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An instrumental approach to deception in bargaining

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4. Reactions to Deceit⁴

The world was shocked when energy trader Enron Corp. went bankrupt; it was the biggest bankruptcy in U.S. history (Kadlec, 2002). Enron was one of the leading companies in its business; it employed around 22,000 employees and had been named America's most innovative company six times in a row by Fortune magazine. Enron executives had inflated the company's stock price by institutionalized, systematic, and creatively planned accounting fraud. More recently, other large scale fraud cases, such as WorldCom Corp. and HealthSouth Corp., have followed. In all these cases, deception had tremendous negative consequences for everyone involved. But deception is not restricted to large-scale accounting fraud; it takes place at all organizational levels. Think, for example, about the use of misleading marketing tactics, employees deceiving their bosses about being late, and so on.

Due to its potential negative consequences and its pervasiveness, deception has received substantial attention from researchers. Research confirms that lying is indeed a common activity and that people on average tell one or two lies per day (DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996). In bargaining, which is the focus of the current paper, lies and other deviations from the truth are often strategic elements (Lewicki, 1983, p. 72). Tenbrunsel (1998, p. 330) even concluded that: "negotiations are asserted to be breeding grounds for unethical behavior, with deception positioned as a common bargaining tactic". If deception is so common, yet potentially has negative consequences, the crucial question is why people engage in it.

We address this question by taking an instrumental approach to deception. This approach incorporates the notion that bargainers (a) will use deception as a means to reach their goals in bargaining but (b) will refrain from using deception when they have alternative means to reach their goals. In Experiment 3.1 we focus on how goals influence the use of deception. In Experiment 3.2 we focus on reactions to revealed deceit. Experiment 3.2 shows that our instrumental approach also applies to reactions to deceit by others.

⁴ This chapter is based on Koning, Van Dijk, Van Beest and Steinel (2010).

Deception in bargaining

Bargaining can be described as “the process whereby two or more parties attempt to settle what each shall give and take, or perform and receive, in a transaction between them” (Rubin & Brown, 1975, p. 2). This process is typically characterized by both conflict and interdependence. Bargaining parties may have conflicting interests, yet at the same time they are dependent upon each other for reaching an agreement. Knowing the preferences and priorities of one’s opponent may help identify potential conflicts or mutual interests. Information about preferences and priorities is often exchanged between bargaining parties and is likely to affect the bargaining process and its outcomes. However, the mixed-motive nature of bargaining creates an information dilemma (Kelley & Thibaut, 1978; Murnighan, Babcock, Thompson & Pillutla, 1999; Steinel & De Dreu, 2004) – should bargainers provide accurate information to achieve high collective outcomes or lie to attain high personal outcomes?

Prior research on deception has often focused on the consequences of using deception and the evaluation of these consequences (e.g. Lewicki, 1983). Indeed, many experiments have demonstrated that the use of deception is determined by its expected benefits. Research by Pillutla and Murnighan (1995), for example, showed that bargainers lied about the fairness of their offers to get lower offers accepted. In similar vein, Boles, Croson and Murnighan (2000) demonstrated that lying about one’s BATNA⁵, yielded higher outcomes than truthfully disclosing it. Finally, Gneezy (2005) demonstrated that the incentives to use deception moderated the actual use of deception, again showing that the decision to use deception is based on its expected outcomes. Personal gains clearly are a very important incentive to use deception, but they are only part of the story.

Bargainers often refrain from using deception even if they have the possibility to use it. The reason for this is that deception can also have negative consequences, besides the benefits it may bring about. In realistic settings, deception is often accompanied by concrete risks and costs. In the Enron-case, for example, long jail sentences were issued. Jail sentences, monetary fines or loss of a good reputation are all strong incentives not to use deception. But even without such concrete risks and costs people may be reluctant to use

⁵ BATNA is the acronym for Best Alternative To a Negotiated Agreement, and refers to the outcomes bargainers obtain when negotiations fail.

deception simply because deception is considered a form of unethical behavior (e.g., Dees & Cramton, 1991; Tenbrunsel, 1998). For example, Dees and Cramton (1991, p. 2) state that “when outright lies are used, it violates one of the most common prohibitions found in deontological theories of ethics, and in most major religions.” Deception may therefore bring about the psychological cost of doing something that just is not right. This mere fact might persuade people to refrain from using deception, even in the absence of concrete risks or costs.

