An instrumental approach to deception in bargaining

Koning, L.F.

An instrumental approach to deception in bargaining

Lukas Frederik Koning

Cover design: Lukas Frederik Koning

Printed by: Ipskamp Drukkers B.V., Enschede

This research was supported by a grant from the Netherlands Organization for Scientific Research (NWO), grant number 400-04-030.

An instrumental approach to deception in bargaining

PROEFSCHRIFT

ter verkrijging van

de graad Doctor aan de Universiteit Leiden,

op gezag van de Rector Magnificus prof. mr. P.F. van der Heijden,

volgens besluit van het College voor Promoties

te verdedigen op woensdag 15 juni 2011

klokke 11:15 uur

door

Lukas Frederik Koning

geboren te Burgervlotbrug

in 1978

Promotiecommissie:

Promotor:	Prof. Dr. E. van Dijk	Universiteit Leiden
Co-promotoren:	Prof. Dr. I. van Beest	Universiteit van Tilburg
	Dr. W. Steinel	Universiteit Leiden
Overige leden:	Prof. Dr. C. K. W. de Dreu	Universiteit van Amsterdam
	Prof. Dr. N. Ellemers	Universiteit Leiden
	Prof. Dr. P. A. M. van Lange	Vrije Universiteit
	Dr. S. F. Harinck	Universiteit Leiden
	Dr. M. J. J. Handgraaf	Universiteit van Amsterdam
	Dr. W. W. van Dijk	Universiteit Leiden

Contents

1. Introduction 7

2. Power and Deception 17

Experiment 2.1: Power and deception by recipients 22

Experiment 2.2: Comparing allocators and recipients 25

General discussion 31

3. Goals and Deception 37

Experiment 3.1: Social value orientation and deception 40

Experiment 3.2: Expectations about the opponent and deception 44

General discussion 49

4. Reactions to Deceit 51

Experiment 4.1: Social values and deception 56

Experiment 4.2: Suspicion and reactions to revealed Deceit 61

General discussion 67

5. Deception and False Expectations 71

Experiment 5.1: Reactions to deception in a scenario setting 75

Experiment 5.2: Reactions to deception in ultimatum bargaining 76

Experiment 5.3: Use of deceptive strategies 79

General discussion 84

6. General Discussion 87

References 93

Samenvatting 99

Dankwoord 103

Curriculum Vitae 104

1. Introduction

Once upon a time, a woodworker named Gepetto makes a puppet. He calls the puppet Pinocchio and wishes that the puppet becomes a real boy. A blue fairy grants Gepetto's wish and brings Pinocchio to life. She tells Gepetto that Pinocchio will become a real boy of flesh and blood once he has proven to be brave, truthful, unselfish and able to tell right from wrong. A key element in the fairy-tale is that Pinocchio's nose grows longer every time he tells a lie. In the fairy tale, lying clearly falls into the category of bad behavior. After facing many temptations, Pinocchio finally selflessly rescues Gepetto and is turned into a real boy.

Indeed, many parents tell their children that lying is bad. Parents often punish lying or reward telling the truth when their children had an opportunity to lie. In society, lying is also deemed unacceptable and is often punished when discovered. During the last decades, corporate fraud and large scale scams have frequently appeared in the news. Some notorious cases are those of Enron, WorldCom Corp and HealthSouth Corp. In the case of Enron, the wages of executives were depending on the company's stock value and thus on the company's revenue. As a result, creative book-keeping practices were employed with the sole purpose of boosting the company's revenue. In the end, the book-keeping fraud was discovered and long jail sentences were issued. Another high-profile fraud was that of Bernard Lawrence Madoff (or Bernie Madoff). Madoff ran the largest Ponzi scheme in history. In this type of fraud, investors are promised an exceptionally high return on their investment, but in reality their money is never invested at all. The returns on their investments are paid using money from other investors. As a result, an ever growing number of investors are needed to keep the scheme going. It was estimated that in the case of Madoff a total sum of $65 billion was involved. In the end, Madoff was sentenced to 150-years in prison for his scam.

The above examples demonstrate that lying is a form of unethical behavior and the severe sentences indicate that lying is not acceptable and should be punished. The fact that lying is unethical is also widely acknowledged in the literature. 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". Yet at the same time the examples also demonstrate that lying is quite prevalent in

everyday life. Research confirms this and shows that people tell an average of two lies per day (DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996). Lying thus is an activity people frequently engage in, even though it is considered unethical. This raises the question why people engage in an activity they ought not to. This dissertation sets out to investigate this question and tries to further our understanding of why and when people are most likely to engage in deception. But before elaborating on why and when people may use deception, I first define what deception is.

According to Webster's dictionary (Cayne, 1991), deception is defined as either the act of deceiving or the condition of being deceived. This definition thus pertains to both the state of being deceived and the act of deceiving. It should be noted that one can be deceived even if no one is responsible for the deception. For example, one could be deceived due to a misunderstanding or due to language differences. In similar vein, responsibility or intentionality also plays an important role in the act of deceiving. Webster's dictionary defines deceiving as: to practice deceit; to give a false impression; to cause to accept as true or valid what is false or invalid. Again it should be noted that one can intentionally or unintentionally deceive another. For example, if one has incorrect information but is not aware of the fact that the information is incorrect, one may accidentally deceive someone else into believing the information.

In addition to the distinction between intentional and unintentional acts of deception, acts of deception are also often classified as either active or passive (e.g., Lewicki, Barry & Saunders, 2010). Passive acts of deception (also called omissions) are misrepresenting a situation by failing to disclose information to another. For example, a salesman might not tell a customer about a discount he or she is entitled to. Active acts of deception (also called falsifications), on the other hand, are actually fabricating information that contradicts the truth. For example, a salesman might tell a customer that he or she is not entitled to a discount even though the customer is. In the first example one might argue that it is not the responsibility of the salesman to inform the customer about the discount. In the second example the salesman has taken up the responsibility to inform the customer, but then does so in a deceptive manner.

Deception that is both active and intentional is often referred to as lying. For example, Bok (1978, p. 13) defines a lie as "any intentionally deceptive message which is stated". Ekman (1985) adds to this definition that the target of the lie should not receive a

warning. According to Ekman, a person lies if "one person intends to mislead another, doing so deliberately, without prior notification of his purpose, and without having been explicitly asked to do so by the target". Other scholars have stressed that it is the attempt to lie that is important and not whether the lie is successful or not. Therefore, according to Vrij (2001), deception can be defined as "a successful or unsuccessful deliberate attempt, without forewarning, to create in another a belief that the communicator considers to be untrue".

The current thesis investigates when and why people lie. A bargaining setting was chosen to study deceptive behavior as bargaining is one area in which deception is particularly common. According to Lewicki (1983), lies and other deviations from the truth are often strategic elements in a bargaining scenario. Other authors have also noted that deception is a common bargaining strategy. Strudler (1995, p. 805) for example stated that: “Many people lie, dissimulate and otherwise fail to tell the truth in negotiation.” Tenbrunsel (1998, p. 330) concluded that: “negotiations are asserted to be breeding grounds for unethical behavior, with deception positioned as a common bargaining tactic.” Bargaining thus seems an excellent setting to study deceptive behavior.

Bargaining and mixed-motive conflict

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). This process is typically characterized by both conflict and interdependence. Bargainers may have conflicting interests, yet at the same time they are dependent upon each other for reaching an agreement. Bargaining has therefore been characterized as mixed-motive conflict (see e.g., Schelling, 1960). In such situations, two motives are in conflict with each other, namely the motive to cooperate and the motive to compete. On the one hand, bargainers may be motivated to cooperate, as mutual cooperation often yields better outcomes for all parties than competing. On the other hand, bargainers may also be tempted to compete, as competition often leads to better personal outcomes. However, mutual competition often leads to conflict and an increased risk of not reaching an agreement.

Whether bargainers will compete or cooperate strongly depends on their motivation. It has often been argued that self-interest is the dominant motive in bargaining (see e.g., Pillutla & Murnighan, 1995; Straub & Murnighan 1995). It was thus assumed that

bargainers would always act in a way that maximizes their own outcome and would compete on every opportunity. More recent literature, however, has also identified other motives that may play a role in bargaining (e.g., Van Lange, 1999; Van Lange & Kuhlman, 1994; Van Lange, Otten, De Bruin, & Joireman, 1997). According to this literature, bargainers may pursue other goals than maximizing their own outcome and may for example also strive to maximize joint outcomes or equality in outcomes. Bargainers will thus sometimes give up some of their own outcome to strive for a fair distribution of outcomes.

To study which motives are dominant in bargaining, researchers have used numerous bargaining paradigms. One research paradigm that is very well-suited to study the motivation of bargainers is the ultimatum game (Güth, Schmittberger, & Schwarze, 1982). Ultimatums are an essential part of bargaining and are often the end stage of a bargaining process (Handgraaf, Van Dijk, & De Cremer, 2003; Thaler, 1992). In an ultimatum game one party (the allocator) proposes a division for a certain resource. The other party (the recipient) can either accept or reject the proposed division. If the recipient accepts, the resource is divided according to the proposal. If the recipient rejects, both parties receive nothing. Both players thus are interdependent and yet have different strategic means; the allocator has control over the offer while the recipient has the ability to accept or reject the offer.

If bargainers would act purely out of self-interest, recipients should accept any offer above zero. Knowing that recipients should accept any offer above zero, allocators should offer the smallest amount possible and thus keep as much as possible for themselves. Research on ultimatum bargaining, however, shows that recipients frequently reject offers lower than 20% of the resource and that allocators typically offer 30% - 40% of the resource, with a 50-50 split being the mode (see e.g., Camerer & Thaler, 1995; Komorita & Parks, 1995; Pillutla & Murnighan, 2003). These findings seem to suggest that bargainers may not act out of pure self-interest and that fairness may play a role in bargaining.

But is it truly fairness that drives bargainers or could there be another explanation for the fact that empirical results differ from expectations based on self-interest? Some authors have argued that recipients are not motivated by fairness, but rather act out of wounded pride, anger or spite (e.g., Straub & Murnighan, 1995; Pillutla & Murnighan, 2003). According to these authors, recipients reject low offers simply because they were angry that the offer was lower than they expected. Knowing that recipients might reject low offers,

allocators might increase their offers as a result. The generous offers of allocators would then be a result of strategic motives, rather than truly fair motives. To study the motives of allocators more closely, researchers introduced informational asymmetries (see e.g., Boles, Croson & Murnighan, 2000; Kagel, Kim & Moser, 1996; Pillutla & Murnighan, 1995; Van Dijk & Vermunt, 2000).

Information in bargaining

The exchange of information is a central aspect of the bargaining process. Typically, not all bargaining parties have exactly the same information and informational asymmetries exist between bargaining parties. Bargaining parties thus have information that other parties do not have; so-called private information. Researchers have used informational asymmetries to study the motives of allocators and to disentangle strategic fairness from true fairness. The idea is that if allocators are truly concerned with fairness, they will offer a fair amount even if the recipient lacks the information to judge whether an offer is fair or not. If allocators only make generous offer to avoid a rejection, they will stop doing so when recipients lack the information to judge whether an offer is fair or not. In that case, allocators would make self-interested offers as they would no longer need to fear a rejection by the recipient. Results showed that offers were lower if the recipient had insufficient information to judge the fairness of the offer, but offers were still well above the minimum amount that could be offered (e.g., Van Dijk, De Cremer, & Handgraaf, 2004).

An interesting feature of information asymmetries is that they also provide bargainers with the opportunity to use deception. Private information can be shared truthfully during bargaining, but it can also be misrepresented. Due to the mixed-motive nature of bargaining, it can be worthwhile to keep your true preferences and priorities private or to even lie about them. For example, when buying an item you might pretend that you have seen a cheaper alternative elsewhere to persuade a salesman to lower the price. Lying about your interest in the item or its value may thus yield you better outcomes.

