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FlashReports

Contagion or restitution? When bad apples can motivate ethical behavior

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ABSTRACT

When there is a "bad apple" in the group, are we more likely to follow the example or compensate for their sins? Three experiments showed that whether a group member's unethical actions lead to contagion or restitution depends on the presence of out-group observers. In Experiment 1, participants were more likely to compensate for the transgression of an in-group member than an out-group member when there were out-group observers. Experiment 2 varied the presence of out-group observers and showed that such compensatory behaviors occur only in the presence of out-group members. We suggest that the presence of out-group observers trigger a self-categorization process that induces guilt in individuals for their group members' transgressions. Indeed, associated guilt mediated the relationship between ingroup member's unethical behavior and participants' compensatory behavior (Experiment 3). These results suggest that norms implied by others' behavior and group categorization are important determinants of ethical behavior.

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The term "bad apples" was made particularly popular in the rhetoric of business and politics after the airing of a Canadian broadcast from the CBC's Fifth Estate television series called "A Few Bad Apples". The show unravels a series of events captured at the Abu Ghraib prison in Iraq where some Iraqi detainees were tortured and humiliated – dragged, chained, striped, and forced to mimic sex. Although the White House swiftly identified "a few bad apples" that were responsible for the abuses in Abu Ghraib, a larger question lingers: how would the unethical behavior of a few bad apples in the group affect others' conduct?

Recent research casts shadowy prospect on this question, suggesting that the unethical behavior of in-group members might be contagious (Gino, Ayal, & Ariely, 2009). When people are exposed to an in-group member's unethical behavior, they align with it and behave dishonestly themselves. An out-group member's unethical behavior, however, does not have the same assimilating effect. Gino et al. (2009) explained that the degree to which people are influenced by the social norms (Cialdini & Trost, 1998) of dishonesty depends, to some extent, on the relationship between the initiator and the follower. People tend to perceive questionable behaviors exhibited by in-group members or similar others to be more legitimate compared to those by out-group members. Thus, in an isolated military base with a strong and unified army identity, it is not surprising that many soldiers participated in the prisoner humiliation in addition to the few who initiated it.

Other observations suggest more optimistic predictions. Research has shown that individuals experience guilt associated with the historical unethical behaviors that their group members engaged in (e.g., German citizens when remembering the Holocaust), and they are motivated to compensate the victims of those behaviors (Doosie, Branscome, Spears, & Manstead, 1998; Swim & Miller, 1999). More recent research (Fortune & Newby-Clark, 2008) has shown that people experience guilt for another person's inappropriate behavior (e.g., cheating in school) even when they are slightly associated with the person (e.g., standing close to each other). Instead of following the example set by bad apples, these studies on associated guilt suggest that in-group members' unethical behavior may drive restitution and compensation for the sins of others with whom they are associated.

Given these two opposing predictions, when would bad apples lead to contagion or restitution? To answer this question, we draw upon self-categorization and social identity theory and suggest that the type of influence bad apples have on others may depend on the mere presence of out-group observers. When individuals are surrounded by in-group members who are similar to them, they are likely to imitate the behaviors of their peers because such behaviors signal appropriate norms (Cialdini & Trost, 1988; Gino et al., 2009), leading to *contagion* (Gino et al., 2009). We expect a different pattern when a group member's transgression is witnessed not only by in-group members but also by an out-group. First, the presence of an out-group may increase our tendency to question the norms set by in-group members. The possibility that out-group members may evaluate and judge the actions of ingroup peers differently can heighten our awareness to potential

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moral consequences of those actions (Schwartz, 1968). Second, the presence of out-group observers may trigger a self-categorization process that leads people to feel responsible for not only their own wrongdoing but also that of their in-group members.

Self-categorization theory (Turner, 1987) suggests that individuals categorize themselves and others as members of certain social groups to derive security and esteem as well as to navigate a complex world. Self-categorization is often activated by the salience of categorical differences. For example, gender is more likely to become a salient category along which people identify themselves if there are two females and two males in the room compared to a room full of females (Turner, 1987). Thus, the mere presence of out-group observers can make group differences salient, leading to a merging between self and in-group members and contrasting between in-group and out-group members (Turner, 1987). Consequently, people may feel guilty not only of transgressions committed by themselves, but also of those by their in-group peers. This associated guilt can motivate individuals to act ethically to *compensate* for their in-group member's sins.