In conclusion, deception has both potential benefits and costs and whether bargainers will use deception depends on their evaluation of these benefits and costs. In the Enron example, executives benefitted from exaggerating Enron’s stock price as they received stock options as part of their payment. To drive up the stock price, executives had to create the illusion that Enron was making billions in profits. The only way to create such unrealistically high profits was through the use of deception. Creative accounting methods allowed Enron executives to hide debts, avoid taxes and inflate assets. In the case of Enron, executives clearly used deception to increase their own outcomes. However, as we will argue later on, bargainers may also pursue other goals than self-interest. In the current paper we investigate how different goals influence the use of deception. Furthermore, we investigate how bargainers perceive and react to deception by others. We present an instrumental approach to deception to better understand when and why bargainers use deception or how they react to deception by others.

An instrumental approach to deception

Instrumentality refers to the means-end connection, i.e., the relation between goals and the behavioral options to reach these goals (e.g. Becker & McClintock 1967; Edwards, 1961; Mitchell & Biglan, 1971). As we noted above, past research on deception has often focused on the fact that deception is instrumental for increasing the own outcomes. We would like to point out, however, that the instrumentality perspective is broader than the issue of how an individual means relates to a single goal; people may pursue *different goals* and instrumentality also pertains to the *selection of means*. For example, if one’s goal is to return home as soon as possible, one may be tempted to cross a red light if that is the only option available. However, if one has an alternative route without a traffic light, one may

also opt for this latter option. The instrumentality approach presupposes that people select the means they find most instrumental to their current goal.

This notion is highly relevant to the issue of deception, as bargainers may have alternative means at their disposal that may not be considered unethical. Bargainers will compare the benefits and costs of such alternative means to those of using deception. Considering that using deception is unethical, it is conceivable that bargainers may prefer alternative means instead. Returning to our example of crossing a red light, one would have to consider both the benefits and costs of crossing the red light in relation to the benefits and costs of taking an alternative route. In addition to risking a fine, the mere fact that crossing a red light is an illegal (and to some even immoral) act could be sufficient reason not to select such an option and take the alternative route.

The same logic applies to the use of deception in bargaining. Bargainers may acknowledge that deception can increase their outcomes, but may be held back by the unethical aspect of it. If they have an alternative means that also yields good outcomes, but lacks the unethical aspect, they might prefer such an alternative. To conclude, an instrumental approach not only focuses on the benefits of using deception, but also on the downsides of using it and the importance of the availability of alternative means.

Previous research by Koning, Steinel, Van Beest, and Van Dijk (2011) provided first support for an instrumental approach to deception. Koning et al. studied deception in relation to power in an ultimatum bargaining setting (Güth, Schmittberger, & Schwarze, 1982). In ultimatum bargaining, two persons divide a scarce resource; in this case a number of chips of a certain monetary value. One person, the allocator, makes an offer on how to distribute the resource. The other person, the recipient, can then only decide whether to accept or reject the offer. In other words, the allocator sets an ultimatum to the recipient. Bargainers learned that the chips were worth more to them than to their opponent. In addition, bargainers were then told that their opponent was yet unaware of the differential value of the chips. Then they could choose to either inform their opponent about the true value of the chips or deceive their opponent by saying that the chips were of equal value to both. Koning et al. studied whether the willingness to deceive was affected by the relative power positions and the role of the two bargainers. They manipulated power by varying what would happen if the recipient would reject (cf. Fellner & Güth, 2003; Suleiman, 1996). The consequences would either be large for the allocator and small for the recipient (in

which case the allocator was relatively powerless and the recipient relatively powerful) or small for the allocator and large for the recipient (in which case the allocator was relatively powerful and the recipient relatively powerless).

Results showed that bargainers in a low power position used deception more frequently than bargainers in a high power position. High power bargainers could be confident that they would receive a good offer or that their offer would be accepted. High power bargainers could therefore reach good outcomes even without using deception. In contrast, low power bargainers had to fear the consequences of the decisions made by the opponent and therefore resorted to deception more readily. However, power only had an effect on the behavior of recipients and not on the behavior of allocators. A crucial difference between both roles is that allocators have fine-grained control over the outcomes by being able to formulate the offer, while recipients lack such control. To make an offer more attractive, allocators can either use deception or slightly increase the offer. Although the latter option would be slightly less profitable, it is more ethical than using deception. Having such an alternative means made allocators less prone to using deception. To conclude, the results of Koning et al. (2011) showed that bargainers were more likely to refrain from using deception when they had sufficient power or when they had alternative means.