As many have pointed out, deception is a common tactic in bargaining settings (see e.g., Lewicki, 1983; Strudler, 1995; Tenbrunsel, 1998). The reasons for using deception as a bargaining tactic seem clear; bargainers may obtain higher personal outcomes by using deception. Indeed, research has confirmed that the use of deception increases when it has greater potential gains (Gneezy, 2005). Furthermore, research has shown that deception is

more likely to occur in competitive settings where bargainers are focused on personal gains (Schweitzer, DeChurch, & Gibson, 2006). Research on deception typically shows that there are two ways in which deception can increase the own outcomes; deception may increase the chances of getting a self-serving offer accepted and deception may help to elicit better offers from another party (e.g., Boles, Croson, & Murnighan, 2000; O'Connor & Carnevale, 1997; Pillutla & Murnighan, 1995; Schweitzer & Croson, 1999; Steinel & De Dreu, 2004; Van Dijk, Van Kleef, Steinel, & Van Beest, 2008). However, one may again wonder if self-interest is the only motive to use deception or whether other motives may also play a role in the use of deception. I argue that a broader perspective on deception is needed and propose an instrumental approach to deception.

An instrumental approach to deception

In an instrumental approach to deception, both the goals bargainers pursue and the means they have available to reach these goals determine their use of deception. Central to the idea of instrumentality is the connection between means and ends, i.e., the relation between goals and the behavioral means to reach these goals (e.g. Becker & McClintock 1967; Edwards, 1961; Mitchell & Biglan, 1971). Past research on deception has often stressed that bargainers use deception to increase their own outcome and deception is often portrayed as a means for increasing the own outcome. I would like to point out, that the instrumentality perspective is broader than the issue of how an individual means relates to a single goal, such as maximizing the own outcome. Instrumentality also pertains to the *selection* of means and presupposes that bargainers will select the means that is most instrumental for their current goal. In addition, instrumentality incorporates the notion that different goals may lead to a different selection of means.

To give a simple illustration of an instrumental approach, I consider the question why people would (or would not) cross a red light. An instrumental approach would predict that whether people cross a red light depends on both the goals they pursue and the means they have available to them. If one's goal is to return home as safely as possible, it is not likely that one would cross a red light. Crossing the red light increases the risk of getting into a car accident, which of course is not instrumental to the goal of returning home as safely as possible. However, if one's goal is to return home as quickly as possible, one may be tempted to cross a red light. Crossing the red light saves time compared to waiting until it

turns green and therefore is instrumental to the goal of returning home as quickly as possible. But even if one's goal is to return home as quickly as possible, one may be held back by the risks that are involved with crossing a red light. If one would know an alternative route without a traffic light, one might also opt for this alternative route. An instrumental approach presupposes that people will consider both the benefits and costs of crossing the red light in relation to the benefits and costs of taking the alternative route. In addition to the risk of getting an accident or fine, the mere fact that crossing a red light is an illegal and to some even an 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. If deception is presented as a means to increase the own outcome, an instrumental approach acknowledges that bargainers who pursue this goal will use deception. However, bargainers may also pursue other goals than maximizing their own outcome, such as maximizing joint outcomes or equality in outcomes. An instrumental approach would predict that these bargainers would be less likely to use deception if deception is presented as a means to increase the own outcome. Furthermore, an instrumental approach stresses the importance of alternative means besides deception. Bargainers may acknowledge that deception can help them reach their goals, but may be held back by the unethical aspect of it. If bargainers have alternative means that also allow them to reach their goals but lack the unethical aspect, bargainers may prefer such alternative means instead. An instrumental approach thus not only highlights the benefits of using deception, but also the downsides of it and the importance of the availability of alternative means.

Overview of the chapters

In Chapter 2, the relation between deception and the means bargainers have available to them is investigated. The means of bargainers were manipulated by assigning them to different roles in the ultimatum game (Güth, Schmittberger, & Schwarze, 1982) and by introducing power differences (see also Fellner & Güth, 2003; Suleiman, 1996). The two players in the ultimatum game have different behavioral means. The allocator has the ability to formulate the offer, while the recipient only has the ability to accept or reject the offer. In a traditional ultimatum game, the threat posed by a rejection may be sufficient to persuade the allocator to make a generous offer (e.g., Camerer & Thaler, 1995; Komorita & Parks,

1995; Pillutla & Murnighan, 2003). In the current research, power differences were introduced by varying the consequences of a rejection for both the allocator and the recipient. The means of rejecting was either highly effective or highly ineffective to the recipient for ensuring a reasonable outcome. Results showed that recipients used deception to obtain better offers and that more recipients did so in a low power position. For allocators, being in a low power position did not increase the use of deception. Instead, allocators increased their offers when they were in a low power position. This chapter shows that bargainers may refrain from using deception when they have alternative means to reach their goals as would be predicted by an instrumental approach.

In Chapter 3, the relation between the goals bargainers pursue and their use of deception is investigated. Previous research has identified self-interest as the main motive to use deception. Motives other than self-interest also play a role in bargaining and may therefore play a role in the decision to use deception or refrain from using it. Social value orientation is used to determine which goals bargainers pursue. Two orientations are distinguished, namely a proself and a prosocial orientation (see also Van Lange, 1999; Van Lange & Kuhlman, 1994; Van Lange, Otten, De Bruin, & Joireman, 1997). Bargainers with a proself orientation aim to maximize their own outcome with little regard for the outcomes of other bargaining parties. In contrast, bargainers with a prosocial orientation aim to maximize joint outcomes and equality in outcomes. In a newly developed bargaining paradigm, bargainers could achieve both goals through deception. Results showed that proself bargainers used deception mainly to increase their own outcomes and did so regardless of the orientation of their opponent. This was different for prosocial bargainers. Prosocial bargainers often deceived proself opponents, but did so to maximize joint outcomes and equality in outcomes. In addition, prosocial participants rarely deceived prosocial opponents, who could be assumed to pursue the same goal of getting high joint outcomes. This chapter shows that the use of deception was influenced by both the goals bargainers pursue and their expectations of the goals their opponent pursued as would be predicted by an instrumental approach.

In Chapter 4, the relation between goals and the use of deception is once more investigated. The first experiment in this chapter shows that proself bargainers use deception more readily than prosocial bargainers if deception could be used to increase the own outcomes. This finding confirms previous research on deception and social value

orientation (e.g., Steinel & De Dreu, 2004) and also fits with an instrumental approach. The second experiment in Chapter 4 shows that reactions to deceit by another party can also be understood from an instrumental perspective. Bargainers found deception by their opponent more understandable and judged a deceitful opponent less harshly when the opponent was in a weak position and had limited alternative means besides deception. This finding fits in an instrumental approach as it shows that people feel that having a lack of alternative means makes the use of deception more understandable and even more acceptable.

In Chapter 5, the unethical aspect of deception is further explored by looking at false expectations that deception can evoke. Expectations play an important role in the bargaining process and the evaluation of its outcomes (e.g. Kahneman, Knetsch, & Thaler, 1986; Pillutla & Murnighan, 1996, 2003). Deception can evoke false expectations because others may base their expectations on the false information given through deception. In this chapter, two forms of deception are compared to each other with regard to such false expectations. Bargainers were confronted with an opponent who either overstated the outcomes of another person or who understated his own outcomes. Results showed that understating the own outcomes raised false expectations to a lesser extent and was deemed more acceptable than overstating the outcomes of another person. Finally, results showed that people who had the opportunity to use deception were more likely to understate their own outcomes than to overstate the outcomes of their opponent. These results show that false expectations may be an important reason why deception can be considered unethical. In terms of an instrumental approach, false expectations may be regarded as harmful to others and may therefore be considered a reason not to select the means of deception.

In Chapter 6, the findings in this dissertation are summarized and discussed. The different findings of each chapter are discussed in relation to an instrumental approach to deception. In addition, the findings are related to previous research on deception and suggestions are presented for future research on deception.

A final note to the reader is that all empirical chapters (Chapters 2 to 5) were prepared as separate journal articles. As a result, the chapters may be read independently but there may also be some theoretical overlap between the chapters. Furthermore, the

chapters are all written in first-person plural as they are the product of collaboration with my supervisors.

2. Power and Deception [1]

Deception is common in everyday life (DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996). One area of everyday life in which deception is especially prominent, is 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). This process is typically characterized by both conflict and interdependence. Bargainers 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 to identify potential conflicts or mutual interests. Information about such preferences and priorities is therefore likely to affect the bargaining process and its outcomes. Bargainers often share information about their preferences and priorities, but it should be noted that they can do so truthfully or in a deceptive manner. Furthermore, with regard to the interdependent nature of bargaining, it is important to note that bargainers are not only interdependent, but that their level of dependency may vary. This level of dependency is often linked to a bargainer's power position. Both power and deception thus play a prominent role in bargaining.

Power in bargaining

Power is a very broad concept and has been defined in many different contexts and many different ways. One common way to define power is in terms of influence over others. For example, Keltner, Gruenfeld and Anderson (2003) define power as an individual's relative capacity to modify others' states by providing or withholding resources or administering punishments. Influence over others thus stems from the fact that one's actions and decisions have consequences for others. Building on this reasoning, power can also be described in terms of dependency. One has more power when others are more dependent on the rewards or punishments one can administer. Power and dependency therefore are closely linked to each other (see e.g., Bacharach & Lawler, 1981; Emerson, 1962, 1972a, 1972b). For example, Emerson defined the power of an actor A over actor B as

[1] This chapter is based on Koning, Steinel, Van Beest and Van Dijk (2011)

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.

Power differences greatly affect bargaining outcomes. Suleiman (1996) demonstrated that bargainers reached higher outcomes when their opponent had little control over their outcomes. Other research on the relation between power and bargaining outcomes has yielded similar findings (e.g., Fellner & Güth, 2003; Van Dijk & Vermunt, 2000). What has not been investigated, however, is the relation between power and the use of deception in bargaining. This is unfortunate given the fact that both play a prominent role in bargaining. The current set of studies addresses this void. We argue that there is a strong relation between power and the use of deception in bargaining.

Deception in bargaining

The exchange of information is a central aspect of the bargaining process. Typically, not all bargaining parties have exactly the same information and informational asymmetries exist between bargaining parties. Bargaining parties have information that other parties do not have; so-called private information. Research has demonstrated that private information has a substantial impact on the bargaining process and its outcomes. In particular, it has been demonstrated that bargainers may use private information to their own advantage (e.g., Kagel, Kim, & Moser, 1996; Van Dijk, De Cremer, & Handgraaf, 2004).

Private information can be shared truthfully during bargaining, but it can also be kept private or even misrepresented. Lewicki, Barry and Saunders (2010) classify the latter two as passive and active acts of deception. Passive deception is misrepresenting a situation by failing to disclose information that would benefit another, while active deception is actually lying about a common-value issue. In the current article, we focus on active deception or explicit lying. Due to the mixed-motive nature of bargaining, it can be worthwhile to keep your true preferences and priorities private or to even lie about them. For example, when buying an item you might pretend that you have seen a cheaper alternative elsewhere to persuade a salesman to lower the price. Lying about your interest in the item or its value may thus yield you better outcomes. As Lewicki (1983) already pointed out, lies and other deviations from the truth are often strategic elements in a

bargaining scenario. Other authors have also noted that deception is a common bargaining strategy. Strudler (1995, p. 805) for example stated that: “Many people lie, dissimulate and otherwise fail to tell the truth in negotiation.” Tenbrunsel (1998, p. 330) concluded that: “negotiations are asserted to be breeding grounds for unethical behavior, with deception positioned as a common bargaining tactic.”

The reasons for using deception as a bargaining tactic seem clear; by using deception bargainers may obtain higher outcomes. Indeed, research has confirmed that the use of deception increases when it has greater potential gains (Gneezy, 2005). Furthermore, research has shown that deception is more likely to occur in competitive settings where bargainers are focused on personal gains (Schweitzer, DeChurch, & Gibson, 2006). Research on deception typically shows that there are two ways in which deception can increase the own outcomes; deception may increase the chances of getting a self-serving offer accepted and deception may help to elicit better offers from another party (e.g., Boles, Croson, & Murnighan, 2000; O’Connor & Carnevale, 1997; Pillutla & Murnighan, 1995; Schweitzer & Croson, 1999; Steinel & De Dreu, 2004; Van Dijk, Van Kleef, Steinel, & Van Beest, 2008).

Although deception is a common strategy in bargaining, it has also been described as 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.” If deception is unethical, bargainers might be reluctant to use it. Indeed, research on deception consistently shows that a substantial number of bargainers refrains from using deception (see e.g., Boles et al., 2000).