Three experiments tested whether the exposure to bad apples induces ethical or unethical behavior. Experiment 1 tested the prediction that individuals would be more likely to compensate for the selfish behavior of an in-group rather than an out-group member when there is an out-group observer. Experiment 2 systematically manipulated the presence and absence of out-group observers and examined how it moderates the influence of an ingroup member's selfish behavior. Finally, Experiment 3 examined whether an in-group member's selfish behavior induces feelings of guilt in other in-group members when an out-group is present, and whether such feelings motivate restitution.

Experiment 1

Seventy-six undergraduate students (44 females, M_{age} = 20.76, SD = 1.37) from the University of North Carolina in Chapel Hill participated in the study for a \$5 show-up fee and the opportunity to earn an additional \$10. The experiment had a single factorial between-subject design: in-group selfish example vs. out-group selfish example.

The study was conducted in two adjacent lab rooms with groups of 8-10 participants in each session. Unbeknownst to participants, three of the participants in each session were confederates. One confederate wore a UNC t-shirt and the other two wore Duke t-shirts. At the beginning of each session, the experimenter asked the three confederates and one participant to go into one of the two rooms, and the rest to go into the other room. Participants were seated at individual desks arranged so that they could see each other's actions. The experimenter then announced that the session included two unrelated studies: the first study was a questionnaire with bogus questions about judgments. Participants were paid \$5 for completing this questionnaire. This was to make sure participants would walk away with some money. For the second task, the experimenter told participants that they would be paired with another participant from the other room. Each participant had \$10 to allocate between him/herself and the other participant. Participants were told they could offer this participant any portion of the \$10, from nothing to the entire amount, or any amount in between. In reality, participants in the other room engaged in a different study.

The experimenter then gave each participant an envelope with \$10 (eighteen 50¢ coins and four quarters). The experimenter asked the participants to take the amount of money they wanted to keep out of the envelope and leave the rest in the envelope to be sent to their ostensible counterpart in the other room. They were assured that their decisions were completely anonymous.

Participants were randomly assigned to the in-group or outgroup selfish condition. In the in-group selfish condition, the confederate wearing the UNC t-shirt quickly poured the coins on the desk, put all the money in his pocket, and whispered to himself, "I'm taking everything." The other two confederates then turned their faces to the selfish confederate for a moment. In the outgroup selfish condition, the confederate wearing a Duke t-shirt took all the money and the other two behaved exactly the same as in the other condition. The participant was always seated next to the selfish confederate. After having made the decision, participants reported their demographic information and were fully debriefed. Thus, our design is very similar to Gino et al. (2009) except for the presence of an out-group observer in this experiment.

As predicted, participants in the in-group selfish condition left more money (M = \$5.87, SD = \$2.24) than those in the out-group selfish condition (M = \$3.29, SD = \\$2.32), t(74) = 4.92, p < .001. Further, participants in the in-group selfish condition left on average more than \$5 (half of total amount) in the envelope, t(37) = 2.39, p < .03, whereas those in the out-group selfish condition left on average less than \$5 t(45) = -4.54, p < .001. In addition, research using dictator games similar to the one employed here has found that individuals tend to allocate, on average, 20-30% of their initial allocation (Forsythe, Horowitz, Savin, & Sefton, 1994; Hoffman, McCabe, Shachat, & Smith, 1996). Thus, contrary to Gino et al. (2009), the selfish example set by an in-group member actually led participants to go out of their way to compensate for their group mates' selfish act. We argue that these results can be explained by the presence of the out-group members who triggered participants' motivation to compensate for their in-group members' transgression. However, we should note that our study employed a different dependent measure as in Gino et al. (2009). In Gino et al.'s study, the confederate cheated on a problem-solving task and earned undeserved money as a result, whereas in our study the confederate refused to share money with another participant and behaved more or less selfishly. In Experiment 2 we systematically varied the presence and absence of out-group observers to show that the compensatory behavior is due to the presence of out-group observers and not to different dependent variables.