Although these findings supported an instrumental approach to deception, the study did not explicitly measure bargainer's goals. Often, the implicit assumption is that bargainers are motivated to maximize their own outcomes in bargaining. Boles et al. (2000) identify both greed and competition as important antecedents to deception. They argue that self-interested negotiators may be motivated to engage in unethical action to increase their own outcomes and that self-interest can dominate a person's concerns for cooperation, fairness, or altruism. However, the motivations or goals of the participants were not measured and therefore it is not certain whether self-interest did indeed dominate. In the current study we examine the relation between goals and the use of deception more closely. To this end, we measured bargainers' social value orientations.

Experiment 4.1: Social values and deception

Classic game theory presupposes that bargainers act out of rational self-interest and aim to maximize their personal outcomes. More recent literature, however, suggests that bargainers may pursue a broader set of goals than self-interest (Van Lange, 1999). In this regard, social value orientation is an important personality characteristic (Messick & McClintock, 1968). Social value orientation can be described as stable preference for a certain pattern of outcomes. Many orientations can be distinguished, depending on the weight people assign to their own and others' outcomes, but most people can be classified as being a prosocial, individualist or competitor (Van Lange, 1999). According to Van Lange, prosocials are primarily motivated to maximizing joint outcomes and equality in outcomes. The main goal of individualists is to maximize their own outcome, regardless of other's outcome. Competitors aim to maximize the difference between outcomes for self and other. These latter two -individualists and competitors- are usually taken together and defined as proselfs (Van Lange & Kuhlman, 1994), because they both assign a higher weight to the own outcomes than to the outcomes of others.

In the current research, we thus differentiate between proselfs and prosocials. Both orientations have distinctly different preferences and pursue different goals in bargaining; proselfs will aim to maximize their own outcome, while prosocials will aim to maximize joint outcomes and equality in outcomes. Based on our instrumental approach to deception, we argue that the different goals of the two orientations will lead to differences in the use of deception.

In the current ultimatum bargaining setting, we expected that proselfs would be more willing to use deception than prosocials. In ultimatum bargaining, maximizing the own outcome is only possible at the expense of the other bargainer. As a result, proselfs may have a hard time reaching an agreement with the other bargainer and deception could then prove to be a fruitful strategy. Prosocials, on the other hand, are trying to maximize joint outcomes and this goal may not require deception. Similar to Koning et al. (2011), we compared the willingness to deceive for allocators and recipients. Again we expected that recipients would be more likely to use deception than allocators, as recipients lack the fine-grained control over the outcomes that allocators have. Allocators can either increase an

offer's actual value or use deception to increase the chances of getting the offer accepted. Allocators thus have an alternative means to deception, while recipients lack such alternative means. Based on our instrumental approach, we therefore expected that differences between proselves and prosocials would be more pronounced for recipients than for allocators.

Method

Participants and design. The participants, 69 first year psychology students (mean age: 20.2 years; 21 men, 48 women) at Leiden University, participated voluntarily in a laboratory study. The experiment used a 2 (social value orientation: proself vs. prosocial) x 2 (role: allocator vs. recipient) between-participants factorial design in which participants were randomly assigned to the roles. Social values were assessed using the Decomposed Games Measure (Van Lange, Otten, De Bruin, & Joireman, 1997).

Procedure. As a first task, participants completed a written version of the nine-item Decomposed Games measure to assess their social value orientation. The task consists of nine items, in which participants choose combinations of outcomes for themselves and an (anonymous) other. Outcomes are represented by points, and participants are instructed to imagine that the points have value for both. Each option represents a particular orientation. An example is the choice between alternative A: 500 points for self and 500 points for other, B: 560 points for self and 300 for other, and C: 500 points for self and 100 for other. Option A represents the *prosocial* orientation, because it provides an equal distribution of outcomes (i.e., 500 for self and other), and generates the highest collective outcome (i.e., 1000). Option B represents the *individualistic* option because own outcomes are maximized (560 versus choice A: 500, and C: 500) irrespective of other's outcomes. Option C represents the *competitive* orientation because this distribution maximizes the difference between own outcomes and other's outcomes (Choice C: $500 - 100 = 400$, versus A: $500 - 500 = 0$, and B: $560 - 300 = 260$).

Participants are classified as prosocial, individualistic or competitive when at least six choices (out of nine) are consistent with one of the three orientations (e.g., McClintock & Allison, 1989; Van Lange & Kuhlman, 1994). In the present experiment, out of a total number of 69 individuals, only two people could not be classified and were therefore excluded from further analyses. Of the 67 remaining participants, 31 (46.3 %) were

identified as prosocials, 30 (44.8 %) as individualists, and 6 (8.9 %) as competitors. The individualists and competitors were combined to form one group of proselves ($N = 36$).

