

Explaining Unfair Offers in Ultimatum Games and their Effects on Trust: An Experimental Approach

David De Cremer, Eric van Dijk, and Madan M. Pillutla

ABSTRACT: Unfair offers in bargaining may have disruptive effects because they may reduce interpersonal trust. In such situations future trust may be strongly affected by social accounts (i.e., apologies vs. denials). In the current paper we investigate when people are most likely to demand social accounts for the unfair offer (Experiment 1), and when social accounts will have the highest impact (Experiment 2). We hypothesized that the need for and impact of social accounts will be highest when the intentions of the other party are uncertain. The results provided support for this reasoning.

INTRODUCTION

IN THE LAST DECADE, the media have started to pay considerable attention to unethical acts within organizations and society at large. One common unethical situation involves the allocation of resources between different (interdependent) parties in unfair and morally unacceptable ways. For example, governments sometimes misrepresent the actual value of resources they allocate to health care and services (Buchanan, 1997). Departments within organizations compete for scarce resources and in this process use strategies of deception that results in final unfair outcomes to other departments. Finally, auditing companies report income in benefiting ways that violate the fairness standards used by society at large (Moore, Tetlock, Tanlu, & Bazerman, 2006). A common theme in these examples is that the unfair behavior of one party influences the outcomes and welfare of other parties. As such, this unfair behavior can be regarded as unethical by violating the rules, values and standards that our community employs to coordinate and cooperate (Tenbrunsel & Smith-Crowe, 2008; cf. Jones, 1991).

The field of behavioral ethics attempts in a descriptive way to examine the antecedents of ethical behavior (Treviño, Weaver, & Reynolds, 2006). Despite this focus on the positive (i.e., the promotion of ethical behavior), the field also has to address the fact, as the above examples illustrate, that we will often be confronted with unethical decisions. Because of our striving for an ethical climate in our organizations, research should also address the issue of how people react to unethical decisions. More precisely, in the present research, we develop the argument that the field also has to realize that attention needs to be paid to how we deal with things when they have gone wrong in a way that trust is restored. Despite the fact that “a more elusive benefit of ethics in organizations is trust” (Treviño, 2007: 49), both

business and behavioral ethics have devoted little attention to this issue. We argue that it is important to focus on trust repair, because unethical or unfair decisions are likely to lead to reduced trust or even distrust.

In the current article we address this question in the context of ultimatum bargaining. The ultimatum game (UG; Güth, Schmittberger, & Schwarze, 1982) is a simple bargaining situation that is highly suited to investigate motivated bargaining behavior, and in particular the question of how people react to unfair allocation decisions. Moreover, the UG paradigm nicely parallels the structure of many interdependent relationships within organizations. In this game, two players decide on how to distribute a certain amount of money. One of the players, the allocator, offers a proportion of the money to the other player, the recipient. If the recipient accepts, the money is distributed in agreement with the allocator's offer. If the recipient rejects the offer, both players get nothing.

Because in the UG the inputs of both players are equal, the equality rule dictates that a 50–50 split is considered the fairest offer (Handgraaf, van Dijk, & De Cremer, 2003; van Dijk & Vermunt, 2000). Lower offers are likely to be experienced as unfair and as such can be considered as a violation of the expectations that people hold. In such cases, bargainers (i.e., recipients) may then want to receive some sort of explanation or social account for the offer from the unethical decision-maker (i.e., the allocator). Did the allocator intentionally make an unfair offer? Having a social account may be highly relevant for the recipient because it may affect the judgment of whether or not the allocator is to be trusted.

SOCIAL ACCOUNTS AND TRUST

The social accounts literature generally assumes that when one party violates the expectations of another party in, for example, an ultimatum game (e.g., making an unfair offer to the recipient), the way the transgressor addresses the unethical behavior or decision will impact on the trustworthiness of the relationship between both parties (Bies, 1987; Kim, Ferrin, Cooper, & Dirks, 2004; Schweitzer, Hershey, & Bradlow, 2006). Trust can be defined as the “willingness to accept vulnerability based upon positive expectations about another's behavior” (Rousseau, Sitkin, Burt, & Camerer, 1998). Thus, after an unfair decision has been made, recipients of this unfair offer will likely feel more vulnerable and consequently display less trust towards the unethical decision-maker. The transgressor therefore has to account for the decision he/she made and can do this in a variety of ways such as showing remorse, explaining why such an offer was made, or even blaming another party (Scher & Darley, 1997; Schlenker, 1980).

However, as our above definition suggests, trust implies that one considers the other party to be of goodwill and as such that one can have positive expectations about what this other party will decide. For that reason, we argue that it is important that the decision-maker who behaved unethically clearly acknowledges responsibility and promises that future decisions will be different. This action of taking responsibility is captured in what is referred to as an apology (Goffman, 1971; Ohbuchi, Kameda, & Agarie, 1989; Schlenker, 1980), as done by Enron CEO Kenneth Lay, when he

apologized by noting that: "I take responsibility for what happened at Enron, both good and bad." Alternatively, not taking up responsibility is often reflected in the act of denial, as illustrated by the words of Richard Nixon, "I am not a crook." By taking up responsibility the transgressor thus signals goodwill towards the victim of the unethical decision, but this can further be reinforced by making a promise that future decisions will be done otherwise. Indeed, promises have been found to facilitate cooperation (Schweitzer et al., 2006) as it signals positive expectations about future acts and decisions. Thus, taking up responsibility and promising a change in behavior and decisions is believed to communicate good intentions on behalf of the transgressor; processes that should lead to higher perceptions of trustworthiness (Ho & Weigelt, 2002). Interestingly, this assumption is also in line with the meta-analytic findings of Shaw, Wild, and Colquitt (2003) showing that addressing an injustice by delivering an excuse is more beneficial than simply trying to justify it.

In the present research, we will thus focus on the social accounts of apology and denial. Apologies will be operationalized by means of accepting responsibility and a promise, whereas a denial will include no acceptance of responsibility and no mention of a promise towards future decisions. Prior research has revealed that apologies can be more effective in maintaining trust, particularly when clear evidence concerning the violation is available (i.e., such as receiving an unfair offer; see also Kim et al., 2004, Experiment 2). The reason for this is that by apologizing, the offender may not only communicate that his/her behavior was unacceptable but also that he/she intends to avoid similar violations in future interactions (Dirks, Kim, Cooper, & Ferrin, 2007). In contrast, a denial of an objectively unfair act does not communicate that the offender thinks his/her unfair behavior is unacceptable and thus does not signal the intention to improve his/her unfair behavior. Because the literature on attributions suggests that in order to elicit positive integrity attributions, offenders need to show willingness and put effort into restoring trust (i.e., to provide evidence of goodwill, cf. Skowronski & Carlston, 1992), it thus follows that a denial is more likely to impact negatively on interpersonal trust than an apology. Moreover, in line with the findings of Kim and colleagues (2004), this effect is most likely to emerge in the context of violations of fairness (as the present research examines).