Based on these insights, we argue that deception may pose a dilemma to bargainers. It may be an effective strategy for increasing the own outcome on the one hand, but it may be considered an unethical one on the other. To understand when and why bargainers use deception - or refrain from using it - it is essential to incorporate insights on both the benefits and costs of using deception. In the current paper we adopt an instrumental approach to deception, which incorporates these elements.

An instrumental approach to deception

Instrumentality refers to the means-end connection, i.e., the relation between goals and the behavioral means to reach these goals (e.g. Becker & McClintock, 1967; Edwards,

1961; Mitchell & Biglan, 1971). As noted above, past theory and research has often stressed that deception is a means 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 certain goal, such as furthering the own outcome; instrumentality also pertains to the *selection of means*. For example, if one's goal is to return home as quickly 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. An instrumental approach presupposes that bargainers will compare the benefits and costs of such alternative means to those of using deception. If using deception is considered unethical, it is conceivable that bargainers may prefer an 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 the risk of getting a fine, the mere fact that crossing a red light is an illegal and to some even an 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 realize that they could use deception to further their own outcomes, but may be held back by the unethical aspect of it. If bargainers have alternative means that also allow them to reach their goals but lack the unethical aspect, bargainers may prefer such alternatives instead. An instrumental approach not only highlights the benefits of using deception, but also the downsides of using it and the importance of the availability of alternative means. As we will argue below, this is relevant to our current investigation on the relation between power and deception, as power may affect the means bargainers can use to reach their goals.

The current research

We studied the relation between power and deception in an ultimatum bargaining setting. During bargaining, parties typically exchange offers until one party sets a final offer which the other party can only accept or reject. Ultimatums thus are an essential part of bargaining (e.g. Handgraaf, Van Dijk, & De Cremer, 2003; Thaler, 1992). The ultimatum

bargaining game captures this process in a very simple and elegant way (see also Güth, Schmittberger, & Schwarze, 1982). In an ultimatum bargaining game, one party (the allocator) proposes a division for a certain resource. The other party (the recipient) can either accept or reject the proposed division. If the recipient accepts, the resource is divided according to the proposal. If the recipient rejects, both parties receive nothing. Both players thus are interdependent and yet have different strategic means; the allocator has control over the offer while the recipient has the ability to accept or reject the offer. The differences between both roles allowed us to study how different types of means influence the use of deception and to test our instrumental approach to deception. Moreover, the simple structure of the ultimatum bargaining game offers excellent possibilities to manipulate the levels of power and information of both bargaining parties.

We manipulated the power relation between both parties by varying the consequences of a rejection for both. By varying the consequences of a rejection, we manipulated the amount of threat a rejection posed (i.e., we manipulated "threat power", see Fellner & Güth, 2003). When an offer was rejected in the current setting, the resource was divided as proposed but both shares were lowered by a lambda factor. Allocators received their share multiplied by lambda, while recipients received their share multiplied by 1 – lambda ($0 \leq \text{lambda} \leq 1$). In the current study we chose values of 0.1 and 0.9 for lambda as these values result in large power differences, while still ensuring some level of dependency between both parties.

The following example shows the outcomes of both parties in a situation where the recipient rejects an offer of 30% of the resource. When lambda equals 0.1 and the offer is rejected, the allocator receives only 7% of the resource (70% x 0.1) while the recipient receives 27% of the resource (30% x 0.9). It is clear that a rejection by the recipient has a large influence on the allocator's outcomes when lambda equals 0.1, while it has little impact on the outcomes of the recipient. In this setting, the recipient thus is relatively powerful as the allocator is highly dependent upon the recipient's choice. In addition, the means of rejecting is highly effective to the recipient and allocators are likely to keep this into account when making the offer.

However, the power relation reverses when lambda equals 0.9. When lambda equals 0.9 and the offer is rejected, the allocator receives 63% of the resource (70% x 0.9) while the recipient only receives 3% of the resource (30% x 0.1). In this case, rejecting hardly

influences the outcomes of the allocator and mostly harms the outcomes of the recipient. As a consequence, the recipient is rather powerless as the allocator is not very dependent upon the recipient's choice. In this setting, the means of rejecting is not very effective to the recipient.

As the above examples demonstrate, lambda influences the effectiveness of the means of rejecting the offer. As a consequence, the lambda factor affects the power relation between both parties. In two experiments we investigated whether this change in power also affects the use of deception. In Experiment 1 we test whether the deceptive behavior of recipients is influenced by their power position. In Experiment 2 we complete the picture by comparing allocators and recipients.

Experiment 2.1: Power and deception by recipients

To provide a first test of our ideas on the relation between power and deception, we designed an experiment in which all participants were assigned to the recipient role. Participants bargained over the division of one hundred chips. Participants learned that the chips were worth twice as much to them as to the allocator. We also informed participants that the different exchange values were only known to them and not to the allocator (see also Kagel et al., 1996; Van Dijk & Vermunt, 2000). Participants learned that they could send the allocator a message about the exchange values prior to the allocator deciding on the offer. Participants could choose from two messages; one message stated that the chips were worth twice as much to them as to the allocator (no deception) the other message stated that the chips were worth the same to both players (deception). Which message the participant chose to send was our measurement of deception and our main dependent variable (see also Van Dijk et al., 2008).

We expected that power would influence the recipient's willingness to use deception. Rejecting is highly effective when lambda equals 0.1, making the recipient relatively powerful. However, rejecting is highly ineffective when lambda equals 0.9, making the recipient relatively powerless. Power thus affects the effectiveness of the strategic means available to the recipient (rejecting the offer). We argue that recipients might resort to deception more readily if their alternative means (rejecting the offer) is less effective in

ensuring a good outcome. Therefore we expected that more recipients would use deception when lambda equals 0.9 than when lambda equals 0.1.

Method

Participants and design. Ninety participants were randomly assigned to either the lambda 0.1 or the lambda 0.9 condition. All participants were assigned the role of recipient. All participants were students at Leiden University. The average age of the participants was 20.77 years (*SD* = 2.24). Sixty-five participants were female (72%) and 25 were male (28%).

Procedure. Participants entered the laboratory and were seated in separate cubicles with a computer. Participants were told that they were going to bargain over 100 chips with another participant, which in reality was a computer-simulated opponent. To minimize suspicion towards this procedure, we always made sure multiple participants were present in the laboratory at any given time. They received a detailed description of the bargaining situation and we carefully explained our power manipulation using the lambda factor. After explaining the bargaining situation, participants learned that the chips were worth €0.08 to them and €0.04 to their opponent. Moreover, we told participants that the allocator was not aware of the different exchange values. Prior to the allocator deciding on the offer, participants sent information about the exchange values to the allocator. Participants could send a message stating the chips were worth €0.08 to them (no deception) or a message stating the chips were worth €0.04 to them (deception). After choosing a message we checked whether participants had understood our manipulation of power. We asked participants whether a rejection would have larger impact on their own outcomes or those of the allocator. In addition, we asked participants how powerful they were during bargaining, how powerful their opponent was (reverse coded) and who was more powerful. Responses were measured on 5-point rating scales and were averaged into a single score for perceived power (Cronbach's alpha = .85). Low scores indicated that participants perceived their position to be powerless while high scores indicated that participants perceived their position to be powerful. Finally, participants were thoroughly debriefed and received €3 for their participation. All participants agreed to this procedure.

Results

Manipulation checks. Eighty-nine out of ninety participants (99%) correctly indicated whether a rejection would have a larger impact on their own outcomes or those of the allocator. This result indicates that our manipulation of power using the lambda factor was well understood by the participants.

Perceived power. An ANOVA showed a significant difference between both lambda conditions on participants' perceived power, $F(1, 88) = 48.21$, $p < .001$, $\eta^2 = .35$. Recipients perceived their position to be more powerful when lambda was 0.1 (*M = 3.77, SD* = 0.68) than when lambda was 0.9 (*M = 2.61, SD* = 0.88). As argued, our lambda manipulation thus determined whether participants perceived their position to be either powerful or powerless.

Deception. Our main measure of deception was the message participants sent to the other player about the exchange value of the chips. In our experiment, 38% of the recipients (34 out of 90 participants) used deception. More relevant to the current investigation, a Chi-square analysis showed that there was a significant difference in deception between both lambda conditions, $\chi^2(1) = 4.73$, $p = .03$. When lambda was 0.9, 49% of the recipients (22 out of 45) used deception, while 27% of the recipients (12 out of 45) did so when lambda was 0.1. This result shows that more participants used deception in a low power position than in a high power position.

Discussion

Our results show that some bargainers use deception (38%), but also that a substantial percentage refrains from using it (62%). This finding is in line with previous research on deception (e.g., Boles et al., 2000) that shows that some bargainers use deception while others do not. More interestingly, our results show that the use of deception was influenced by power. As predicted, participants in a low power position (lambda equals 0.9) more often deceived their opponent than participants in a high power position (lambda equals 0.1). This finding fits with the idea that people take the effectiveness of their alternative means into account when deciding on whether or not to use deception. In a low power position, the recipients' use of deception can be explained from the fact that their alternative means of rejecting the offer was not very effective. In a high power position, recipients could rely on their alternative means of rejecting the offer to

yield them good outcomes. Our results thus not only show that recipients use deception, but also when they are most likely to do so. These findings provide first support for our instrumental approach to deception that poses that the use of deception is influenced by the alternative means bargainers have. The results show that deception is more likely to be used when such alternative means are less effective.

Experiment 2.2: Comparing allocators and recipients

In Experiment 2.1 we established a relation between power and deception for recipients in an ultimatum bargaining setting. One may wonder whether this relation is specific to recipients, or whether a similar relation exists for allocators. Therefore we compare the behavior of recipients to that of allocators in Experiment 2.2, to test whether both behave in a similar fashion. In addition, we provide a more comprehensive picture in Experiment 2.2 by considering potential mediators of the relation between power and deception.

In Experiment 2.2 we extend our analysis by directly comparing recipients to allocators. From an instrumental perspective it is important to realize that allocators and recipients have different means. In our setup, both allocators and recipients have deception as a means. In that regard the roles do not differ. However, they do differ in the alternative means they have besides deception. Recipients have the alternative means of rejecting the offer. As Experiment 2.1 shows, recipients used deception more readily when their alternative means of rejecting became less effective due to the lambda factor. But how will our lambda manipulation affect the use of deception by allocators?

For allocators, the alternative means to deception is that they can formulate an offer. This means is highly instrumental to the allocator as increasing the offer will increase the chance that the recipient will accept. Offers that exceed 20% of the resource are often accepted (see e.g., Camerer & Thaler, 1995) and therefore even a slight increase of the offer may be enough to persuade recipient to accept. Note that even in a low power position allocators can still secure a reasonable share of the outcomes by making a slightly higher offer. The alternative means of formulating an offer is thus effective in persuading the recipient to accept and remains effective even in a low power position. We therefore did not expect to see large effects of our lambda manipulation on deception for allocators, as

the lambda factor does not affect the alternative means of the allocator (formulating an offer) in the way it does for recipients.

For recipients, we expected to replicate our findings from Experiment 2.1; more recipients will use deception in a low power position than in a high power position. Lacking power reduces the effectiveness of rejecting an offer, thereby making deception a more viable alternative means to reach reasonable outcomes. For allocators we expected a different pattern of behavior. Reasoning that allocators have additional control because they can formulate the offer, we expected the effect of power on the use of deception to be less pronounced for allocators. We also expected that power may influence the offers of allocators instead. Low power allocators may opt to slightly increase their offer instead of using deception.