After measuring social value orientation, participants took part in an unrelated study. Subsequently, they participated in the current study on ultimatum bargaining. The participants were informed that they would be paired with another participant and that each pair of participants (referred to as person A and B) had to divide 100 chips. Person A (the allocator) would make an offer for distribution to person B. If Person B (the recipient) would accept the offer, the chips would be divided accordingly. If Person B would reject the offer, both A and B would end up with zero outcomes (i.e., no chips would be divided).

Participants were either assigned to the allocator role (person A) or to the recipient role (Person B). After the assignment of the roles, participants were informed that the chips were of unequal value: they would receive €0.08 for each chip, whereas their opponent would receive only €0.04 per chip. They also learned that their opponent was unaware of this difference in value; the opponent only knew that he / she would receive €0.04 per chip. Subsequently, participants learned that before the offer would be made, they could send a message to their opponent. The rationale that we offered was that in reality there is often communication involved in bargaining. Participants were asked to indicate to the recipient how much they would receive for each chip. They could inform the recipient that they received anywhere between €0.02 and €0.10 per chip. Note that only the message of €0.08 was correct.

Our main interest was in the message participants would send to their opponent. Would they communicate the true value (€0.08) or would they deceive their opponent? For allocators, we also measured the number of chips they offered to the recipient, to test whether their offer was indeed affected by their use of deception. After participants had communicated the value, we asked them whether they thought it was justifiable to misinform the opponent. Participants rated their answer on a scale from 1 (not justifiable) to 7 (justifiable). At the end of the experiment, participants were thoroughly debriefed and paid 6 Euro.

Results

Deception. In the current setting, communicating a value of €0.08 means that one truthfully disclosed the value. All other values can be considered as deceitful. As a first

analysis, we therefore analyzed whether participants told the truth or whether they deceived their opponent. A log linear analysis on this dichotomous measure indicated that the percentage of participants deceiving the opponent was higher for proselfs (89%) than for prosocials (65%), $\chi^2(1) = 5.46, p < .05$. See Table 4.1. Based on this analysis, one might be tempted to conclude that role did not affect the decision to deceive, and that deception is mainly affected by personality (i.e., social value orientation) and not by role. But a closer inspection of the percentages in Table 1 reveals an interesting pattern that fits our main hypothesis: Proselfs in the recipient role were especially likely to use deception. On the dichotomous measure of deception, this did not result in a significant interaction. But if we consider the contents of their messages, thus the actual values participants communicated to their opponent, the interaction does reach significance.

Table 4.1. Percentages of participants deceiving their opponent, by social value orientation and role.

	Allocator	Recipient
Proself	81	95
Prosocial	65	64

More specifically, a 2 x 2 ANOVA on the communicated value of the chips yielded a significant main effect of social value orientation ($F[1, 63] = 7.93, p < .01$) and a significant interaction of social value orientation and role ($F[1, 63] = 4.56, p < .05$). Table 4.2 provides the relevant means of communicated values. The main effect indicated that proselfs communicated a lower value ($M = 3.89, SD = 2.24$) than prosocials did ($M = 5.45, SD = 2.19$). The interaction showed, however, that this effect was mainly due to the low values that were communicated by proselfs in the recipient role ($M = 3.10, SD = 1.59$). Proselfs in the allocator role communicated a higher value ($M = 4.88, SD = 2.58$). The highest values were communicated by prosocials in the allocator ($M = 5.24, SD = 2.36$) and recipient roles ($M = 5.71, SD = 2.02$).

Table 4.2. Communicated value of the chips, by social value orientation and role.

	Allocator	Recipient
Proself	4.88 (2.58) ^a	3.10 (1.59) ^a
Prosocial	5.24 (2.36) ^a	5.71 (2.02) ^b

Note. Standard deviations between brackets. Within columns, means with different superscripts differed from one another at the $p < .05$ level.

Allocators' offers. After measuring deception, we measured the number of chips allocators offered to the recipient to test whether their offer was affected by their use of deception. A t-test showed that allocators on average offered fewer chips when they had lied ($M = 48.25$, $SD = 11.78$) than when they had told the truth ($M = 62.75$, $SD = 9.22$), $t(30) = 3.16$, $p < .01$.