EFFECTIVENESS OF APOLOGIES VERSUS DENIALS:

THE ROLE OF UNCERTAINTY ABOUT THE TRANSGRESSOR'S INTENTIONS

It should be noted, however, that the literature is quite inconsistent in demonstrating the effectiveness of apologies relative to denials, as some studies find positive effects of apologies (Lewicki & Bunker, 1996; Ohbuchi et al., 1989) whereas others do not (Schlenker, 1980; Riordan, Marlin, & Kellogg, 1983; Sigal, Hsu, Foodim, & Betman, 1988). One reason, we believe, is that prior studies looking at the provision of explanations (i.e., social accounts) for unfavorable events have treated the victim as a passive actor (e.g., Frantz & Bennis, 2005; Kim et al., 2004; Scher & Darley, 1997). Thus, research only looked at how the party responsible for the offense plays an active role in the possible influence apologies relative to denials

may exert, whereas hardly any attention has been devoted to the active role that the victim plays in it.

One exception is the study by Skarlicki, Folger, and Gee (2004), who examined the effects of apologies in the context of an UG. Their results showed that how sincere the recipient perceives the apology to be affects the effectiveness of an apology on behavior in an UG. In the present paper, we build on this finding by investigating the effect of uncertainty about the intentions of the transgressor. Based on the Skarlicki et al. (2004) findings one could argue that in UG settings recipients are most likely to be affected by social accounts when they consider the social account to be informative of the intentions of the allocator (i.e., whether he/she acknowledges to have acted unfair and promises to change in the future or not). We argue that after the unfavorable event of receiving an unfair offer, recipients may desire additional information the most when they are uncertain about what the intentions of the allocating party are. Sometimes the intentions of the opponent may become immediately clear to the recipient. For example, when someone has an opportunity to divide \$10 with you, and offers you only \$2, you may immediately conclude that your opponent is out to benefit him/herself at your expense and that he/she is not likely to do otherwise in the future. In such situation recipients will perceive the allocator as having bad intentions, meaning that one is less willing to perceive the allocator as trustworthy and to accept his/her offer (e.g., Camerer & Thaler, 1995; Güth & Tietz, 1990; Handgraaf et al., 2003; Thaler, 1988; van Dijk & Tenbrunsel, 2005).

Importantly, however, in UG it may not always be that easy to make such a definite and strong inference about the other's intention. As others before us have argued, UG situations are often characterized by information asymmetry, i.e., bargainers are often only partly informed about the preferences of their bargaining opponents (e.g., Loewenstein & Moore, 2004; Roth & Murnighan, 1982). As a consequence, it may not always be possible to infer the true intentions of one's bargaining opponent with certainty from an objectively unfair offer. That is, even if one would be convinced that one is offered a bad deal, there is a possibility that the allocator was not aware that it would in fact be a bad deal. That is, if the allocator does not know with certainty the consequences of the offer for the recipient then he or she may in fact have unintentionally offered a bad deal and thus should not be regarded as an unethical decision-maker.

To illustrate this point, it is useful to return to the example of the UG and briefly discuss how asymmetric information may affect inferences about intentions in this setting. Consider the situation where two bargainers have to allocate 100 chips that *could* be worth more to the recipient than to the allocator (cf. Kagel, Kim, & Moser, 1996; van Dijk & Vermunt, 2000). In this case, it would be fair and considered normative that the allocator gives more resources to him or herself than to the recipient. However, if the recipient is informed before the offer is made that the chips will be equally valuable to both the allocator and the recipient then such an offer is considered as unfair and potentially disruptive of the relationship. Then, the inference whether the allocator has bad intentions or not will depend on how certain one feels with respect to whether this allocator knew the information about

the value of the chips or not. That is, suppose that you are offered a deal that you consider as unfair; e.g., the allocator offers you forty chips and allocates sixty chips to him- or herself while you know the chips are of equal value to the both of you. If you are certain that the allocator knew that the value of the chips would be the same for both parties then the offer could be considered as an intentionally unfair one (because the allocator then would intentionally allocate him/herself more money). But if you are uncertain whether the allocator knew that the chips would be of equal value then the unfair offer may have been made unintentionally.

Asymmetric information in bargaining may thus evoke uncertainty about the intentions of one's bargaining opponent. It is under these conditions, we argue, that people may have the greatest desire for social accounts explaining the existing situation of an unfair offer. Because people consider uncertainty to be an aversive state that may even block the ability to make decisions (Curley, Yates, & Abrams, 1986, Kuhn, 1997; Lopes, 1987; McGregor, 2003), they will be motivated to reduce any kind of uncertainty that they encounter. Indeed, one of people's main motives is to control their environment and this includes understanding what happens and being able to control subsequent events (Fiske, 2004). As such, uncertainty is something that people aim to reduce.

In this respect, uncertainty about the private information available to one's opponent may turn the UG situation into a weak situation in which there are few cues that can be used to infer what the other party knows or does not know (Snyder & Ickes, 1985). Therefore, such a weak situation motivates the search for additional information to gain, at least, a better insight in what happened. Indeed, prior research on the uncertainty management model (van den Bos & Lind, 2002) has shown that uncertainty activates sense-making processes by relying on social information that can give insights into why unfairness emerged in the first place. Because social accounts may help to provide such insights, it may therefore be expected that recipients' desire for social accounts should be highest under conditions of uncertainty about what the allocating party did or did not know. Furthermore, when there is no uncertainty about whether the party making the unfair offer knew the exact value of each resource or not then the desire for a social account will be less strong as it may not substantially add to one's understanding of the intentions of the allocating party (i.e., it is clear why the unfair offer was made). As such, this prediction can be seen as extending the Shaw and colleagues' (2003) finding that explanations for injustices not only matter in contexts with instrumental, relational and moral implications, but also in settings where it helps to reduce uncertainty.

WHEN SOCIAL ACCOUNTS AFFECT RESPONSES

Does the strong desire for an explanation accounting for the unfair offer under uncertainty also imply that the social accounts (apology vs. denial) will have the strongest influence on the responses of the recipient when uncertainty about the intentions of the allocating party is high (based on whether the allocating party does not know the value of the chips to be allocated)? In the present paper, we advocate the idea that if social information accounting for the unfair offer is desired the most under

one specific circumstance (i.e., uncertainty about whether the allocator does not know the value of the chips and thus the intentions of this allocator) then it should follow that the *actual* delivery of an apology versus a denial should also impact the most on people's responses when that specific circumstance is salient (i.e., when the intentions of the other party are unknown).

