethical behavior: The influence of justice evaluations and social context factors. *Journal of Business Ethics*, 12, 253–263.
- White, T. (1992). Business, ethics, and Carol Gilligan's "Two voices". *Business Ethics Quarterly*, 2(1), 51–61.
- Zhong, C. B., Bohns, V. B., & Gino, F. (2010). A good lamp is the best police: Darkness increases dishonesty and self-interested behavior. *Psychological Science*, 21, 311–314.
- Zuckoff, M. (2005). *Ponzi's scheme: The true story of a financial legend*. New York: Random House.