Deceit justifiable. A 2 x 2 ANOVA on the question whether it was justifiable to misinform the opponent yielded a significant main effect of social value orientation ($F[1, 63] = 7.55$, $p < .01$) and a marginally significant interaction ($F[1, 63] = 2.91$, $p = .09$). The main effect indicated that deceiving the opponent was less justifiable for prosocials ($M = 3.94$, $SD = 1.90$) than for proselfs ($M = 5.14$, $SD = 1.69$). Moreover, the interaction showed that the differences between the judgments of proselfs and prosocials were especially pronounced for recipients (see Table 4.3).

Table 4.3. Justified to misinform the opponent, by social value orientation and role.

	Allocator	Recipient
Proself	4.75 (1.95) ^a	5.45 (1.43) ^a
Prosocial	4.29 (1.76) ^a	3.50 (2.03) ^b

Note. Standard deviations between brackets. Within columns, means with different superscripts differed from one another at the $p < .05$ level.

Discussion

The results of this experiment showed that social value orientation influences the use of deception. Proselfs deceived their opponent significantly more frequently than prosocials. In addition, they also differed in the extremity of their lies. Proselfs communicated a lower value of the chips than prosocials. More interestingly, this effect was moderated by the role of the participant. The effect of social value orientation was more pronounced for participants in the recipient role than in the allocator role. Taken together these findings support an instrumental approach to deception, as the willingness to deceive was a function of both the goals bargainers pursued (in this context operationalized in terms of social values; prosocials vs. proself) and the means they had available (in this context dependent on the role; allocator vs. recipient).

Experiment 4.2: Suspicion and reactions to revealed Deceit

In Experiment 4.1 we assessed how differences in goals and means influenced the use of deception. In Experiment 4.2 we focus on ‘the other side of the coin’, that is, how people respond to deception by others. We are not the first to assess how people respond to deception. Boles et al. (2000), for example, demonstrated that recipients rejected an offer more frequently after they had found out that the allocator had deceived them. However, to understand why bargainers would reject more readily after finding out that they have been deceived, it is important to take a broader perspective. We argue that reactions to deceit should also be understood from an instrumental perspective. Based on our instrumental approach, we predict that power and deception are related, as power influences the means bargainers have available in order to reach their goals. Indeed, our previous research has confirmed that bargainers in a low power position were more prone to using deception than bargainers in a high power position. High power bargainers could reach good outcomes even without using deception, while low power bargainers could not. In the current study we examine whether reactions to deceit follow an instrumental pattern as well. To this end, we manipulated power and tested whether reactions to deceit are affected by power in similar vein as the use of deception is affected by power.

To investigate the relation between power and reactions to revealed deceit, we again made use of an ultimatum bargaining setting. This time, all participants were assigned to the recipient role. Participants did not know the exact size of the resource they bargained over (cf. Boles et al., 2000). We told participants that their opponent, the allocator, did know the exact size and that he / she would communicate the size to them. Participants then received a message stating that the resource size was either 80 chips (small resource) or 140 chips (large resource). Subsequently, participants received an offer of 40 chips.

In addition to manipulating the communicated size of the resource, we also manipulated power. In bargaining settings, power is often defined in terms of a bargainer's level of dependency. Emerson (1972a, 1972b), for example, defined the power of an actor A over actor B as a function of the extent to which B is dependent upon A for scarce and valuable resources. Actor A becomes more powerful when B is more dependent on him or her. The same holds true for B; the more dependent A is upon B, the more powerful B is. The power relation between A and B is thus determined by A's dependency on B and B's dependency on A.

We manipulated the degree to which the allocator was dependent on the participant, by varying the consequences of a rejection of the offer (cf. Fellner & G uth, 2003; Koning et al., 2011; Suleiman, 1996). Upon rejection, the share of the participant was always lowered by 25%. In contrast, the share of the allocator was lowered by either 75% or 25%. The consequences of a rejection for the allocator thus were either large (putting the participant in a relatively high power position) or small (putting the participant in a relatively low power position).

Our first interest was whether participants would accept or reject the offer. We expected that both power and the communicated resource size would influence the participant's decision to accept or reject. When a large resource size was communicated, participants could be fairly sure that the offer was indeed low. This might lead to a willingness to punish the allocator, but particularly so when rejecting would be highly consequential for the allocator. The larger the consequences for the allocator, the more efficiently the participant could punish the allocator. When a small resource size was communicated, the offer might be perceived as more generous and might be more readily accepted. However, we anticipated that participants might be suspicious of the communicated size. Would the resource really be that small, or would the allocator have

lied about its size? Due to this uncertainty, participants could not evaluate the true merit of the offer. Participants might therefore still be inclined to reject the offer, but less so than when a large size was communicated. As a consequence, the influence of power on rejection rates would also be weaker. We therefore expected that power would be less influential when a small resource size was communicated than when a large resource size was communicated.