What does our operationalization of an apology vs. a denial indicate in an UG? In the context of an UG, the provision of an *apology* signals that the offending party (i.e., the person making the unfavorable offer) acknowledges responsibility for being unfair and promises to act differently in the future. Under this condition, the recipient may be inclined to give the violator the benefit of the doubt and be willing to cooperate by accepting his or her offer (cf. Gibson, Bottom, & Murnighan, 1999; Schweitzer et al., 2006). In contrast, if the offender would *deny* responsibility for the unfair offer and does not suggest any change in the future, then it becomes difficult for the recipient to give the offender the benefit of the doubt. As a result, the recipient will still feel vulnerable and doubtful about the intentions of the allocator. As a result, when a denial is given, victims should thus be less willing to display trust and accept the offer than when an apology is offered (see also Bottom, Daniels, Gibson, & Murnighan, 2002, for evidence that in interdependent situations denials prevent the re-establishment of cooperation).

THE PRESENT RESEARCH

To summarize so far, we first of all predict that recipients in an UG will have a stronger desire for social information addressing the objectively unfair offer when it is uncertain what the intentions of the allocating party are (*Hypothesis 1*). Further, with respect to the effects when actual social accounts are given, we predict that if evidence is available that an objectively unfair offer is given (i.e., the equality-rule is violated. Remember that fairness here is defined by the equality-rule when inputs are equal), denials will reveal lower levels of trust and cooperativeness (i.e., acceptance of the offer) than an apology (*Hypothesis 2*).

However, we expect that this social account effect will be moderated by the extent to which the violated party is uncertain about the intentions of the offender (*Hypothesis 3*).

More precisely, in case of Hypothesis 3, we expect that under situations of uncertainty about the other's intentions, the predicted impact of an apology vs. a denial on the recipients' actual responses (i.e., trust judgments and trust intentions such as accepting the offer) will emerge. In contrast, when there is no uncertainty about what the party making the offer did or did not know then the provision of an apology vs. a denial will be less likely to impact on recipients' responses. If it is certain that the other party did know the consequences of the unfavorable offer then recipients may not require additional information to come to the conclusion that they were intentionally treated badly and can thus expect the same behavior again. Thus, the provision of an apology vs. a denial will not reveal a differential effect as bad intentions are clear and additional social information is not needed to reduce uncertainty about intentions. In a similar vein, if it is certain that the other

party did not know the exact value of the resources to be distributed then social accounts may also add little to the inferential process because then it is clear that the other may not be held accountable and that chances are high that future decisions will be better. Again, the provision of an apology vs. a denial will not reveal a differential effect because no uncertainty needs to be reduced by means of additional social information.

Hypothesis 1 will be examined in Experiment 1 and Hypotheses 2 and 3 will be examined in Experiment 2.

EXPERIMENT 1

To test our ideas regarding the relation between informational uncertainty and the need for social information in bargaining, we conducted an experimental lab study on ultimatum bargaining (Güth et al. 1982). Participants learned that they and their opponent could divide 100 chips. The opponent could make an offer of how to distribute the 100 chips. The participant could then react to the offer. If the participant would accept the offer, the chips would be distributed accordingly. If the participant would reject, both the participant and their opponent would end up with zero outcomes. Before the offer was made, participants were informed that the chips to be divided could be worth more to the recipient than to the allocator or that the value could be equal to both parties. Participants then found out that the chips had an equal value, and subsequently learned that the opponent only offered them 40 of the available 100 chips. In addition, it was manipulated whether participants were certain that the allocator either knew or did not know the exact financial value of the resources before making the offer or whether the opponent was uncertain about the information that the allocator received about the financial value before making the offer.

As stated in Hypothesis 1, it was expected that if recipients were uncertain about the information that the other party holds regarding the value of the resources to be distributed then they would desire a social account from the other party accounting for his or her decision. In contrast, when it was certain whether the allocating party possessed information about the exact value of the resources then the desire for such accounting information would be lower.

Method

Participants and Design

One hundred twenty-five undergraduate students (ninety-three women and thirty-two men, average age = 19.57 years, $SD = 1.74$) participated voluntarily in exchange for course credits. They were randomly assigned to the experimental condition of Other's Knowledge. This experimental condition manipulated three conditions of certainty, that is, a condition in which it was certain that the other knew the exact value of the resources to be divided (i.e., other knows), a condition in which it was certain that the other did not know the exact value (i.e., other does not know), and a condition in which it was uncertain whether the other knew the exact value of the resources (i.e., uncertainty).

Experimental Procedure

Participants arrived at the laboratory and were seated in separate experimental cubicles. They were not able to see one another and each participant's cubicle contained a computer, a table, and a chair. All instructions were given via the computer. At the start of the instructions, participants were informed that they would take part in a negotiation with another person who was also present in the laboratory.

Then, the negotiation situation was explained in greater detail. It was said that 100 chips had to be divided between themselves and the other person. Each chip was worth a specific financial value that still had to be determined and that would be paid out to participants depending on the division. More precisely, it could be that each chip was worth ten Eurocents for both the participant and the other person (i.e., a fair offer would then be a fifty–fifty split). On the other hand, it could also be the case that each chip was worth fifteen Eurocents for the participant and only ten Eurocents for the other person (i.e., a fair offer would then be a sixty–forty split). Then, it was communicated that for this study the chips would be of equal worth to both the participant and the other person (i.e., ten Eurocents). Thereafter, it was made clear to participants that it was decided randomly that the other person would be the one making the offer and that the participant would be the recipient. It was further explained that if the recipient would accept the offer then the allocation of the 100 chips would be as offered. However, if the recipient would not accept the offer, both the recipient and the allocator would get nothing. Then, participants responded to a series of questions assessing whether they accurately understood the game situation that was presented. In case participants answered incorrectly to these questions the correct answer was provided and the question was asked again.

After this, the Uncertainty manipulation was introduced. Participants were first told that the other person was asked to make an offer. It was also said that the value of the chips that had to be allocated could be worth either ten Eurocents for each or ten Eurocents for the allocator and fifteen Eurocents for the recipient. It was then communicated that the experimenter decided that the value would be ten Eurocents for both the participant and the other. Meanwhile, the allocator made the offer and as such it was not clear yet whether this person knew the exact value or not when he or she made the offer. Subsequently, participants received an email from the experimenter informing them whether the allocator made the offer without knowing the exact financial value of the resources or not. It was emphasized that the other person did not know that the experimenter communicated this information.

In the *other knows* condition participants read, “The other person (who made you an offer) definitely knows the exact value of the chips.” In the *other does not know* condition participants read, “The other person (who made you an offer) definitely does not know the exact value of the chips.” In the *uncertainty* condition participants read, “It may be possible that the other person (who made you an offer) found out about the exact value of the chips before making the offer, but on the other hand he may not have found out. We will try to find out as quickly as possible.”