Additionally, we investigated whether concerns about getting a low outcome mediated the relation between power and deception. Prior research on ultimatum bargaining has identified such concerns as an important motive underlying the offers allocators made to the recipient. Positive offers have often been explained as being the result of the allocator's concern that a low offer would be rejected (e.g. Kagel et al., 1996; Kravitz & Gunto, 1992; Pillutla & Murnighan, 1995; Roth & Murnighan, 1982; Straub & Murnighan, 1995; Van Dijk & Vermunt, 2000; Van Dijk et al., 2004, 2008). Allocators may anticipate that a low offer will be rejected and may be concerned that they will end up with a zero outcome as a result. Prior research has never addressed whether recipients have similar concerns. This is understandable, as recipients in prior research on ultimatum bargaining received an offer and could then only decide whether to accept or reject. At that point, recipients no longer need to be concerned about their outcomes as the offer is already decided upon. This is different in the current setting because the recipient's opportunity to use deception takes place before the allocator makes an offer. In such a setup, concerns about a low outcome can be as important to the recipient as it has proven to be for the allocator. When awaiting an offer, recipients may be concerned that they will receive a low offer and this concern may be an important underlying motive in the decision whether or not to deceive the allocator. We therefore predicted that such concerns would mediate the recipient's decision to use deception. For allocators, we expected that concerns about a low outcome would affect their use of deception to a lesser extent as they also have control over the offer as a viable alternative means.

Finally, we also checked for a possible relation between power and morality. Although our reasoning based on an instrumental approach does not rest on differential views on the morality of deception, we wanted to rule out the alternative explanation that deception may influenced by differences in moral perceptions. Previous literature on power and morality suggests that such a relation might exist. For example, Kipnis (1972) states that power corrupts and one might be tempted to conclude from this statement that having power may lower ethical standards and may thus facilitate the use of deception. However, one could also argue for the opposite, namely that having power decreases the use of deception. For example, Tenbrunsel (1998) stated that those high in power are held to higher ethical standards. Based on these insights, one might reason that people high in power may be aware of the fact that they are held to higher ethical standards and may thus be more reluctant to use of deception.

Method

Participants and design. Eighty-seven participants were randomly assigned to the conditions of a 2 (role: allocator, recipient) by 2 (power: lambda 0.9, lambda 0.1) factorial design. All participants were students at Leiden University. The average age of the participants was 21.03 years (*SD* = 2.75). Fifty-three participants were female (61%) and 34 were male (39%).

Procedure. Experiment 2.2 used a similar experimental procedure as Experiment 2.1. Again, participants were told that they were going to bargain over 100 chips with another participant, which in reality was a computer-simulated opponent. To minimize suspicion towards this procedure, we always made sure multiple participants were present in the laboratory at any given time. Participants were then randomly assigned to either the role of recipient or allocator. Regardless of their role, the chips were always worth €0.08 to the participant and €0.04 to their (computer-simulated) opponent. Participants could send information about the exchange values of the chips to their opponent. We made it clear that their opponent would receive their message prior to deciding upon the offer or deciding on whether to accept or reject the offer. Participants could choose to send a truthful or a deceptive message. Which message the participant chose was our measure of deception and the main dependent variable of this experiment.

After participants had chosen a message, we asked whether concerns about receiving a low outcome had influenced their choice. We asked recipients whether concerns about receiving a low offer had influenced their choice for a certain message. Allocators were asked instead whether concerns about a rejection of their offer had influenced their choice. Responses were measured on a 5-point rating scale with 1 indicating that these concerns had little influence on their choice and 5 indicating that they had a large influence on their choice.

Next, allocators were asked to propose a division for the chips. Recipients were instead asked to indicate how many chips they wanted to receive at minimum to accept an offer. The number that the recipients indicated determined whether they accepted or rejected a proposal at the end of the bargaining session. If the allocator's offer would exceed the recipient's demand, the offer would be accepted. But if the allocator would offer less than the recipient's demand, the offer would be rejected. We also made it clear that the recipient's demand was not communicated to the allocator.

After formulating a proposal or indicating a minimum demand, we asked three questions about moral perceptions on using deception. This allowed us to address the possibility that power alters moral perceptions and thereby increases or decreases its use. We asked participants whether they felt it was justified to send incorrect information (reverse-coded), whether they felt obliged to send correct information and whether they felt it was their moral duty to send correct information. Responses were measured on 5-point rating scales and were averaged into a single score for moral concerns (Cronbach's alpha = .92). Low scores indicated that deception was considered morally acceptable while high scores indicated that deception was considered immoral. At the end of the experiment we checked whether participants had understood our manipulation of power. We also measured perceived power as we did in Experiment 2.1 and again calculated a perceived power score (Cronbach's alpha = .84). Finally, participants were thoroughly debriefed and received €3 for their participation. All participants agreed to this procedure.

Results

Manipulation checks. Eighty-three participants out of eighty-seven (95%) correctly indicated whether a rejection would destroy mostly their own outcomes or those of the

opponent. This result shows that our manipulation of power using the lambda factor was well understood by the participants.

Perceived power. An ANOVA showed a significant interaction effect of role and lambda on participants' perceived power, $F(1, 83) = 30.74$, $p < .001$, $\eta^2 = .31$. Simple effects analyses revealed significant differences between lambda conditions for both allocators ($F[1, 83] = 27.69$, $p < .001$, $\eta^2 = .25$) and recipients ($F[1, 83] = 6.73$, $p = .011$, $\eta^2 = .08$). Allocators considered their position to be more powerful when lambda was 0.9 (*M = 4.36, SD* = 0.63) than when lambda was 0.1 (*M = 2.97, SD* = 1.25). The reverse was true for recipients, who considered their position to be more powerful when lambda was 0.1 (*M = 3.73, SD* = 0.56) than when lambda was 0.9 (*M = 3.03, SD* = 0.91). The lambda manipulation thus determined whether participants perceived their position as either powerful or powerless.

Deception. A hierarchical log linear analysis with role, lambda and deception revealed a three way interaction, $\chi^2(1) = 4.85$, $p = .03$. To further analyze this interaction, we performed separate Chi-square tests for recipients and allocators.

For recipients, a Chi-square test revealed a significant effect of power on deception, $\chi^2(1) = 7.21$, $p = .01$. When lambda was 0.1, 43% of the recipients (9 out of 22) used deception, while 81% of the recipients (17 out of 21) did so when lambda was 0.9. In other words, more recipients used deception in a low power position than in a high power position. For allocators, a Chi-square test revealed that there was no significant difference in deception between both lambda conditions, $\chi^2(1) = 0.09$, *ns*. When lambda was 0.1 55% of the allocators (12 out of 22) used deception, while 50% of the allocators (11 out of 22) did so when lambda was 0.9.

Outcome concerns. For both recipients and allocators we used a t-test to assess whether concerns about receiving a low outcome had influenced their decision to use deception. For recipients the t-test showed that these concerns had more influence on their choice when lambda was 0.9 (*M* = 3.86, *SD* = 1.24) than when lambda was 0.1 (*M* = 2.68, *SD* = 1.25), $t(41) = -3.10$, $p < .01$. For allocators no significant difference was found between both values of lambda, $t(42) = 0.95$, *ns*. The influence of concerns about receiving a low outcome on the allocator's choice to use deception was not significantly different when lambda was 0.1 (*M* = 3.14, *SD* = 1.21) or when lambda was 0.9 (*M* = 2.82, *SD* = 1.01).

Mediation. Above we showed that power only had an effect on deception for recipients and not for allocators. To test whether concerns about a low outcome mediated the behavior of recipients, we followed the steps proposed by Baron and Kenny (1986). As our outcome variable is dichotomous while our mediator is continuous, we used the procedure described by MacKinnon and Dwyer (1993) to make the regression coefficients comparable. The comparable coefficients are given between brackets and are used for the Sobel test. A logistic regression analysis showed a significant effect of power on deception, B = 1.82, SE = 0.71, p = .01 (B = 0.45, SE = 0.18). Next, a linear regression analysis revealed a significant effect of lambda on the mediator concerns about a low outcome, B = 1.18, SE = 0.38, p < .01 (B = 0.31, SE = 0.38). Finally, a logistic regression analysis with power, outcome concerns and lambda as factors showed a significant effect of outcome concerns on deception, B = 0.97, SE = 0.34, p < .01 (B = 0.54, SE = 0.19). Moreover, the effect of power on deception was no longer significant, B = 1.16, SE = 0.82, *ns* (B = 0.24, SE = 0.17). A Sobel test revealed that this reduction was significant (Z = 2.11, p = .04). As predicted, concerns about a low outcome mediated the effect of power on deception for recipients.

Allocators' offers. Power had no effect on deception by allocators, but we argued that allocators might adjust their offer instead. An ANOVA indeed showed a significant difference between both lambda conditions in the number of chips offered to the recipient, $F(1, 42) = 20.45$, $p < .001$, $\eta^2 = .33$. When lambda was 0.1, allocators offered 55.73 chips (*SD* = 8.56) on average to the recipient. When lambda was 0.9, the average number of chips offered to the recipient dropped to 35.45 chips (*SD* = 19.21).

Recipients' demands. We also performed an ANOVA to test whether power had an effect on the demands of recipients. Results showed that this was not the case, $F(1, 41)$ = 0.12, *ns*. When lambda was 0.9, recipients indicated that they wanted a minimum of 42.14 chips (*SD* = 15.67) to accept the proposal and when lambda was 0.1 recipients wanted a minimum of 44.00 chips (*SD* = 17.78).

Moral perceptions. An ANOVA with role and lambda as factors revealed no significant differences in moral perceptions, $F(1, 83)$ = 0.85, *ns*. On average participants scored around the scale midpoint, M = 3.13 (*SD* = 1.25). This result makes it less likely that our findings can be attributed to differential perceptions on the morality of using deception.

Discussion

As predicted, power had different effects on the behavior of recipients and allocators. Similar to Experiment 1, more recipients used deception in a low power position than in a high power position. For allocators, power did not affect deception. This finding can be understood from an instrumental approach, as allocators also have the alternative means of formulating the offer to persuade the recipient to accept. Our results show that allocators preferred to change their offers over using deception. Low power allocators offered more chips to the recipient than high power allocators. So for recipients, power affected deception, while for allocators power affected the number of chips offered to the recipient. This is in agreement with an instrumental approach to deception; bargainers use deception to reach their goals, but may prefer alternative means over deception, such as adjusting the offer. In addition, the results showed that concerns about receiving low outcomes mediated the use of deception by recipients. We also measured moral perceptions to test whether our manipulations would affect moral judgments and thereby affect the use of deception. Although a self-report measure at the end of the experiment may not have been the ideal measure, the fact that there were no significant differences between experimental conditions makes an alternative explanation based on different moral perceptions unlikely.

General discussion

In two experiments we investigated the relation between power and deception in ultimatum bargaining. Our results show that power may influence the use of deception by bargainers. In our experiments, recipients used deception more readily when their low power position made their alternative means of rejecting the offer less effective. As the means of allocators differ from those of recipients, a different pattern of behavior was found for allocators. Allocators also have control over the offer to persuade the recipient to accept as an alternative means to deception. Knowing that offers above 20% of the resource will likely be accepted, allocators can increase their offer slightly instead of using the unethical means of deception. Note that this is true even for allocators in a low power position. Our results confirm that allocators often choose this alternative means over using

deception and therefore power did not influence the use of deception for allocators as it did for recipients. Moreover, our results showed that concerns about receiving a low outcome played an important mediating role in deception for recipients. This finding confirms that such concerns are an important motive in bargaining and in addition can motivate bargainers to engage in unethical acts such as deception.

In our experiments we used a well-known paradigm to study bargaining behavior, namely the ultimatum bargaining game (Güth et al., 1982). The ultimatum game captures the essence of ultimatum bargaining in a very elegant and simple structure. The simple structure of the game allowed us to introduce informational and power asymmetries. Power was manipulated by using a lambda factor, similar to Fellner and Güth (2003). This manipulation fits with the characterization of power in terms of the dependency relations between bargainers (cf. Emerson 1962, 1972a, 1972b). More importantly, the lambda factor also allowed us to influence the effectiveness of the means of rejecting and thus to test our instrumental approach to deception. We are aware, however, that power is a very broad concept and that there are many different forms and definitions of power (see e.g., French & Raven, 1960). What may be perceived as a noteworthy limitation of the current studies is that power was studied as a relational construct. Other manipulations of power focus on the experience of power and do not necessarily study power in a relational context. For example, Galinsky, Gruenfeld and Magee (2003) asked participants to recall a personal experience in which they either had or lacked power. Such manipulations of power could be used to further explore deception by people in a low power position. Would people in a low power position use deception more readily in general or only towards people in a high power position? Future research could address these questions by using manipulations of power that go beyond a manipulation of the dependency relations between people.