Secondly, we were interested in how participants would react if they eventually found out what the actual size of the resource was. To investigate this, we added a new element to the bargaining situation: After participants had decided to accept or reject the offer, we “revealed” that the resource had in fact been large (i.e., 140 chips). Note that this implied that allocators who communicated a large size had truthfully informed the participant, while allocators who communicated a small size had deceived the participant. We then measured whether participants found it understandable that the allocator had communicated either a large or a small resource size. For low power allocators, we expected that participants would find communicating a small resource size (i.e., deceiving the participant) more understandable than communicating a large resource size (i.e., telling the truth). In a low power situation, the consequences of a rejection were severe for the allocator. As a consequence, participants might understand that the allocator resorted to deception to increase the chances of getting an offer accepted. For high power allocators the consequences were less severe and we expected that communicating a small or large resource size would be roughly equally understandable.

Finally, to get an idea of the possible longer term consequences, we asked participants whether they would be willing to bargain again with the allocator sometime in the future. In general, we expected that participants would be less willing to bargain with an allocator who had communicated a small resource size (i.e., had lied) than one who communicated a large resource size (i.e., had told the truth). Based on our instrumental approach, we expected this effect to be stronger for high power allocators than for low power allocators. Participants might attribute deceit by a low power allocator to the situation, rather than to the person of the allocator. Consequently, participants might be more forgiving towards a deceptive low power allocator and might be more willing to bargain again with the allocator.

Method

Participants and design. The participants, 86 psychology students (mean age: 19.8 years; 27 men, 59 women) at Leiden University, participated voluntarily in a laboratory study and were randomly assigned to the conditions of a 2 (communicated size: 80 tickets vs. 140 tickets) by 2 (opponent's power: high vs. low) between-subjects factorial design.

Procedure. All participants were assigned to the role of the recipient in an ultimatum bargaining setting. We manipulated power by varying the consequences of a rejection. If the participants rejected, their share would always be lowered by 25%. The allocator's share, on the other hand, would be lowered by either 25% (high power allocator condition) or by 75% (low power allocator condition). Participants thus had either a small or a large influence on the allocator's outcomes. In terms of power, participants were up against an allocator that was either relatively powerful or relatively powerless.

After manipulating power, we introduced our information manipulation. The exact resource size of the resource was unknown to the participant. Participants learned that the resource could be 80, 100, 120 or 140 chips and that all sizes were equally likely. We then told them that the allocator did know the exact size of the resource and would send them a message concerning the size. Participants received a message stating there were either 80 or 140 chips available to divide. Together with the message, participants received an offer of 40 chips.

We then measured suspicion towards the message using 4 questions, example items were "do you think your opponent has sent you an incorrect resource size" and "do you trust that your opponent has communicated the actual size to you" (reverse coded). All responses were averaged into a single suspicion score with 1 indicating little suspicion and 7 indicating a lot of suspicion (Cronbach's alpha = .92).

After measuring suspicion, we asked participants whether they wanted to accept or reject the offer of 40 chips. Finally, after participants had accepted or rejected, we revealed that the actual resource size was 140 chips. Participants thus found out whether the allocator had lied to them or told them the truth. We then asked participants whether they found it understandable that the allocator communicated either a large or small resource size. Participants rated their answer on a scale from 1 (not understandable) to 7 (very understandable). Finally, we asked whether the participants would like to bargain again with

their opponent sometime in the future. Participants rated their answer on a scale from 1 (would not bargain again with this opponent) to 7 (would bargain again with this opponent).

Results

Manipulation checks. We checked our power manipulation by asking the participants about the consequences of a rejection. All participants correctly indicated what the consequences for themselves were when they rejected the offer. Eighty-five participants (99%) correctly indicated what the consequences for the opponent were when they rejected the offer. Excluding participants that did not answer our manipulation checks correctly did not lead to different results. Therefore, all participants were retained in the analyses.

We also tested whether the communicated resource size did indeed affect suspicion. A 2 x 2 ANOVA yielded only a main effect for communicated resource size on suspicion, $F(1, 82) = 32.56, p < .001$. Participants were more suspicious when a small resource size was communicated ($M = 4.99, SD = 1.06$) than when a large size was communicated ($M = 3.26, SD = 1.41$).