After this information was given, participants received the offer of the other person. The email mentioned that the other person had decided to allocate sixty chips to himself and forty chips to the recipient. (Note that sixty–forty would be a fair

offer if the value of the chips for the recipient would be fifteen Eurocents and ten Eurocents for the one making the offer. However, because the exact value was ten Eurocents for each, this offer was unfair, as it violated the equality-rule (Messick, 1993; van Dijk, De Cremer, & Handgraaf, 2004).

Then, the dependent measures of Experiment 1 were solicited. All items were responded to on a 7-point scale (1 = *not at all*, 7 = *very much so*). To check for the effectiveness of the Uncertainty manipulation, participants were asked to what extent they felt uncertain whether the other knew the exact value of the chips. After the offer was presented, participants were asked how fair they evaluated the offer to be (1 = very unfair, 7 = very fair). Then, participants' desire for social information was assessed by means of three items. They were asked to what extent they wanted to "ask an explanation from the other," "ask the other to provide information about his situation," and "know whether the other knew the exact value." These items were combined to form one composite score (Cronbach's $\alpha = .85$). Finally, the experiment was stopped and participants were debriefed, thanked and dismissed.

Results

Manipulation Check

A one-way ANOVA on the uncertainty manipulation check score revealed a significant main effect of Other's Knowledge, $F(2, 122) = 22.37, p < .001, \eta^2 = .26$. Planned comparisons showed that participants in the *uncertainty condition* agreed significantly more with this statement than those in the *other does not know condition* ($M_s = 4.19$ vs. $3.42, SD_s = 1.63$ and 1.96 , respectively; $t = -1.96, p = .05$) and those in the *other knows condition* ($M = 1.80, SD = 1.19, t = -7.48, p < .001$). Also a significant difference was found between the *other does not know condition* and the *other knows condition* ($t = -4.46, p < .001$). Thus, our uncertainty manipulation successfully distinguished the three levels of uncertainty.

A one-way ANOVA on how fairly the offer was perceived revealed no significant effect, Other's Knowledge, $F(1, 122) < 1, p < .57, \eta^2 = .00$. Further, the average score ($M = 3.55$) pointed out that the offer was evaluated as significantly less fair than the midpoint of the scale ($t = -3.60, p < .001$). Thus, as expected, participants also perceived the sixty–forty offer as an unfair decision.

Desire for Social Information

A one-way ANOVA revealed a significant effect of Other's Knowledge, $F(2, 122) = 3.58, p < .05, \eta^2 = .06$. Planned comparisons, first of all, showed that participants in the *other knows condition* did not differ from those in the *other does not know condition* in wanting to receive an explanation from the allocator concerning his or her offer ($M_s = 3.77$ vs. $3.66, SD_s = 1.27$ and 1.68 ; respectively; $t = .33, p = .74$). Further, in line with Hypothesis 1, participants in the *uncertainty condition* ($M = 4.42, SD = 1.23$) expressed a stronger desire to receive social information relative to those participants in the *other knows condition* ($t = -2.34, p < .05$) and the *other does not know condition* ($t = -2.38, p < .05$). These analyses thus show that when it was uncertain whether the allocator knew the exact value of the chips to be allocated then more social information was desired by the recipients.

Discussion

As expected, the results of Experiment 1 showed that information about an unfavorable offer was more desired when participants were uncertain whether the allocator possessed accurate knowledge about the financial value of the chips. Participants were less interested in receiving an explanation when they were certain that the allocator knew the financial value or when they were certain that allocator did not know this value. These findings therefore can be seen as supportive of our idea that under conditions of uncertainty about what the transgressor knew (relative to the certainty conditions) social information is needed to make assumptions about the intentions of the other party.

In study 2, we wanted to extend the findings of study 1 by testing whether the stronger desire for social information addressing an unfair offer would also imply that specific social information such as an apology versus a denial would influence recipients' decisions and inferences under conditions of uncertainty about the transgressor's knowledge. Moreover, would this also imply that under conditions of certainty such social accounts would be discounted more and thus reveal less influence on the responses of the recipient? Therefore, in Experiment 2 we manipulated the actual provision of a social account by having the allocator apologize (i.e., assume responsibility for the offer and promise to do better next time) or deny responsibility for the offer and not making a promise at all.

EXPERIMENT 2

The social account manipulation for Experiment 2—the provision of an apology vs. a denial—was based on prior research in the area of trust repair (Kim et al., 2004). More precisely, in the apology condition, the allocator apologized for the unfavorable offer (thus expressing that he had the intention to be unfair) and promised to do better next time (see also Schweitzer et al., 2006). In the denial condition, the allocator denied that he had the intention to be unfair and thus rejected any responsibility regarding the unfair offer and made no promise for the future. As outlined in our introduction, we expect that denials after an unfair offer would impact less positively on people's responses than an apology that could mitigate the unfair action a bit. Further, based on the above, we expected that this effect of a social account would reveal a significant effect in the uncertainty condition but not in both certainty conditions.

Because social accounts have been examined in the context of trust and particularly trust repair (see, e.g., Kim et al., 2004; Kim, Dirks, Cooper, & Ferrin, 2006), we focused on trust as our dependent measure. We assessed trust by means of judgments. Judgments include asking people how trustworthy and respectable they perceive the other party to be and are measures commonly used in the psychological tradition of trust (Lewicki, Tomlinson, & Gillespie, 2006; Mayer, Davis, & Schoorman, 1995).

Taken together, our prediction was thus that in the uncertainty condition the allocating party would be perceived as less trustworthy when a denial relative to an

apology was communicated. In both certainty conditions, no effect of the social account manipulation (apology vs. denial) was expected on both trust indications.

Method

Participants and Design

One hundred and thirty undergraduate students (108 women and twenty-two men, average age = 19.24 years, $SD = 3.24$) participated voluntarily in exchange for course credits. They were randomly assigned to a 2 (Social account: Apology vs. denial) \times 3 (Other's Knowledge: Other knows, Other does not know, Uncertainty) between-subjects factorial design.

Experimental Procedure

Participants arrived at the laboratory and were seated in separate experimental cubicles. They were not able to see one another and each participant's cubicle contained a computer, a table, and a chair. All instructions were given via the computer. At the start of the instructions, participants were informed that they would take part in a negotiation with another person who was also present in the laboratory.

Then, the negotiation situation was explained in greater detail. As in Experiment 1, it was said that 100 chips had to be divided between themselves and the other person and that the financial value would be paid out to the participants. The manipulation of Uncertainty was exactly the same as in Experiment 1. Also, following the same procedures as in Experiment 1, the offer made by the other person was presented on the computer screen. The offer was again sixty to the other person and forty to self.