Experiment 2

This experiment examines how the presence of an out-group observer moderates the effect of bad examples on individuals' own behavior. Gino et al. (2009) found that participants cheated more when they observed cheating behavior by an in-group member and cheated less when they observed cheating behavior by an out-group member. In their experiment, other than the confederate in the out-group cheating condition, all participants were ingroup members. We suggest that when out-group observers are present, individuals respond to a selfish in-group example in a different way. Specifically, we predict that when out-group members are not present, participants in the in-group selfish condition will behave more selfishly than those in the out-group selfish condition, replicating Gino et al. (2009); but when out-group observers are present, participants in the in-group selfish condition will behave less selfishly than those in the out-group selfish condition, replicating the results of Experiment 1.

One-hundred thirty-five UNC students (63 females, M_{age} = 21, SD = 1.30) participated in the study for a \$5 show-up fee and the opportunity to earn an additional \$10.

The experiment employed a 2 (in-group selfish example vs. outgroup selfish example) \times 2 (no out-group vs. with out-group) between-subjects design. The lab setting was identical to Experiment

Table 1Design used in Experiment 2. The person in italics is the confederate who behaved selfishly.

	In-group selfish example		Out-group selfish example	
Without out-	Participants	Confederate	Participants	Confederate
group (as in	UNC	UNC	UNC	Duke
Gino et al.,	Confederate	Confederate	Confederate	Confederate
2009)	UNC	UNC	UNC	UNC
With out-group	Participants	Confederate	Participants	Confederate
(as in	UNC	UNC	UNC	Duke
Experiments 1	Confederate	Confederate	Confederate	Confederate
and 3)	Duke	Duke	UNC	Duke

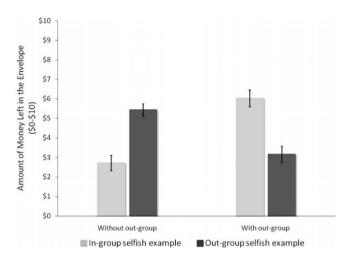


Fig. 1. Amount of money left in the envelope by condition, Experiment 2.

1. In addition to the two conditions in Experiment 1 (with outgroup conditions), we added two new conditions where the two confederates other than the selfish confederate both wore UNC t-shirts (no out-group conditions, as in Gino et al., 2009). Table 1 summarizes the design. Participants were randomly assigned to one of the four conditions.

We did not find significant main effects for the presence or absence of out-group members, F(1,131)=1.79, p=.18, nor for the selfish person's group membership, F(1,131)<1, p=.85. Yet, as predicted, the interaction between the two factors was significant, F(1,131)=52.07, p<.001 (see Fig. 1). Specifically, when out-group members were present, participants left *more* money in the envelope (M=\$6.03, SD=\$2.47) when an in-group member acted selfishly than when an out-group member acted selfishly (M=\$3.17, SD=\$2.40), t(66)=4.85, p<.001. However, when there was no other out-group members, participants left *less* money in the envelope (M=\$2.73, SD=\$2.25) when an in-group member acted selfishly than when an out-group member acted selfishly (M=\$5.44, SD=\$1.80), t(65)=5.46, p<.001.

These findings provide strong evidence that the presence of outgroup observers can curb people's tendency to follow the example of bad apples and instead motivate them to engage in restitution.

Experiment 3

Thus far we have shown that people compensate for the unethical actions of in-group members, but they do so only when members outside their own group are present. Experiment 3 tests the mechanism behind restitution by examining the mediating role of associated guilt. We predict that when out-group observers

are present, participants will experience stronger guilt seeing the selfish behavior of an in-group member than that of an out-group member; this associated guilt, in turn, motivates compensatory behavior.

Eighty-three UNC students (59 females, M_{age} = 21.84, SD = 4.98) participated in the study for \$5. This experiment had a single factorial design (in-group selfish example vs. out-group selfish example).

Participants were randomly assigned to one of two conditions. They read one of two versions of a short description of a dictator game that depicts the same experimental setup as in Experiment 1 (Appendix). Participants were asked to imagine engaging in the game and to indicate how much money they would leave in the envelope if they were participating in the real game. They also indicated how guilty they would feel about the behavior of the person who took all the money along with some unrelated emotional measures (1 = not at all, 5 = very much).

Consistent with the results of Experiments 1 and 2, the amount of money participants indicated they would leave in the envelope was significantly higher in the in-group condition (M = \$5.54, SD = \$2.04) than in the out-group condition (M = \$3.30, SD = \$2.15), t(80) = 4.79, p < .001.

Further, participants in the in-group selfish condition felt more guilty (M = 4.61, SD = 1.64) about the person's selfish behavior than the participants in the out-group selfish condition (M = 3.26, SD = 1.54), t(80) = 3.82, p < .001.