Rejection rates. A log linear analysis revealed a significant main effect of the allocator's power on rejection rates, $\chi^2(1) = 11.07, p < .001$. Participants rejected more frequently when the allocator had low power (80.4%) than when the allocator had high power (47.5%). More interestingly, the log linear analysis also yielded a marginally significant interaction effect of communicated size and power on rejection rates, $\chi^2(1) = 3.18, p = .07$. The observed pattern supported our reasoning. When a large size was communicated, participants rejected the offer more frequently when the allocator had low power (95.5%) than when the allocator had high power (50%), $\chi^2(1) = 11.20, p < .01$. However, when a small resource was communicated there was no significant difference in the frequency of rejection, $\chi^2(1) = 2.09, p = .15$. The offer was rejected equally often when allocators had low (33.3%) or high power (45.0%).

Understanding for allocator's choice. A 2 x 2 ANOVA revealed a significant main effect of the communicated resource size on understanding for the allocator's choice, $F(1, 82) = 19.24, p < .01$. In this bargaining setting, participants found communicating a small size by the allocator more understandable ($M = 5.73, SD = 1.56$) than communicating a large size

($M = 3.98$, $SD = 2.04$). More interesting, we also found a significant interaction effect of communicated resource size and power on understanding, $F(1, 82) = 4.24$, $p = .043$. A simple main effects analysis showed that for low power allocators communicating a small size was considered more understandable ($M = 6.08$, $SD = 1.44$) than communicating a large size ($M = 3.59$, $SD = 2.22$), $F(1, 82) = 22.59$, $p < .01$. No such difference was found for high power allocators, $F(1, 82) = 2.56$, $p = .11$. For high power allocators, communicating a small ($M = 5.30$, $SD = 1.63$) or large ($M = 4.40$, $SD = 1.79$) size was considered equally understandable. These results show that for low power allocators using deception was far more understandable than telling the truth while for high power allocators no such difference was found.

Future interaction. A 2 x 2 ANOVA revealed a significant main effect of power on the willingness to bargain again with the allocator, $F(1, 82) = 12.80$, $p < .001$. The participants' willingness to bargain again with the allocator was higher for low power allocators ($M = 4.17$, $SD = 2.05$) than for high power allocators ($M = 2.83$, $SD = 1.39$). Moreover, we found a marginally significant interaction effect of power and communicated resource size on willingness to bargain again, $F(1, 82) = 3.08$, $p = .08$. A simple main effects analysis showed that for low power allocators, it made no difference whether the allocator had communicated a small ($M = 4.21$, $SD = 2.04$) or a large ($M = 4.14$, $SD = 2.10$) resource size, $F(1, 82) = 0.50$, $p = .82$. For high power allocators, however, there was a difference, $F(1, 82) = 4.51$, $p < .05$. Participants preferred an allocator who had communicated a large resource size ($M = 3.45$, $SD = 1.43$) over one that had communicated a small resource size ($M = 2.20$, $SD = 1.06$). Participants thus seemed more forgiving towards deception by a low power allocator than a high power allocator.

Discussion

In the current study we investigated whether reactions to deceit can be understood from an instrumental perspective. To this end we manipulated the relative power position of two bargainers in an ultimatum bargaining setting. Participants first received information from their opponent about the size of the resource being bargained over and then received an offer for the division of the resource. When the opponent communicated a large resource size, participants could be fairly sure that they were offered only a small share of the actual resource (i.e., that they received a low offer). Consequently, their reactions were

strongly affected by their power position; participants were more likely to reject the offer when the consequences of doing so were large for the opponent. This was different when the opponent communicated a small resource size. In that case, participants were suspicious about the size of the resource and thus unsure about the true merit of the offer. Some participants still rejected the offer, but fewer did so than when a large size was communicated. The influence of power on the rejection rates was also weaker than when a large resource size had been communicated. These findings show that suspicion and uncertainty can attenuate the effects of power on rejection rates.

Furthermore, we were interested in how people react when they find out that they have been deceived. The results are interesting and in line with our instrumental approach to deception. When the opponent had little power, participants found deception far more understandable than telling the truth. No such difference was found when the opponent was in a more powerful position. In addition, participants preferred not to interact again with a powerful opponent that had lied, while this was not the case for low power opponents. Low power opponents were apparently excused for their deceit, while more powerful opponents were held personally accountable for their lies. These findings show that participants in their judgments incorporate whether or not deception was instrumental to their opponent.