After this information was given, the social account manipulation was introduced. It was explained to participants that when the other person had made his or her offer, this person was informed that the recipient of his/her offer (i.e., the participant) knew that each chip was worth ten Eurocents for both parties. It was also made clear to participants that the person making the offer was not aware whether the recipient (i.e., the participant in this study) knew whether the allocating party did know, did definitely not know, or was uncertain about the exact financial value of the chips when he/she made the offer. Then, it was mentioned to participants that the person who made the offer was asked to think about the offer that he/she made and what kind of explanation he/she wanted to communicate to the recipient (i.e., the participant in this study). As a response to this question, the person making the offer wrote a brief email that now was sent to the participant. Then, participants received the message. Both social account conditions were based on the manipulation of Kim et al. (2004). In the *apology* condition, participants read: "I'm sorry about the offer that I just made. I will try to do better next time." In the *denial* condition, participants read: "I do not feel responsible for the offer that I made and its possible consequences. I deny bad intentions from my side."

Then, the dependent measures of Experiment 2 were solicited. All items were responded to on a 7-point scale (1 = *not at all*, 7 = *very much so*). To check for the effectiveness of the Uncertainty manipulation, participants were asked the following questions. More precisely, they were asked to what extent they felt "uncertain

whether the other knew the exact value of the chips.” Then, participants were asked to what extent the other did “know the exact value of the chips,” and “definitely not know the exact value of the chips (reversed-scored).” These two items were combined to form a certainty score ($r = .64, p < .001$). As in Experiment 1, participants were asked how fair they evaluated the offer to be (1 = *very unfair*, 7 = *very fair*). To check for the effectiveness of the social account manipulation, participants were asked to what extent the other party “apologized” and “denied responsibility” for the offer. Thereafter, trust was assessed by measuring participants’ perceptions of the other’s trustworthiness: To what extent do you consider your negotiation partner to be a “respectable” and “trustworthy” person ($r = .62, p < .001$). Finally, participants were debriefed, thanked and dismissed.

Results

Manipulation Checks

A 2 x 3 ANOVA on the certainty score revealed only a significant main effect of Other’s Knowledge, $F(2, 124) = 132.70, p < .001, \eta^2 = .68$. Planned comparisons showed that participants in the *other knows condition* were much more certain about the value of the chips than those in *other does not know condition* ($M_s = 6.45$ vs. $2.18, SD_s = 0.97$ and 1.34 , respectively; $t = 17.31, p < .001$) and those in the *uncertainty condition* ($M = 3.74, SD = 1.39, t = 10.43, p < .001$). Also a significant difference was found between the *other does not know condition* and the *uncertainty condition* ($t = -5.49, p < .001$).

A 2 x 3 ANOVA on the question how uncertain one felt about whether the other knew the exact value of the chips revealed only a significant main effect of Other’s Knowledge, $F(2, 124) = 9.66, p < .001, \eta^2 = .14$. Planned comparisons showed that participants in the *uncertainty condition* agreed significantly more with this statement than those in *other does not know condition* ($M_s = 3.67$ vs. $2.51, SD_s = 1.61$ and 1.84 , respectively; $t = -2.81, p < .01$) and those in the *other knows condition* ($M = 1.96, SD = 1.61, t = -4.54, p < .001$). No significant difference was found between the *other does not know condition* and the *other knows condition* ($t = -1.47, p < .15$).

A 2 x 3 ANOVA on the question whether the other party apologized for the offer revealed only a significant main effect of Social account, $F(1, 124) = 235.23, p < .001, \eta^2 = .66$, showing that participants in the apology condition considered the

Table 1: Means and Standard Deviations of Participants’ Ratings of Trustworthiness as a Function of Other’s Knowledge and Social Account

Social Account	Other’s Knowledge					
	Uncertain		Other knows		Other does not know	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Trustworthiness						
Apology	4.60	1.17	4.34	1.19	4.25	1.18
Denial	3.44	1.23	3.72	1.12	4.39	1.52

Note. Means are on 7-point scales, with higher values indicating higher ratings of trustworthiness.

other party as more apologizing than those in the denial condition ($M_s = 6.26$ vs. 2.21 ; $SD_s = 1.06$ and 1.83 ; respectively).

A 2×3 ANOVA on the question whether the other party denied responsibility for the offer revealed only a significant main effect of Social account, $F(1, 124) = 30.81, p < .001, \eta^2 = .20$, showing that participants in the denial condition considered the other party to deny responsibility more than those in the apology condition ($M_s = 5.16$ vs. 3.17 ; $SD_s = 1.97$ and 2.05 ; respectively). All in all, these findings show that our manipulations were very successful.

A 2×3 ANOVA on how fairly the offer was perceived revealed no significant effects: Social account, $F(1, 124) = 6.10, p < .66, \eta^2 = .00$; Other's Knowledge, $F(1, 124) < 1, p < .71, \eta^2 = .00$, and Interaction, $F(1, 124) = 2.13, p < .13, \eta^2 = .03$. Further, the average score ($M = 3.53$) pointed out that the offer was evaluated as significantly less fair than the midpoint of the scale ($t = -3.93, p < .001$). Thus, as expected, participants also perceived the sixty–forty offer as an unfair decision.

Trust Responses

A 2×3 ANOVA on the average trustworthiness perception score revealed a significant main effect of Social account, $F(1, 124) = 6.10, p < .05, \eta^2 = .05$, thereby supporting Hypothesis 2. That is, participants evaluated the other as less trustworthy when a denial relative to an apology was given ($M_s = 3.85$ vs. 4.40 ; $SD_s = 1.35$ and 1.17 ; respectively). Also, a significant interaction between Social account and Other's Knowledge emerged, $F(2, 124) = 2.92, p = .05, \eta^2 = .05$ (see Table 1 for the means and standard deviations and Figure 1 for a visual representation).