Furthermore, one might wonder whether our lambda manipulation may have affected other concepts than just power. Most notably, one might wonder whether it may have affected mood or may have induced a competitive mindset (see e.g., Schweitzer, DeChurch, & Gibson, 2006). To check whether this was the case, we performed a separate study[2] in which we tested whether our lambda manipulation affected mood or a

[2] To test for possible effects of our manipulations of power and information levels on mood and competitive mindset, we conducted a laboratory experiment with 130 participants recruited from Leiden University.

competitive mindset. Results from this study did not show any significant effects of our lambda manipulation on mood or a competitive mindset. We therefore think it is unlikely that these concepts can explain our results.

Our findings also provide new insights into the role of power in bargaining. In addition to the adage that power corrupts (Kipnis, 1972), recent work from Keltner et al. (2003) suggests that power stimulates approach related behavior and a focus on opportunities and self-interests. If we look at deception purely as an opportunity to increase the own outcomes, we would expect that having power would lead to more deception. Our findings, however, seem to suggest that a lack of power may also induce deception. Note though that deception in our experiments was not only a means to increase the own outcomes, but also a means to prevent exploitation.

Another important aspect of our experimental setup with differential exchange values of the resource is that it allowed us to measure deception by both allocators and recipients in an identical way. In prior research (e.g. Boles et al., 2000) allocators and recipients often lied about different topics. In our paradigm, both parties lied about the same topic, making a direct comparison between the two roles possible. When comparing the two roles, it is clear that they are fundamentally different; allocators have control over the offer and thus have a behavioral alternative that recipients lack. The different behavioral options of both roles result in differences in how power affects their strategic behavior. For allocators, power had an effect on the offer, while for recipients power had an effect on deception. Our measure of deception was dichotomous, however, and future research may also be interested in studying the magnitude of deception (see e.g. Koning, Van Dijk, Van Beest, & Steinel, 2010).

Participants were randomly assigned to the conditions of a 2 (role: allocator, recipient) by 2 (power: lambda 0.9, lambda 0.1) between-subjects factorial design. Mood was measured on a Likert-type scale ranging from 1 (happy) to 5 (sad). Results showed no significant effects of role (F[1,126] = 1.40, *ns*), power (F[1,126] = 0.01, *ns*) or the interaction between both (F[1,126] = 1.25, *ns*). On average, participants scored just below the scale midpoint (M = 2.30, SD = 0.86) indicating that they were somewhat happy. We measured competitive mindset by asking participants how important they thought it was to earn as much as possible. Responses were measured on a Likert-type scale ranging from 1 (not important) to 5 (very important). Again, the results showed no significant effects of role (F[1,126] = 0.52, *ns*), power (F[1,126] = 0.24, *ns*) or the interaction between both (F[1,126] = 0.40, *ns*). On average, participants scored just above the scale midpoint (M = 3.56, SD = 1.23) indicating that they were somewhat competitive.

In addition, we explicitly presented participants with the option to use deception, while some researchers might prefer to study more spontaneous uses of deception. An advantage of confronting participants with an explicit choice between using deception and telling the truth is that it ensures that participants willingly choose between the two. In natural communication, people may not always be aware that they have an opportunity to use deception. As a result, in such settings it may be more ambiguous whether people willingly refrained from using deception or that it simply did not occur to them that they had the opportunity to use deception. However, it would be interesting to test whether our findings also apply to more natural forms of communication.

The current research used an anonymous bargaining setting in which no risks were involved in using deception. In many realistic settings there are risks involved in using deception. People who use deception run the risks of getting caught and being punished. Moreover, power could have an impact on how large these risks are and may thereby influence the willingness to use deception. If having power would diminish the risks involved in using deception, power might also increase the use of deception by those high in power. Moreover, if the risks involved in using deception would be higher for those low in power this might put a constraint on the willingness to use deception by those low in power. Future research could give more insight in how risks affect the willingness to use deception and how power affects these risks.

Finally, the current research focused on the means bargainers have and not on the goals they pursue. Our instrumental approach presupposes that both means and goals determine the use of deception. In classic game theory it is assumed that bargainers will try to maximize their own personal gains. Past research on deception has adopted this view and the current paper also follows this dominant approach. It should be noted, however, that bargainers may also pursue other goals than self-interest (e.g. Blount, 1995; Handgraaf et al., 2003; McClintock, 1977; Pruitt & Carnevale, 1993; Van Dijk et al., 2004). Bargainers may, for example, strive to maximize joint outcomes or minimize differences in outcomes. Research has shown that these different goals lead to differences in the use of deception (see Koning et al., 2010; Steinel, Utz, & Koning, 2010). Future research could further investigate the relation between goals and the use of deception.

In conclusion, our findings show that there is a relation between power and deception. We demonstrated that power may diminish the benefits of using deception and

that alternative means may be preferred over deception. Our findings support an instrumental approach to deception and demonstrate that bargainers consider the benefits and costs of using deception in relation to those of any alternative means available.

3. Goals and Deception [3]

People lie on a daily basis; research has shown that people tell two lies per day on average (DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996). Mixed-motive situations, such as negotiations, are especially conducive to the use of deception. According to Tenbrunsel (1998), negotiations are asserted to be breeding grounds of unethical behavior, with deception positioned as a common bargaining tactic. But what makes mixed-motive situations so conducive to deception?

In mixed-motive conflict, two or more parties face a conflict between the motives to cooperate or compete with each other (Schelling, 1960). While cooperation may benefit all parties involved, competition may lead to even higher personal outcomes. When all parties compete, however, this often leads to detrimental outcomes for everyone. A typical example of mixed-motive conflict is bargaining; two parties may compete with each other to get high personal outcomes, but they also need to cooperate and compromise to reach an agreement. In such situations, deception can help bargainers overcome this conflict**.**

According to Vrij (2001, p. 6), deception can be defined as "a successful or unsuccessful deliberate attempt, without forewarning, to create in another a belief which the communicator considers to be untrue". To answer the question why deception is used so readily in bargaining, researchers have often focused on self-interest as an important motive. In fact, Gneezy (2005) added to the above definition that deception is used in order to increase the deceiver's payoff at the expense of the other side. Research on deception has also often focused on the fact that bargainers may use deception to increase their own payoff. For example, Boles, Croson and Murnighan (2000) studied deception in an ultimatum bargaining setting in which two parties bargained over an amount of money. Only one party knew the exact amount of money that would be distributed and this party informed the other party about the amount. Results showed that bargainers lied about the amount and portrayed it as lower than it really was. By doing so bargainers made their offer seem more generous, allowing them to make lower offers and keep more money. In similar vein, Pillutla and Murnighan (1995) found that bargainers labeled their low offers as fair

[3] This chapter is based on Koning, Steinel, Van Beest and Van Dijk (2010b)

offers in order to increase the chances that the other party would accept them. In addition, Gneezy (2005) demonstrated that bargainers used deception more frequently when it yielded higher personal gains. Finally, Steinel, Utz and Koning (2010) found that bargainers with a disposition to pursue high personal outcomes used deception more frequently than bargainers that pursued equality in outcomes.

Research has thus often identified self-interest as an important motive to use deception. Although we acknowledge the importance of self-interest as a motive to use deception, we argue that other motives may also play a role and that people may pursue other goals than to simply increase their own payoff. To this end, we took an instrumental approach to deception that relates the use of deception to the goals bargainers pursue. Instrumentality refers to the means-end connection, i.e., the relation between goals and the behavioral means to reach these goals (e.g. Becker & McClintock 1967; Edwards, 1961; Mitchell & Biglan, 1971). The instrumentality approach presupposes that people select the means they find most instrumental to their current goal. If deception is viewed solely as a means to increase the own payoff, then it follows that one would choose this means if one pursues the goal of maximizing the own payoff.

However, recent research shows that bargainers may pursue a variety of goals they and that they may pursue goals other than self-interest. In this context, social value orientation is a highly relevant personality characteristic. Social value orientation can be described as a relatively stable preference for a certain distribution of outcomes (Messick & McClintock, 1968; Van Lange, Bruin, Otten & Joireman, 1997). 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 either prosocial, individualist or competitor (Van Lange, 1999). Prosocial bargainers are primarily motivated to maximize 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.

So far, research on deception predominantly seems to assume that deception is used for one goal only, namely to maximize the own outcomes. While proself bargainers may indeed wish to use deception to maximize their own outcomes, this may not be the case for

prosocial bargainers. Indeed, this is exactly what Steinel, Utz and Koning (2010) found when they reported that bargainers with a prosocial motivation used deception less frequently than bargainers with a proself motivation. In many studies on deception, however, deception is presented as a means to increase the own outcome. Deception often cannot be used to increase joint outcomes or promote equality in outcomes. If deception could be used as a means to reach these goals, prosocial bargainers might be more likely to use deception.

To test this hypothesis and we developed a new paradigm in which deception can be used as an instrument to maximize the own outcomes as well as joint outcomes and equality in outcomes. Our paradigm, to which we refer as the *Motivated Deception Game*, allows us to directly compare deception by both proself and prosocial bargainers. In the *Motivated Deception Game*, two people distribute a number of points that are of value to both. One person (the allocator) chooses between three different distributions of these points, while the other (the recipient) has no influence on the outcomes. The first distribution is favorable to the recipient, but not to the allocator. The second distribution reverses this pattern; the distribution is favorable to the allocator, but not to the recipient. The third and final distribution has equal outcomes for both the allocator and the recipient, but the outcomes are slightly lower than the highest outcomes of the other distributions.

In the *Motivated Deception Game*, the recipient might expect the allocator to choose the distribution that is most favorable to the allocator. We offered recipients the possibility to influence the choice of the allocator by using deception. Prior to giving information about the distribution to the allocator, recipients were allowed to adjust the information. Recipients could move points from one distribution to another, thereby making distributions more or less attractive to the allocator. It is important to note, however, that recipients could make either the first distribution (favorable to the recipient) or the third distribution (equal outcomes for both) more attractive. Recipients could thus use deception to maximize their own outcomes or to maximize joint outcomes and equality in outcomes.

Experiment 3.1: Social value orientation and deception

In Experiment 3.1, we focused on the relation between deception and the goals people pursue. To assess these goals we measured people's social value orientation and classified them as either proself or prosocial. In this experiment, all participants were assigned to the role of the recipient. We anticipated that both proself and prosocial recipients would use deception in an attempt to influence the allocator's decision, but that they would differ in the way they deceived the allocator. We expected that proself recipients would use deception to maximize their own outcomes, while prosocial recipients would use deception to maximize joint outcomes and equality in outcomes. In other words, we expected proself recipients to make the distribution that was most favorable to the recipient more attractive to the allocator, while we expected prosocial recipients to make the distribution that yielded equal outcomes more attractive.

Method

Participants and design. The participants, 82 first year psychology students (mean age: 21.32 years; 25 men, 57 women) at Leiden University, participated voluntarily in a laboratory study. The experiment used a between-subjects design with two conditions (social value orientation: proself vs. prosocial). Social value orientation was assessed using the Decomposed Games Measure (Van Lange, Otten, De Bruin, & Joireman, 1997).

Procedure. After arriving at the laboratory, participants were seated in separate cubicles with a computer. Then their social value orientation was assessed using the Decomposed Games Measure (Van Lange, Otten, De Bruin, & Joireman, 1997). This measure 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). Finally, the individualistic- and competitive orientations were combined into the proself orientation (see also Messick & McClintock, 1968; Van Lange, 1999). Only 4 participants (5%) could not be classified as being either proself or prosocial and were therefore excluded from further analyses. Of the remaining 78 participants, 46 participants (59%) had a prosocial orientation and 32 participants (41%) had a proself orientation.

After measuring the participant's social value orientation, participants were introduced to the *Motivated Deception Game*. Participants learned that they were going to bargain over a number of points with another participant. They were then told that their opponent would choose from three distributions and would thereby determine the outcomes for both participants. We showed participants the distributions the opponent would be allowed to choose from (see Table 3.1).

Table 3.1. Payoff structure of Experiment 3.1.