General discussion

In the current paper we presented an instrumental account of deception to better understand why bargainers use deception and how bargainers respond to deception by others. An instrumental approach presupposes that bargainers select the means they find most appropriate to their current goal. In our first experiment, we investigated how different goals and means lead to differences in the use of deception. Bargainers aiming to maximize their own outcome were more likely to use deception than bargainers aiming to maximize joint outcomes. Moreover, this effect was especially strong when bargainers had no alternative means to deception. In our second experiment, we demonstrated that reactions to revealed deceit also followed an instrumental pattern. Based on our previous research, we introduced power differences to test our instrumental approach. Results

showed that bargainers considered deception by low power opponents to be more understandable and more excusable than deception by high power opponents. Bargainers apparently understood that low power opponents had fewer means of reaching good outcomes than high power opponents and therefore resorted to using deception more readily. Results from both experiments supported an instrumental approach and show that an instrumental approach not only provides insight in the actual use of deception, but also in reactions to revealed deceit.

Although these results support our reasoning, it should be noted that the current research was conducted with undergraduate psychology students in a laboratory setting. Although we made all efforts to simulate a realistic negotiation setting, one could wonder to what extent our findings generalize to real-world negotiations. Future research should address this issue by studying our instrumental approach to deception in real-world business settings. However, a huge advantage of the current setup is that it gave us a very high level of control over bargainers' goals and means which allowed us to thoroughly test our instrumental approach to deception.

A remarkable aspect of our findings is that we demonstrated that low power bargainers are more prone to using deception than high power bargainers. There is also a body of literature that suggests that high power bargainers might be more prone to using deception. Research by Keltner and colleagues (e.g. Keltner, Gruenfeld & Anderson, 2003), for example, shows that high power people are more focused on rewards and more action oriented. This finding might suggest that high power people could be more tempted to use deception to increase personal gains. We would like to point out, however, that in our experiments power only increased or decreased the benefits of using deception; the risks and costs were kept constant. In fact, there were no risks or cost involved, except psychological ones. It is easy to think of realistic situations where the benefits would remain high independent of someone's power position, but where the risks or cost would vary with power. For example, high power people might be able to cover their tracks better, thus decreasing chances to get caught. If the benefits of using deception remain high for high power people, but the risks and costs decrease, we would also predict that having high power leads to more deception.

Finally, we are aware that power is a very broad concept and that there are many different forms and definitions of power (for example, reward power, coercive power, see

French & Raven, 1960). Future research could investigate the relation between different forms of power and the use of deception. However, although power can be operationalized in many different ways, we expect that our instrumental approach could still be used to predict the effects of power on deception.

Practical implications

Our findings have a number of practical implications for management, corporate culture and business ethics. Our findings show that the use of deception is influenced by both the goals bargainers pursue and the means they have available, which were manipulated through relative power position and role in the negotiation. In organizational settings, these factors may also play a large role. Both organizations and their employees pursue their own set of goals and employees all fulfill specific roles within an organization. Furthermore, relations between employees are often hierarchical in nature and power differences exist in abundance on the work floor. Managers should be aware that employees in certain roles or power positions will be more prone to using deception.

A similar word of caution should be made about the goals employees pursue. Although employees may differ in the extent to which they pursue self-interest, managers should be aware that company policies can enhance self-interest as a goal. Rewards that include stock options or bonuses for reaching certain targets may seem a good way to align the goals of employees and the company, however, practice has proven that doing so can give rise to fraud. From goal setting literature (e.g., Locke & Latham, 1990) it is clear that setting high but attainable goals helps motivate employees while setting too high or even unattainable goals may hamper task performance. The current research extends this finding by suggesting that unattainable goals not only hampers performance but may even cause employees to embrace unethical means. When goals seem unattainable for employees through their regular means, deception may become a viable alternative. In the ultimatum bargaining setting used in our experiments, maximizing the own outcomes is only possible at the expense of the other. This makes it difficult to maximize the own outcomes and still reach an agreement with the other. Consequentially, bargainers aiming to maximize the own outcomes more readily resorted to using deception. In the Enron example we gave in the outset of this paper, a similar pattern emerged; the profits needed to increase the stock price time upon time were so unrealistic that deception became the only viable means. We

therefore argue that organizations should be very careful in setting realistic goals and should use bonuses with great caution.

Finally, and most obviously, it is important to have a healthy corporate culture, with a clear set of rules regarding deception. Our experiments show that a large number of bargainers were reluctant to use deception even when it involved potential monetary benefits without any tangible risks or costs. Apparently the unethical nature of deception restrains some bargainers from using it. However, our results also show that in some situations deception is considered understandable or even excusable, for example when one has low power. Managers should therefore emphasize that deception is always unacceptable as it may prevent - at least some - people from using it.