We examined whether guilt mediated the effects of exposure to a bad example on the amount of offer (Baron & Kenny, 1986). The effect of the in-group/out-group selfish behavior was significantly reduced (from β = .47, p < .001 to β = .23, p < .01) when guilt was included in the equation, and guilt was a significant predictor of the dependent variable (β = .61, p < .001). A bootstrap analysis showed that the 95% bias-corrected confidence intervals for the size of the indirect effect (1.15) excluded zero (0.529, 1.905), suggesting a significant indirect effect (MacKinnon, Fairchild, & Fritz, 2007).

General discussion

Imagine you were traveling to Europe and were out to dinner with a group of American colleagues and a few locals. As you are finishing your last bite, you see one of your colleagues tip only 2%. How would you react to such inappropriate behavior?

Results of three experiments suggest that when out-group observers are present, people tend to feel guilty about in-group member's selfish or unethical behavior and, as a result, go the extra mile to compensate (e.g., tipping 25% rather than 15%). This complements early studies showing that when individuals are surrounded by in-group members they tend to blindly follow the example set by bad apples (e.g., Gino et al., 2009).

Our findings also extend prior research on the "black sheep effect", which shows that individuals evaluate unfavorable ingroup members (e.g., poor performers) more negatively than unfavorable out-group members (Branscombe, Wann, Noel, & Coleman 1993; Marques, Yzerbyt, & Leyens, 1988), either to protect the group image or to distance themselves from the unfavorable members (Eidelman & Biernat, 2003). Our studies demonstrated that, besides *cognitively* derogating the black sheep, individuals are also motivated to *behaviorally* restore the group image by acting ethically or generously when they have a chance to.

Our results highlight the importance of self-categorization and social identity in influencing individuals' unethical behavior. Prior research has demonstrated that both individual (e.g., gender and age) and contextual (e.g., incentives and codes of ethics) factors influence unethical behavior (Ford & Richardson, 1994; Loe, Ferrell,

& Mansfield, 2000). While such factors are certainly important in understanding the determinants of individual dishonesty, we believe that the example set by only one individual (e.g., a colleague or a peer) can also have large consequences. As our results show, where we draw the line between in-group and out-group members can predict our reaction to the selfish acts of in-group members.

Future research examining the influence of in-group and outgroup effects on one's own unethical behavior seems warranted. For instance, future research could explore whether the identity of the victim of wrongdoing matters in determining how the unethicality of a few bad apples in the group affect other members' behavior. In the settings of the current studies and Gino et al. (2009), the victim's identity is kept ambiguous, but it is theoretically plausible to suggest that the identity of the victim plays an important role in shaping the influence of bad apples. Future studies focusing on this issue might provide further insights on the role of self-categorization and social identity in predicting individuals' dishonesty.

Unethical behavior represents a serious problem since it is detrimental to the functioning of both organizations and the broader society, as witnessed by the recent countless cases of inappropriate behavior – from the abuses in Abu Ghraib to corporate corruption on Wall Street. Our research suggests that few bad apples can indeed have a contagious effect on others around them. But, in the face of out-groups, we are willing to correct for the bad actions of our peers and compensate for them.

Appendix

Imagine you are participating in a research study, which is being conducted in a lab at Duke University. There are three other participants in the same lab room. From the badges on their backpacks and T-shirts, you recognize that one of them is from UNC and the other two are from Duke. The experimenter announces the following information about the study.

We are interested in how people make decisions. In this task, you are paired with another participant who is in another room in this lab (who will not be identified, now or later). You have \$10 to divide between you and this participant you are paired with. You can offer this participant any portion of the \$10, from nothing to the entire amount, or any amount in between. This participant will keep whatever amount you decide to offer, and you will keep whatever you don't offer. This participant will know all of the rules and all of the information that you know. There are no secrets.

The experiment then gives each participant an envelope with nine \$1 coins and four quarters. The experimenter instructs you to take the amount of money you want to keep for yourself and leave the rest of the money in the envelope to be sent to the participant in the other room with whom you are paired. As you start thinking about what amount to take, you hear someone pouring the coins on the desk, you turn and see that the participant who is from UNC [one of the participants from Duke] has poured all the coins on the desk and is putting all the money in his/her own pocket. The other two participants from Duke also see it.

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