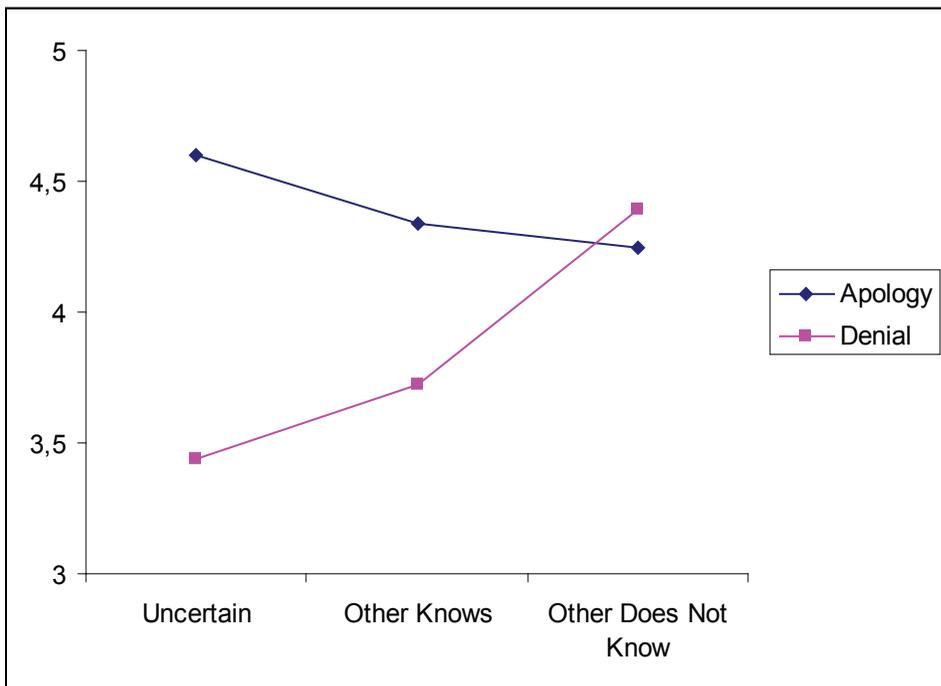


Figure 1. Participants' Ratings of Trustworthiness as a Function of Other's Knowledge and Social Account (Higher Values represent Higher Trust)

To analyze further the interaction we conducted several planned comparisons. Planned comparisons testing the effect of the social account manipulation within each condition of the Other's Knowledge manipulation showed that, as expected by Hypothesis 3, social accounts had a significant effect within the *uncertainty condition* ($t = 3.05, p < .005$), but not within the *other knows condition* ($t = 1.75, p = .09$), and the *other does not know condition* ($t = -.34, p < .74$). Thus, a denial revealed lower trust than an apology, but this was only true within the uncertainty condition.

Further analyses testing the effect of each social account across the uncertainty conditions showed that with respect to the effect of a denial no significant difference was found between the *other knows condition* and the *other does not know condition* ($t = -1.65, p < .11$). Also, no significant difference was found between the *other knows condition* and the *uncertainty condition* ($t = .75, p < .46$). Finally, a significant difference was found between the *other does not know condition* and the *uncertainty condition* ($t = 2.10, p < .05$). These findings indicate that particularly in the uncertainty condition a denial revealed low levels of trust.

With respect to the effect of an apology no significant differences were found between the *other knows condition* and the *other does not know condition* ($t = .25, p < .81$), between the *other knows condition* and the *uncertainty condition* ($t = -.75, p < .46$), and between the *other does not know condition* and the *uncertainty condition* ($t = -1.01, p < .32$). We will discuss this issue in the general discussion.

GENERAL DISCUSSION

Across two experimental studies several important findings emerged addressing the questions when a social account is desired the most and when it will exert the most influence on the other's party responses. The first important finding is that, in Experiment 1, recipients expressed a stronger desire to receive social information that could address the unfair offer when they were uncertain whether the allocating party knew the exact value of the resources that had to be divided. When it was certain that the allocating party knew the exact value or did definitely not know the exact value of these resources, then the desire for such social information was significantly less. Elaborating on this finding in Experiment 2, we manipulated the provision of a social account (i.e., apology vs. denial). Results showed that social accounts had an impact on recipients' trust judgments in such a way that the provision of a denial led to lower judgments of trustworthiness relative to when an apology was offered. However, this effect only emerged under circumstances where the recipient was uncertain whether the allocating party knew the exact financial value of the units or not. Again, when it was certain that this party knew or did not know the specific value, then social accounts did not affect recipients' trust judgments.

These findings suggest that in bargaining situations social accounts only lead to significant effects if sense has to be made of the intentions of the allocating party. In bargaining situations, uncertainty about the intentions of the allocating party is a situation that is preferably avoided (cf. Kuhn, 1997; Lopes, 1987), and recipients may therefore search for additional information on which they base their inferences and subsequently their own decisions on (cf. van den Bos & Lind, 2002). One such

type of information is how the allocating party explains and accounts for the unfair offer. Our results show that in the case of such an uncertain situation, a denial more negatively impacts on people's trust reactions than the provision of an apology.

From the perspective of business ethics research, our results are important because they highlight that it is important to understand better how people react to unethical failures and what kind of information they desire when ethical transgressions emerge. Further, these results also emphasize the need for ethical transgressors to focus more on the aftermath of an ethical failure. Specifically, it stresses the value for transgressors to zoom in on how to account best for an ethical failure. The results are also important for more specific reasons. First of all, the present results provide insights that may explain why prior research has illustrated that the provision of social accounts such as apologies and denials reveal inconsistent effects and that therefore a need exists to identify boundary conditions of social accounts (cf. Kellerman, 2006). Indeed, we argued and demonstrated that, first of all, it is not always the case that recipients of unfair offers desire the provision of an explanation accounting for the transgression. When certainty exists about the intentions of the allocator acknowledging or denying responsibility will make no difference. Moreover, building on this observation we also demonstrated that it is exactly under the conditions where people desire social accounts most strongly that social accounts impact the most on people's trust reactions. Thus, our findings emphasize the importance of looking at conditions that influence when people desire, and respond the most to, social accounts.

Second, in a related manner, the studies contribute to the literature because they focused on the perspective of the recipient. Only few studies have focused on identifying conditions under which social accounts impact on people's responses (De Cremer & Schouten, 2008; Frantz & Bennis, 2005; Kim et al., 2004; Scher & Darley, 1997). Most of these studies have been limited in scope because they did not consider the role that the recipient plays in testing the impact of a social account (for an exception see Skarlicki et al., 2004). Therefore, an important contribution of our present research lies exactly in including the perspective of the recipient. Because the social account that a transgressor communicates is directed towards the other party, it is important to take into account how this other party (i.e., the offended party) evaluates and perceives the transgression (i.e., the unfair offer in the present study). As we have shown, knowing when an explanation is desired the most helps in understanding when social accounts will have an impact on people's trust reactions.

Third, only a relatively small number of experimental studies have employed mixed-motive situations to examine the effectiveness of social accounts (e.g., Gibson et al., 1999; Schweitzer et al., 2006; Bottom et al., 2002). Until now, most of these studies (including our own study) show that denials reveal more negative effects than apologies do. This effect follows the findings of Kim and colleagues (2004) who showed that once objective evidence of the transgression is available then acknowledging responsibility (i.e., an apology) will produce better effects than not doing this (i.e., a denial). In our present studies, the offer was clearly unfair (see also participants' fairness perceptions) and under such circumstances it was indeed

shown that a denial evoked lower trust reactions than the communication of an apology. However, as mentioned earlier, our findings go beyond demonstrating this effect by showing that the impact of these social accounts is dependent on a variable that is highly relevant in negotiations, that is, uncertainty about the knowledge that the allocating party possesses.