	Distribution 1	Distribution 2	Distribution 3
Points participant	550	250	400
Points opponent	250	550	400

We told participants that only they had received information on the distributions and that they should send information on the distributions to their opponent. We then offered participants the opportunity to change the information prior to sending it to the opponent. Participants could thus mislead the opponent by making distributions seem more or less attractive to the opponent. Participants were only allowed to change information about the outcomes of the opponent. They could add or subtract points from any of the three distributions in steps of 50 points. A limitation was that the total number of points of all three distributions combined had to be 1200 points or less. Our main dependent variable was the number of points participants added to or subtracted from each distribution. When

participants had sent the information to the opponent, the experiment ended. Participants were thoroughly debriefed and received €2 for their participation.

Results

Changes per distribution. Our main dependent variable was the number of points participants added to or subtracted from each distribution. Table 3.2 shows the changes made to the distributions by participants from both orientations. Three separate t tests were used to analyze whether proself and prosocial participants differed in the changes they made. Proself and prosocial participants did not differ in the number of points they subtracted from the distribution that favored the opponent, $t(59) = 0.86$, $p = .396$. More interestingly, proself participants added significantly more points to the distribution that favored the participant than prosocial participants did, $t(59) = -2.27$, $p = .027$. Finally, prosocial participants added slightly more points than proself participants to the distribution that yielded equal outcomes, $t(59) = 1.69$, $p = .097$.

Table 3.2. Payoff changes as a function of social value orientation in Experiment 3.1.

	Distribution 1	Distribution 2	Distribution 3
Prosocial	+114.71 (161.68)	-254.41 (120.84)	+52.94 (166.94)
Proself	+195.56 (146.98)	-279.63 (105.85)	-9.26 (104.73)

Note. Standard deviations between brackets.

Deceptive strategies. In total, 61 out of 78 participants (78%) used deception by changing information about the outcomes of the opponent. Moreover, the number of participants that used deception did not differ between both orientations, $\chi^2(1) = 1.21$, $p = .271$. Deception was used by 27 out of 32 proself participants (84%) and 34 out of 46 prosocial participants (74%).

When participants used deception, we investigated which distribution they made most attractive to the opponent. We investigated whether participants assigned most points to the distribution that favored them or that yielded equal outcomes. Results showed that 33 participants made the distribution that favored the participant most attractive, while 15 participants made the distribution that yielded equal outcomes most attractive.

Thirteen participants did not favor one distribution over the others and were therefore excluded from subsequent analyses. A Chi-square analysis showed significant differences between both orientations, $\chi^2(1) = 5.87$, $p = .015$. Most proself participants (19 out of 22, 86%) made the distribution that favored the participant most attractive. Prosocial participants, on the other hand, showed a more differentiated pattern and did not show a clear preference for one strategy over the other (see Table 3.3).

Table 3.3. Information sharing as a function of social value orientation in Experiment 3.1.

	No Deception	Deception: Own outcomes	Deception: Equal outcomes	Deception: Other
Prosocial	12	14	12	8
Proself	5	19	3	5

Discussion

Our results show that *both* proself and prosocial participants used deception to influence the opponent's choice, but they differed in the way they deceived the opponent. Participants of both orientations made the distribution that favored the opponent less attractive. However, proself participants more frequently made the distribution that favored the participant more attractive than prosocial participants did. Prosocial participants most often made the distribution that yielded equal outcomes more attractive.

It is interesting to see that most proself participants used the same strategy, while prosocial participants showed a more differentiated pattern of strategies. A possible explanation for this effect may be found in the expectations participants held about the goals of the opponent. Prosocial participants may hold more diverse expectations about the goals of the opponent than proself participants. According to Kelley and Stahelski's (1970) triangle hypothesis, one's social value orientation influences expectations about the social value orientations of others (see also Van Lange, 1992). In particular, it states that proself bargainers hold homogenous views of others by assuming most others will be proself too, while prosocial bargainers hold heterogeneous views by assuming others will be either proself or prosocial. Different views on the orientation of the opponent may explain the differences between proself and prosocial participants in terms of the strategies they

employ (see also Steinel & De Dreu, 2004). More specifically, it may explain why proself participants predominantly chose the same strategy, while prosocial participants showed more variety in the strategies they employed. In Experiment 3.2 we address this matter by providing information about the orientation of the opponent to the participants.

Experiment 3.2: Expectations about the opponent and deception

The results of Experiment 3.1 showed that proself participants predominantly used deception to maximize their own outcomes, while prosocial participants differed from each other in the strategy they employed. In our second experiment we try to identify factors that may influence the choice of deceptive strategies. We argue that the (assumed) social value orientation of the opponent may play a crucial role in the selection of deceptive strategies, especially for prosocial participants.

In Experiment 3.2 we addressed this matter by providing information about the social value orientation of the opponent. We expected that this information would be especially likely to influence the use of deception of prosocial participants. We expected prosocial participants facing a proself opponent to be likely to use deception to prevent the opponent from choosing the distribution that was most favorable to the opponent. More specifically, we expected that prosocial participants would make the distribution that yielded equal outcomes more attractive to their opponent. However, we also anticipated that some prosocial participants might feel justified to act competitively against a proself opponent and make the distribution that favored the participant more attractive.

We expected that prosocial participants facing a prosocial opponent would most likely not use deception. In the case that both the participant and the opponent are prosocial, they would both strive for the same goal. Hence participants would not need to use deception, because the opponent would favor the same distribution. Therefore prosocial participants would most likely send the actual information to a prosocial opponent.

Finally, we expected that the orientation of the opponent would have little effect on the use of deception by proself participants. Proself participants are most likely to use deception to maximize their own outcomes, regardless of whether the opponent is proself

or prosocial. After all, in both cases proself participants might not expect the opponent to choose the distribution that favored the participant.

Method

Participants and design. The participants, 104 first year psychology students (mean age: 22.00 years; 68 men, 36 women) at Leiden University, participated voluntarily in a laboratory study. The experiment used a 2 (participant's orientation: proself vs. prosocial) by 2 (opponent's orientation: proself vs. prosocial) between-subjects design. The participant's social value orientation was again assessed using the Decomposed Games Measure (Van Lange, Otten, De Bruin, & Joireman, 1997).

Procedure. The setup of our second experiment was nearly identical to the one used in Experiment 3.1. Again we started by measuring the participant's social value orientation. This time, 9 participants (9%) could not be classified as being either proself or prosocial and were therefore excluded from further analyses. Of the remaining 95 participants, 64 participants (67%) had a prosocial orientation and 31 participants (33%) had a proself orientation.

Participants were then introduced to our *Motivated Deception Game*. Table 3.4 shows the slightly adjusted payoff table of the game. We adjusted the payoff table so that the third distribution not only provided equal outcomes but also yielded the highest joint outcomes for both bargainers. By doing so, the distribution now more appropriately matched the prosocial goals of maximizing joint outcomes and equality in outcomes. As a result, the total number of points participants could allocate to the three distributions was lowered from 1200 to 1100 (see Table 3.4).

Table 3.4. Payoff structure of Experiment 3.2.

	Distribution 1	Distribution 2	Distribution 3
Points participant	500	200	400
Points opponent	200	500	400

Before participants started bargaining, we manipulated the information participants received about the social value orientation of the opponent. We showed participants three

items of the Decomposed Games Measure allegedly completed by the opponent. The opponent had made either three proself choices or three prosocial choices. In addition to these three choices we also showed a motivational statement allegedly given by the opponent as a reason for picking these choices. In the motivational statement the opponent indicated that he or she wanted to maximize either the own outcomes (proself opponent) or joint outcomes (prosocial opponent). After receiving information about the opponent, participants were allowed to change the information about the outcomes of the opponent. Participants answered our manipulation check of the opponent's orientation by indicating whether they thought it was important to the opponent to earn more than them. Finally, participants were thoroughly debriefed and received €2 for their participation.

Results

Manipulation check. To test whether participants had understood our manipulation of the opponent's orientation, we asked participants whether they thought that it was important to the opponent to earn more points than them. Responses were measured on a Likert-type scale ranging from 1 (not important) to 7 (highly important). An ANOVA showed a highly significant main effect of the opponent's orientation (F[1,91] = 157.61, p < .001, η^2 = . 63). Participants indicated that earning more points than them would be more important to a proself opponent (M = 6.12, SD = 1.49) than to a prosocial opponent (M = 2.16, SD = 1.31). Finally, the ANOVA did not reveal a main effect for the participant's orientation or an interaction effect ($F's$ < 1, *ns*).

Changes per distribution. Table 3.5 shows the changes participants made to the payoff distributions in each experimental condition. Separate ANOVAs were used to analyze differences between experimental conditions for each distribution. An ANOVA showed significant main effects for both the participant's orientation (F[1,91] = 17.26, p < .001, η^2 = .16) and the opponent's orientation (F[1,91] = 3.91, p = .051, η^2 = .04) in the changes made to the distribution that favored the opponent. The means revealed that proself participants subtracted more points from this distribution (M = -283.87, SD = 145.14) than prosocial participants (M = -157.03, SD = 141.94). Furthermore, the means showed that participants subtracted more points from this distribution when the opponent was proself (M = -239.00, SD = 129.48) rather than prosocial (M = -153.32, SD = 168.01).

An ANOVA showed significant main effects for the participant's orientation (F[1,91] = 11.24, p = .001, η^2 = .11) and the opponent's orientation (F[1,91] = 8.31, p = .005, η^2 = .08) in the changes made to the distribution that favored the participant. Proself participants added significantly more points to this distribution (M = +240.32, SD = 216.19) than prosocial participants (M = +102.34, SD = 155.69). Furthermore, participants added more points to this distribution when the opponent was proself (M = +199.00, SD = 209.10) rather than prosocial (M = +90.00, SD = 143.26).

Finally, an ANOVA on the changes made to the distribution that yielded equal outcomes showed a significant main effect for the participant's orientation, F(1,91) = 6.87, p = .010, η^2 = .07. Proself participants subtracted points from this distribution (M = -70.97, SD = 201.15), while prosocial participants added points (M = +15.62, SD = 98.75).

Table 3.5. Payoff changes as a function of social value orientation in Experiment 3.2.

Participant	Opponent	Distribution 1	Distribution 2	Distribution 3
Prosocial	Prosocial	+60.94 (116.21)	-103.12 (136.75)	+4.69 (19.51)
	Proself	+143.75 (179.49)	-210.94 (127.47)	+26.56 (138.53)
Proself	Prosocial	+161.54 (180.46)	-276.92 (178.67)	-30.77 (275.03)
	Proself	+297.22 (226.53)	-288.89 (120.73)	-100.00 (126.03)

Note. Standard deviations between brackets.

Deceptive strategies. In total, 71 out of 95 participants (75%) used deception by changing the information about the opponent's outcomes. A Chi-square analysis showed a significant effect for the social value orientation of the participant, χ^2(1) = 11.84, p = .001. Proself participants used deception more frequently (30 out of 31, 97%) than prosocial participants (41 out of 64, 64%). Further analysis showed that a significant effect of the opponent's orientation on deception for prosocial participants (χ^2[1] = 11. 47, p = .001). Prosocial participants lied more frequently to a proself opponent (27 out of 32, 84%) than to a prosocial opponent (14 out of 32, 44%). This difference was not observed for proself

participants, (χ^2[1] = 1.43, *ns*). Proself participants lied as frequently to a proself opponent (18 out of 18, 100%) as to a prosocial opponent (12 out of 13, 92%).

Similar to Experiment 3.1, we investigated which distribution was made most attractive by participants who used deception. Table 3.6 shows the number of participants that used deception for each experimental condition. In total, 34 participants made the distribution that favored the participant most attractive, while 33 participants made the distribution that yielded equal outcomes most attractive. Ten participants did not clearly favor one distribution over the others and were therefore excluded from further analyses. A Chi-square analysis showed significant differences in the strategies used by both orientations, $\chi^2(1) = 10.75$, $p = .001$. Most prosocial participants used deception to make the distribution that yielded equal outcomes most attractive (24 out of 36, 67%). By contrast, most proself participants made the distribution that favored them most attractive (19 out of 25, 76%). Further analyses did not show any differences for the opponent's orientation for either prosocial participants (χ^2[1] = 0.06, *ns*) or proself participants (χ^2[1] = 2.34, *ns*).

Table 3.6. Information sharing as a function of social value orientation in Experiment 3.2.