On a related note, our planned comparisons in Experiment 2 also revealed some more interesting findings. That is, the effect of apologies did not differ significantly across the other's knowledge conditions (other knows the value, other does not know the value, or is uncertain about the value), whereas the effect of a denial in the uncertainty condition was significantly different (i.e., revealing lower trust reactions) from its effect in the two certainty conditions. These findings thus provide additional evidence that in the case of a clear and objectively unfair allocation (i.e., the equality rule is violated) a denial seems to make things even worse as no responsibility is acknowledged and no sense of the unfair offer can be made, whereas acknowledging responsibility by means of an apology appears to mitigate the violating act.

Our results have also practical implications. Specifically, they show that when managing ethical failures it is necessary to identify what is known about the motives of the transgressor. If the victims of the ethical failure are ambiguous about the motives of the transgressor then an apology appears to be very useful in mitigating potential conflicts. However, if sufficient information is available to infer the intention of the transgressor then social accounts are not useful in softening the resulting conflict. One way to try to restore trust in those circumstances may then be to repay the financial inequality that was introduced by the unfair allocation. These suggestions make thus clear that in mediating or managing unethical failures resulting in lowered trust it is necessary to evaluate the perspective of the victim in greater detail.

Before closing, we mention some potential limitations. A first potential limitation is that our experimental design does not allow us to conclude whether our predicted effects were found because people appreciated the apology or because they got upset when being presented with a denial. To explore this question in a more elaborate manner, future research could include a control condition (no apology and no denial). Including such a control condition could give us further insights into the concrete effects of our social account manipulation on people's trust responses, particularly when one is uncertain about the intentions of the allocating party.

On a related note, one could also argue that our manipulations of apology and denial did not reveal much information about the initial intentions of the transgressor. In our introduction, we noted that trust can be restored (at least to a certain degree) if the transgressor clearly articulates intentions of goodwill. We reasoned that this can be done by acknowledging responsibility for the unfair decision and making a promise that future decisions will be different. This information was included in our operationalization of the apology. Of course, this does not reveal what the intentions of the transgressor were in making an unfair division. As such, in the present paper, intentions of the transgressor clearly referred to future intentions and less so to initial intentions. More research is needed to examine whether social

accounts including information relevant to the initial intentions of a transgressor would reveal the same results.

Another potential limitation is that we only addressed the effects of two social accounts: apologies and denials. Granted, these two types have received the most attention to date, but it still remains to be tested whether the present findings generalize to the effects of other social accounts. One possible other social account that can be considered as relevant to study in bargaining situations is reticence (see Ferrin, Kim, Cooper, & Dirks, 2007). For example, in politics parties negotiating also often refuse to say anything and simply respond with a “no comment.” In ultimatum bargaining, reticence may communicate different things. That is, recipients may use the heuristic that if they say nothing they communicate that they agree with the offer of the allocator. Alternatively, saying nothing may also increase further ambiguity surrounding an unfair offer. Future research is needed to examine these kinds of predictions.

A final potential limitation involves the use of our single simple measure of trust. Although judgments of trust (as the one we used in our research) are often used in trust research, future research would be advised to also include behavioral measures of trust. In line with the behavioral tradition of trust research, behavioral measures of trust can take the form of measures of cooperation as they reflect people’s willingness to be vulnerable to the decisions of another party; thus communicating trust in the other party (cf. Rousseau et al., 1998). Other behavioral measures of trust may also include, for example, giving the victim of the trust violation a choice to communicate information that can put him/her at risk (for being exploited).

To conclude, the present research is the first (at least to our knowledge) to systematically examine under which conditions social accounts are desired and when they impact the most on people’s trust reactions. In doing this, we advocated the strategy to consider the active role that the recipient plays in this process. Our results indeed showed that how certain versus uncertain the recipient is concerning the knowledge that the allocating party has about the financial value of the units to be distributed affects the impact of social accounts on trust judgments and behavioral intentions. Building on these findings, it is our hope that future business and behavioral ethics research will, first of all, pay more attention to the question of how to deal with things when they have gone wrong (i.e., when unethical decisions are made) and what the antecedents are that make one’s efforts to account for the unethical decision more effective. Our world is a complex place and managers within organizations have to make decisions relatively quickly thereby increasing chances for unethical behavior to emerge. In order to make sure that such ethical violations do not spoil the ethical climate of an organization immediately we need to understand better how unethical violations can be managed in effective and restoring ways.

REFERENCES

- Bies, R. J. 1987. The predicament of injustice: The management of moral outrage. *Research in Organizational Behavior*, 9: 289–319.
- Bottom, W., Daniels, S., Gibson, K. S., & Murnighan, J. K. 2002. When talk is not cheap: Substantive penance and expressions of intent in rebuilding cooperation. *Organization Science*, 13: 497–513.
- Buchanan, A. 1997. Health-care delivery and resource allocation. In R. M. Veatch (Ed.), *Medical ethics*: 321–62. Sudbury, MA: Jones & Bartlett Publishers.
- Camerer, C., & Thaler, R. H. 1995. Anomalies: Ultimatums, dictators and manners. *Journal of Economic Perspectives*, 9: 109–220.
- Curley, S. P., Yates, J. F., & Abrams, R. A. 1986. Psychological sources of ambiguity avoidance. *Organizational Behavior and Human Decision Processes*, 38: 230–56.
- De Cremer, D., & Schouten, B. 2008. When apologies for injustice matter: The role of respect. *The European Psychologist*, 13: 239–47.
- Dirks, K. T., Kim, P. H., Cooper, C. D., & Ferrin, D. L. 2007. *Understanding the effects of substantive responses on trust following transgression*. Unpublished manuscript.
- Ferrin, D. L., Kim, P. H., Cooper, C. D., & Dirks, K. T. 2007. Silence speaks volumes: The effectiveness of reticence in comparison to apology and denial for responding to integrity- and competence-based trust. *Journal of Applied Psychology*, 92: 893–908.
- Fiske, S. T. 2004. *Social beings: A core motives approach to social psychology*. New York: John Wiley & Sons Ltd.
- Frantz, C. M., & Bennis, C. 2005. Better late than early: The influence of timing on apology effectiveness. *Journal of Experimental Social Psychology*, 41: 201–07.
- Gibson, K., Bottom, W., & Murnighan, J. K. 1999. Once bitten: Defection and reconciliation in a cooperative enterprise. *Business Ethics Quarterly*, 9: 69–85.
- Goffman, E. 1971. *Relations in public*. New York: Basic Books.
- Güth, W., Schmittberger, R., & Schwarze, B. 1982. An experimental analysis of ultimatum bargaining. *Journal of Economic Behavior and Organization*, 3: 367–88.
- Güth, W., & Tietz, R. 1990. Ultimatum bargaining behavior: A survey and comparison of experimental results. *Journal of Economic Psychology*, 11: 417–49.
- Handgraaf, M., van Dijk, E., & De Cremer, D. 2003. Social utility in ultimatum bargaining. *Social Justice Research*, 16, 263–83.
- Ho, T. & Weigelt, K. 2002. *Trust building among strangers*. Working paper no. 99-008, Wharton School, University of Pennsylvania.
- Jones, T. M. 1991. Ethical decision making by individuals in organizations: An issue-contingent model. *Academy of Management Review*, 16: 366–95.
- Kagel, J. H., Kim, C., & Moser, D. 1996. Fairness in ultimatum games with asymmetric information and asymmetric pay-off. *Games and Economic Behavior*, 13: 100–10.
- Kellerman, B. 2006. When should a leader apologize and when not? *Harvard Business Review* (April): 73–81.

- Kim, P. H., Dirks, K. T., Cooper, C. D., & Ferrin, D. L. 2006. When more blame is better than less: The implications of internal versus external attributions for the repair of trust after a competence versus integrity-based trust violation. *Organizational Behavior and Human Decision Processes*, 99: 49–65.
- Kim, P. H., Ferrin, D. L., Cooper, C. D., & Dirks, K. T. 2004. Removing the shadow of suspicion: The effects of apology versus denial for repairing competence- versus integrity-based trust violations. *Journal of Applied Psychology*, 89: 104–18.
- Kuhn, K. M. 1997. Communicating uncertainty: Framing effects in responses to vague probabilities. *Organizational Behavior and Human Decision Processes*, 71: 55–83.
- Lewicki, R. J., & Bunker, B. B. 1996. Developing and maintaining trust in working relationships. In R. M. Kramer & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research*. Thousand Oaks, CA: Sage.
- Lewicki, R. J., Tomlinson, E. C., & Gillespie, N. 2006. Models of interpersonal trust development: Theoretical approaches, empirical evidence and future directions. *Journal of Management*, 32: 991–1022.
- Loewenstein, G., & Moore, D. A. 2004. When ignorance is bliss: Information exchange and inefficiency in bargaining. *Journal of Legal Studies*, 33: 37–58.
- Lopes, L. L. 1987. Between hope and fear: The psychology of risk. *Advances in Experimental Social Psychology*, 20: 255–95.
- Mayer, R. C., Davis, J. H., & Schoorman, D. F. 1995. An integrative model of organizational trust. *Academy of Management Review*, 20: 709–34.
- McGregor, I. 2003. Defensive zeal: Compensatory conviction about attitudes, values, goals, groups, and self-definitions in the face of personal uncertainty. In S. J. Spencer, S. Fein, M. P. Zanna, & J. M. Olson (Eds.), *Motivated social perception: The Ontario symposium*, vol. 9: 73–92. Mahwah, NJ: Lawrence Erlbaum Associates.
- Messick, D. M. 1993. Equality as a decision heuristic. In B. A. Mellers & J. Baron (Eds.), *Psychological perspectives on justice: Theory and applications. Cambridge series on judgment and decision making*: 11–31. New York: Cambridge University Press.
- Moore, D., Tetlock, P., Tanlu, L., & Bazerman, M. 2006. Conflict of interest and the case of auditor independence: Moral seduction and strategic issue cycling. *Academy of Management Review*, 31: 10–29.
- Ohbuchi, K., Kameda, M., & Agarie, N. 1989. Apology as aggression control: Its role in mediating appraisal of and response to harm. *Journal of Personality and Social Psychology*, 56: 219–27.
- Riordan, C. A., Marlin, N. A., & Kellogg, R. T. 1983. The effectiveness of accounts following transgression. *Social Psychology Quarterly*, 46: 213–19.
- Roth, A. E., & Murnighan, J. K. 1982. The role of information in bargaining: An experimental study. *Econometrica*, 50: 1123–42.
- Rousseau, M., Sitkin, S., Burt, R., & Camerer, C. 1998. Not so different at all: A cross-discipline view of trust. *Academy of Management Review*, 23: 393–404.

- Scher, S. J., & Darley, J. M. 1997. How effective are the things people say to apologize? Effects of the realization of the apology speech act. *Journal of Psycholinguistic Research*, 26: 127–40.
- Schlenker, B. R. 1980. *Impression management: The self-concept, social identity, and interpersonal relations*. Monterey, CA: Brooks/Cole Publishing Company.
- Schweitzer, M. E., Hershey, J. C., & Bradlow, E. T. 2006. Promises and lies: Restoring violated trust. *Organizational Behavior and Human Decision Processes*, 101: 1–19.
- Shaw, J. C., Wild, E., & Colquitt, J. A. 2003. To justify or excuse?: A meta-analytic review of the effects of explanations. *Journal of Applied Psychology*, 83: 444–58.
- Sigal, J., Hsu, L., Foodim, S., & Betman, J. 1988. Factors affecting perceptions of political candidates accused of sexual and financial misconduct. *Political Psychology*, 9: 273–80.
- Skarlicki, D. P., Folger, R., & Gee, J. 2004. When social accounts backfire: The exacerbating effects of a polite message on an apology on reactions to an unfair outcome. *Journal of Applied Social Psychology*, 34: 322–41.
- Skowronski, J. J., & Carlston, D. E. 1992. Negativity and extremity biases in impression formation: A review of explanations. *Psychological Bulletin*, 105: 131–42.
- Snyder, M., & Ickes, W. 1985. Personality and social behavior. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology*: vol. 2, pp. 883–948. New York: Random House.
- 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.
- Thaler, Richard. 1988. The ultimatum game. *Journal of Economic Perspectives*, 2: 195–206.
- Treviño, L. K. 2007. *Managing business ethics: Straight talk about how to do it right*, 4th edition. New York: John Wiley & Sons, Inc.
- Treviño, L. K., Weaver, G., & Reynolds, S. J. 2006. Behavioral ethics in organizations: A review. *Journal of Management*, 32: 951–90.
- van den Bos, K., & Lind, E. A. 2002. Uncertainty management by means of fairness judgments. *Advances in Experimental Social Psychology*, 34: 1–60.
- Van Dijk, E., De Cremer, D., & Handgraaf, M. J. J. 2004. Social value orientations and the strategic use of fairness in ultimatum bargaining. *Journal of Experimental Social Psychology*, 40: 697–707.
- Van Dijk, E., & Tenbrunsel, A. 2005. The battle between self-interest and fairness in bargaining: Ultimatum, dictators, and delta games. In S. W. Gilliland, D. D. Steiner, D. P. Skarlicki, & K. van den Bos (Eds.), *What motivates fairness in organizations?:* 31–48. Greenwich, CT: Information Age Publishing.
- Van Dijk, E., & Vermunt, R. 2000. Strategy and fairness in social decision making: Sometimes it pays to be powerless. *Journal of Experimental Social Psychology*, 36: 1–25.