Participant	Opponent	No Deception	Deception: Own outcomes	Deception: Equal outcomes	Deception: Other
Prosocial	Prosocial	18	4	9	1
	Proself	5	8	15	4
Proself	Prosocial	1	6	4	2
	Proself	0	13	2	3

Discussion

Our results showed significant differences in the use of deception between proself and prosocial participants. Proself participants used deception more frequently than prosocial participants. In addition, we found differences between proself and prosocial participants in the way they deceived the opponent. Proself participants most frequently made the distribution that favored the participant most attractive to the opponent. By

contrast, prosocial participants most frequently made the distribution that yielded equal outcomes most attractive to the opponent.

General discussion

In the current article we studied the relation between goals and the use of deception. Based on an instrumental approach to deception we expected that such a relation would exist. In an instrumental approach, the use of deception is determined by both the goals bargainers pursue and the means they have available. Whether bargainers will use deception depends on whether they consider it an effective means to reach their goals. Previous research has often focused on self-interest as the main motive to use deception and on deception as a means to increase the own outcomes. More recently, research has demonstrated that bargainers may pursue other goals than self-interest and in this context social value orientation is an important personality characteristic (Messick & McClintock, 1968; Van Lange, Bruin, Otten & Joireman, 1997). We distinguished two different social value orientations; proself and prosocial. Proself bargainers strive to maximize their own outcomes, while prosocial bargainers strive to maximize joint outcomes and equality in outcomes. Our results showed significant differences between both orientations in their use of deception. Moreover, we also demonstrated that expectations about the opponent's orientation had a significant impact on deceptive behavior.

Using our *Motivated Deception Game,* we demonstrated that both proself and prosocial bargainers can use deception as a means to reach their goals. As such, the current findings extend previous research which primarily focused on self-interest as a motive to use deception (see e.g., Pillutla & Murnighan, 1995; Gneezy, 2005). Our findings show that as the goals of proself- and prosocial bargainers differ, so does the way in which they use deception. Proself bargainers mainly used deception to maximize their own outcomes, while prosocial bargainers used different strategies depending on the orientation of the opponent. When facing a proself opponent, prosocial bargainers often used deception to maximize joint outcomes. However, when the opponent was prosocial as well, prosocial participants most refrained from using deception. When both bargainers had a prosocial orientation, they pursued the same goal and the same distribution of outcomes, making

deception as a means unneeded. Due to the unethical nature of deception, prosocial participants may prefer not to use deception when deception is not necessary to reach their goals. This finding is in line with other research that shows that prosocial bargainers more readily adapt their strategies to the (expected) orientation of the opponent (cf., Kelley & Stahelski, 1970; Van Lange, 1992).

In our *Motivated Deception Game,* interesting similarities and differences between proself and prosocial bargainers appeared. The strength of the paradigm is that both orientations may be motivated to use deception to prevent exploitation by their opponent. At the same time, both orientations can reach the goals they strive for through deception; deception is not only presented as a means to maximize the own outcomes, but can also be used to maximize joint outcomes and equality in outcomes. We think that the paradigm offers interesting opportunities for future research. For example, the current studies only used positive outcomes, but one might also use negative payoffs to study deception in the domain of losses and the role of harm in deception (cf., Leliveld, Van Beest, Van Dijk, & Tenbrunsel, 2009; Gneezy, 2005). Furthermore, additional distributions could be added to study other motivations such as maximizing the difference in outcomes, maximizing the other's outcomes, etcetera (cf., Messick & McClintock, 1968).

To conclude, our results confirm that both proself- and prosocial bargainers may use deception, but that they do so to reach different goals. Our results thus supported an instrumental approach to deception that incorporates the goals bargainers pursue. Although previous research has focused on differences between proself and prosocial bargainers, our research replicates and extends that body of literature by investigating the exchange of information during bargaining. Our results not only show that proself and prosocial bargainers strive for different patterns of outcomes, but also that they use different deceptive strategies as a result.

4. Reactions to Deceit [4]

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 BATNA[5], 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 proselfs 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 proselfs (*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 & Güth, 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 where 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.

5. Deception and False Expectations [6]

People lie on a daily basis; research has shown that people tell two lies per day on average (DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996). Especially in bargaining, deception is a very common tactic (Tenbrunsel, 1998; Lewicki, 1983). At the same time, deception is often regarded as a form of unethical behavior (e.g., Dees & Cramton, 1991). So even though deception is a common bargaining tactic, it can also be considered an unethical tactic that people should rather not use. In the current paper we investigate what makes deception unethical and focus on false expectations resulting from the use of deception. We compared different forms of deception to test how false expectations play a role in the evaluation and use of deception. As deception is especially prevalent in bargaining settings, we studied the relation between false expectation and deception in an ultimatum bargaining setting.

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. Bargainers may have conflicting interests, yet at the same time they are dependent upon each other for reaching an agreement. In bargaining two motives play a key role; self-interest and fairness. Which of these two motives is most important, has been the focal point of a large body of research in both social psychology and economics.

A very simple and elegant paradigm to study the motives of bargainers is the ultimatum game (Güth, Schmittberger, & Schwarze, 1982). In the ultimatum game, one party (the allocator) proposes a division for a certain resource. The other party (the recipient) can either accept or reject the proposed division. If the recipient accepts, the resource is divided as proposed. If the recipient rejects, both parties receive nothing.

If bargainers would purely act out of self-interest, recipients should accept any offer above zero no matter how small. Knowing that recipients should accept any offer above zero, allocators should offer the smallest amount possible and keep as much as possible for themselves. Empirical findings do not support these predications; research on the ultimatum game shows that recipients often reject offers lower than 20% of the resource

[6] This chapter is based on Koning, Steinel, Van Beest and Van Dijk (2010a)

(see e.g., Camerer & Thaler, 1995; Komorita & Parks, 1995; Pillutla & Murnighan, 2003). It has puzzled researchers why recipients would reject any offer above zero when accepting clearly yields better outcomes than rejecting. It has been argued that recipients reject offers because they are angry or disappointed that the offer is lower than they had expected (Pillutla & Murnighan, 1996, 2003). It thus seems that expectations play a key role in the rejection of offers in ultimatum bargaining. But what do bargainers base their expectations on?

When resources are to be allocated, people often strive for equity in the distribution of the resources (Adams, 1963, 1965; Walster, Walster, & Berscheid, 1978). Equity means that the ratio between one's own inputs and outcomes is the same as the ratio for others. That is, if one person works twice as hard as another, then it could be considered fair that that person also gets rewarded twice as much. But if two people work equally hard as is the case in the ultimatum game, then one would expect that both also get the same reward. Recipients may therefore expect to get an offer that is close to an equal split of the resource. If the offer is lower than an equal split, recipients may reject it as they expected to get a better offer.

To study whether recipients indeed reject offers due to their expectations to get offered an equal split, researches have varied the amount of information recipients have. In order to be able to judge whether an offer is an equal split or not, recipients need to have information. At a bare minimum, recipients will need to know the size of the resource being divided. In many realistic bargaining settings, parties do not have full information on every aspect of the bargaining setting. In addition, not all bargaining parties may have the same information; some parties may have different or more information than others. Information asymmetries thus often exist between bargaining parties.

Research has demonstrated that such information asymmetries have a large impact on the bargaining process and its outcomes (e.g., Kagel, Kim, & Moser, 1996; Van Dijk, De Cremer, & Handgraaf, 2004). For example, Kagel, Kim and Moser (1996) studied the effects of asymmetric information on the offers of allocators in ultimatum bargaining. In this experiment, bargainers divided 100 chips which were worth more to the allocator than to the recipient. An equal distribution of the money would require allocators to compensate for the differential value by offering more chips to the recipient than to themselves. Results showed that allocators indeed compensated the recipient, but only when the recipient had

full information about the value of the chips. When the recipient had no information about the differential value of the chips, allocators often offered 50 chips. This offer may seem fair to a recipient who is unaware of the differential value, but it implies that the allocator earns more money than the recipient.

In the experimental setup above, bargainers were not able to communicate about their private information. When bargainers are able to communicate with each other, this gives them the interesting opportunity to use deception. According to Vrij (2001), deception can be defined as a successful or unsuccessful deliberate attempt, without forewarning, to create in another a belief that the communicator considers to be untrue. In an ultimatum bargaining setting, deception may make an unfair offer seem more fair, thereby increasing the chances of it getting accepted. Especially when goods have a differential value, deception can be a viable strategy to hide the difference in value.

When the goods are worth more to one party than to another, bargainers may expect this difference in value to be compensated in the number of goods each party receives. For example, when goods are worth twice as much to one bargainer as to another, people may feel that that bargainer should receive half the number of goods the other bargainer receives. Dividing the goods in such a manner will result in an equal distribution of the outcomes. However, bargainers for whom the goods are more valuable may be tempted to conceal the higher value in order to get a larger share of the goods. In the current paper we focus on two forms one could use to conceal the higher value of the goods. The first form is to lie about the lower value for another party by stating that the value for that party is higher than it actually is. The second form is to lie about the higher value for oneself by stating that the value is lower than it actually is. In other words, one could lie by *overstating* the value for another party or by *understating* the value for oneself. Although both forms serve the same purpose of making the values seem more equal, we argue that they are evaluated and used differently. We argue that overstating the value for another is considered more unethical than understating the value for oneself.

The difference between both forms of deception is that the information that is distorted concerns different people. When deceivers understate their own outcomes, they distort information that concerns themselves. By contrast, when bargainers overstate the outcomes of another party, they distort information that concerns another party. Bargainers may consider information that concerns themselves private and may not feel obliged to

share this information (truthfully) with others. When information concerns another party, bargainers may feel obliged to share such information truthfully arguing that the other party has a right to know such information. Moreover, if one overstates the outcomes for another party the actual outcomes for that party will be lower than those communicated through deception. The outcomes will thus turn out to be lower than the other party expected. Given the importance of expectations in the evaluation of outcomes (see e.g., Kahneman, Knetsch, & Thaler, 1986; Pillutla & Murnighan, 1996, 2003), the lower than expected outcomes may be considered especially harmful to the target of deception. By contrast, if one understates the own outcomes, the outcomes for the target of deception will be the same as those communicated through deception. Based on these arguments, one could expect that bargainers may consider lying about their own outcomes more appropriate than lying about the outcomes of another party.

The current research sets out to compare both forms of deception and tests whether bargainers evaluate and use both forms differently. In our first experiment, we assessed whether observers evaluated both forms of deceit differently using a scenario. In our second experiment, an ultimatum bargaining setting was used and reactions to both forms of deception were measured. In our third and final experiment our analysis was extended by investigating the actual use of both forms of deception. In this experiment a newly developed paradigm was used to test whether bargainers preferred using one form of deception over the other.

Experiment 5.1: Reactions to deception in a scenario setting

As a first test of our hypothesis, we designed a scenario experiment in which a bargainer either understated the value of the goods for himself or overstated the value for another bargainer. Participants indicated whether they thought that the bargainer had raised false expectations and whether they thought that the target of deception would be disappointed. We expected that participants would find that overstating the value for another bargainer raises more false expectations and causes more disappointment than understating the value for oneself.

Method

Participants and design. The participants, 31 psychology students (mean age: 21.52 years; 11 men, 20 women) at Leiden University, participated voluntarily in our scenario study. Participants were assigned to the two conditions (form of deception: understate own value, overstate value for another) of a within-subjects design.

Procedure. Participants read a scenario in which two (male) bargainers divided ten chips in an ultimatum bargaining setting. These chips were worth €2 Euro to one bargainer and €1 to the other bargainer. The bargainer with the higher value proposed to split the chips equally, so that each would receive five chips. However, the bargainer lied about the differential value of the chips. In one condition he said the chips were worth €1 to both while in the other condition he said the chips were worth €2 to both. In the first condition, the bargainer thus understated his own outcomes by stating he would receive only €5 while in reality he would receive €10. In the second condition, the bargainer overstated the outcomes of the other by stating he would receive €10 instead of the actual €5. We then asked participants to what extent they thought that the bargainer had evoked false expectations by lying on a scale from 1 (certainly not) to 7 (certainly). We also asked participants to what extent the deceived bargainer would feel disappointed after discovering the final allocation on a scale from 1 (not disappointed) to 7 (very disappointed).

Results

False expectations. A paired-samples t test showed significant differences between conditions on the question whether deception had raised false expectations, $t(30) = -3.97$, $p < .001$. Participants found that false expectations were raised to a lesser extent when understating the own outcomes ($M = 3.74$, $SD = 1.97$) than when overstating the outcomes of someone else ($M = 5.68$, $SD = 1.72$).

Disappointment. A paired-samples t test showed significant differences between conditions in expected disappointment of the deceived bargainer, $t(31) = 2.46$, $p = .020$. Participants expected the deceived bargainer to be more disappointed when his outcomes were overstated ($M = 4.55$, $SD = 1.55$) than when the deceiver understated his own outcomes ($M = 3.55$, $SD = 1.69$).

Discussion

In our scenario, both forms of deception served the same purpose of making an unequal allocation appear equal. It should be noted that in both experimental conditions the use of deception lead to the same (unequal) distribution of outcomes. The pattern of outcomes was exactly the same, regardless of whether the bargainer understated the value for himself or overstated the value for the other person. Yet our preliminary results show that people evaluate both forms of deception quite differently. Participants felt that overstating the value for someone else evoked more false expectations and they expected it to lead to more disappointment. Our scenario thus shows that both forms of deception are evaluated differently by a third party, even though they produce the same result. In our second experiment we test whether targets of deception themselves (i.e., recipients of an ultimatum) also evaluate both forms differently.

Experiment 5.2: Reactions to deception in ultimatum bargaining

Our second experiment again focused on reactions to different forms of deception but used an actual bargaining setting instead of a scenario. In addition, the focus was shifted from a third-person observer to the actual target of deception. The evaluations and emotions of the target of deception may be stronger than those of a third-person observer. The current

study also focused on anger, as anger is known to play an important role in bargaining. In ultimatum bargaining in particular, anger has been identified as an important reason for recipients to reject low offers (see e.g. Straub & Murnighan, 1995; Pillutla & Murnighan, 2003). Therefore we not only measured disappointment but also anger. We expected participants to be more angry and disappointed when the opponent overstated their outcomes than when the opponent understated the own outcomes. In addition to anger and disappointment, we also measured how fair participants considered the behavior of the opponent. We expected participants to rate the opponent as more unfair when the opponent overstated their outcomes than when the opponent's understated the own outcomes.

Method

Participants and design. The participants, 48 psychology students (mean age: 21 years; 26 men, 22 women) at Leiden University, participated voluntarily in our laboratory study. Participants were randomly assigned to the two conditions (opponent's form of deception: understate own value, overstate value for the participant) of a between-subjects factorial design.

Procedure. Upon entering the laboratory, participants were seated in separate cubicles with a computer. Participants then received a detailed description of the ultimatum bargaining game and were all assigned to the recipient role. Participants learned that they were going to bargain over 100 chips with their opponent and that these chips could be worth either €0.04 or €0.08. Participants received no information about the value of the chips. However, they learned that their opponent had full information about the value of the chips for both bargainers. We told participants that the opponent would inform them about the value of the chips and would propose a division of the chips. Participants received a message from the opponent stating that the chips were worth either €0.08 to both or €0.04 to both. After this message the opponent proposed an equal split of the chips. After receiving the message and the proposal, participants could decide whether to accept or reject the proposal. All participants accepted this seemingly equal offer. After participants had accepted the offer they learned the actual value of the chips. We told participants that the chips were worth €0.08 to their opponent and €0.04 to them. Participants thus found out afterwards that the opponent had either overstated their outcomes or understated his

own outcomes. We then asked participants to rate how disappointed and angry they were and to indicated how fair or unfair the behavior of the opponent was. Finally, participants were thoroughly debriefed and paid €2 for their participation.

Results

Manipulation checks. Forty-eight participants (92%) correctly indicated which chip values the opponent had communicated. The four participants that indicated the values incorrectly were removed from further analyses.

Disappointment. A t test showed significant differences between conditions in how disappointed participants were after the actual values of the chips were disclosed, $t(46) = 2.45$, $p = .018$. Participants were more disappointed when the allocator had overstated their outcomes ($M = 5.36$, $SD = 1.62$) than when the allocator had understated the own outcomes ($M = 4.19$, $SD = 1.67$).

Anger. A t test showed significant differences between conditions in how angry participants were after the actual values of the chips were disclosed, $t(45.71) = 2.79$, $p = .008$. Participants were more angry when the allocator had overstated their outcomes ($M = 4.68$, $SD = 1.32$) than when the allocator had understated the own outcomes ($M = 3.46$, $SD = 1.70$).

Unfairness of the opponent. Finally, participants rated the behavior of the allocator as significantly more unfair when the allocator overstated the participant's outcomes ($M = 6.27$, $SD = 0.83$) than when the allocator understated the own outcomes ($M = 5.58$, $SD = 1.10$), $t(46) = 2.44$, $p = .019$.

Discussion

The results of our second experiment replicate the results of our first experiment; both forms of deception are evaluated differently even though they produce the same result of making an unequal distribution appear more equal. In this experiment we focused on the actual target of deceit, but our results are similar to those found earlier for third-party observers; when allocators overstated the outcomes of the recipient this lead to more disappointment and more anger than when they understated their own outcomes. In addition, allocators were rated as less fair when they overstated the outcomes of the recipient than when they understated the outcomes of themselves. What we would like to

stress, is that these differences emerged even though final outcomes were the same across conditions. In both conditions everyone accepted the equal split resulting in the allocator getting €4 (50 x €0.08) and the participant €2 (50 x €0.04). Although the outcomes were thus equally unfair, it appears that the process by which the outcomes were brought about was very important in shaping the evaluations of the participant. In our last experiment we investigate whether bargainers using deception would also evaluate both forms of deception differently and whether that would affect their use of deception.

Experiment 5.3: Use of deceptive strategies

In our third and final experiment we focused on the actual use of both forms of deception. The central question in this experiment was whether bargainers would prefer understating their own outcomes to overstating the outcomes of another party. As our two previous experiments showed, people evaluated these two forms differently being either observers or targets of deception. This may also hold true for bargainers who have the option to use deception and they may prefer to use one form over the other. Bargainers might consider overstating the outcomes of another person to be more harmful to the other and more immoral and may therefore be more reluctant to use this form of deception.

To test this hypothesis we designed a new research paradigm, which resembles an ultimatum bargaining game (Güth et al., 1982). Similar to the ultimatum bargaining game, in this paradigm two bargainers divide an amount of money. The allocator proposes a division of the resource, while the recipient is only allowed to accept or reject this proposal. If the proposal is accepted, the amount of money is divided as proposed. If the proposal is rejected, both bargainers receive nothing.

Different to the standard ultimatum game, the money could only be split in two discrete ways. Participants were all assigned to the allocator role and were presented two envelopes with money on the computer screen; one contained a small amount of money (€1) while the other contained a larger amount (€5). Participants could then choose who would get which envelope. We expected that most participants would want to keep €5 for themselves, giving €1 to the recipient. However, the recipient would still have to agree to this distribution of the money.

We told participants that the recipient was yet unaware of the contents of the envelopes. Participants were then asked to inform the recipient about the contents of the envelopes. Participants could disclose the contents truthfully by saying which envelope contained €1 and which €5. However, they could also tell the recipient that both envelopes contained €1 or that both envelopes contained €5. Assuming that participants kept €5, telling the recipient that both envelopes contain €1 would result in understating the own outcomes. Telling the recipient that both envelopes contain €5 on the other hand would result in overstating the recipient's outcomes. We expected that participants would prefer to understate their own outcomes (i.e., telling both envelopes contain €1) over overstating the recipient's outcomes (i.e., telling both envelopes contain €5).

As noted earlier, an important aspect of deception is that can evoke false expectations in others. People may base their expectations about the outcomes on a lie and only find out afterwards that the actual outcomes are less favorable. When overstating the outcomes of another bargainer, that bargainer will certainly discover the deceit once the actual outcomes are revealed. However, when understating the own outcomes the other party does not necessarily need to discover the deceit. In many realistic settings, bargainers have no or limited information about the outcomes of others. Therefore if one understates the own outcomes, other bargainers will often not find out that they have been deceived. Bargainers may thus prefer understating their own outcomes reasoning that what other parties do not know will not hurt them. To test whether this was indeed the case, we created two experimental conditions; one in which the outcomes of both bargainers were disclosed after bargaining ended and one in which bargainers would only learn their own outcomes.

Method

Participants and design. The participants, 84 psychology students (mean age: 21 years; 27 men, 57 women) at Leiden University, participated voluntarily in our laboratory study. Participants were randomly assigned to the two conditions (outcomes disclosed: only own outcomes vs. outcomes of both parties) of a between-subjects factorial design.

Procedure. Upon entering the laboratory, participants were seated in separate cubicles with a computer. Participants were told that they were going to bargain with another participant. Participants bargained over €6, which was split into €5 and €1. Participants had to decide who would get €5 and who would get €1. We expected that participants would want to keep €5 and give €1 to the opponent. However, the opponent would also have to agree to this distribution of the money, because otherwise both bargainers would receive €0. Participants thus had to find a way to get the opponent to accept the distribution of money.

We told participants that the opponent did not know the amount of money they bargained over and that they should inform the opponent about this amount. We presented it to participants as if they could put the money into two envelopes on which they could then write an amount. Participants could write the actual amounts on the envelopes, but they could also use deception. Participants could choose to either state that both envelopes contained €1 or that both contained €5. Assuming that participants would keep €5, stating that both envelopes contained €5 would be overstating the outcomes of the recipient, while stating that both envelopes contained €1 would be understating the own outcomes. Our main research question was what participants would tell their opponent about the contents of the envelopes.

Before participants informed the recipient about the amounts, they were told which outcomes would be disclosed after bargaining. In one condition the outcomes of both bargainers would be disclosed after bargaining ended (i.e., the contents of both envelopes would be revealed). In the other condition, only the own outcomes would be revealed to bargainers (i.e., only the contents of one's own envelope would be revealed). After sending the information, the experiment ended and participants were thoroughly debriefed about the purpose of the experiment.

Results

Manipulation checks. Seventy-two participants (86%) correctly indicated which information was disclosed to the opponent after bargaining ended. Some participants may have interpreted the question in terms of which information would be known to their opponent at the end of bargaining. Since participants provided the opponent with information, this may have been confusing to participant. Due to this ambiguity and to maximize statistical power, we decided to retain all participants in further analyses.

Amount offered. As expected, most participants (57 out of 72, 79%) kept €5 and offered €1 to the opponent. Moreover, participants kept €5 regardless of which information was disclosed after bargaining, $\chi^2(1) = 2.47$, $p = .116$. Since we were primarily interested in which information bargainers would give when they made a self-interested distribution of the outcomes, we only retained participants who kept €5 euro in further analyses.

Deception. A Chi-square test showed significant differences between conditions in the information participants gave to the recipient, $\chi^2(2) = 9.87$, $p = .007$. Table 5.1 shows the frequency at which participants deceived the recipient and which deceptive strategies were used. When only the contents of the own envelope were disclosed at the end of bargaining, participants clearly favored telling the recipient that both envelopes contained €1. Note that in this case the recipient would indeed actually receive €1 and would thus never discover that the final allocation of outcomes was in fact unfair. This changed when the contents of both envelopes were revealed after bargaining ended. Table 1 shows that more participants told the truth when the contents of both envelopes were revealed. A Chi-square test showed that this increase in telling the truth was significant, $\chi^2(1) = 6.22$, $p = .013$. Moreover, Table 5.1 also shows a slight increase in the number of participants telling the recipient that both envelopes contained €5. A Chi-square test showed that the number of participants that used this form of deception differed significantly between both conditions, $\chi^2(1) = 3.86$, $p = .049$. The reason behind this increase may be that participants expected the recipient to accept €5 more readily than €1. Overall, disclosing the contents of both envelopes after bargaining causes participants to either tell the truth or adopt a more strategic form of deception. Still, stating that both envelopes contained €1 remained the most popular form of deception by far, suggesting that participants generally preferred to understate their own outcomes.

Table 5.1. Frequency of information-sharing strategies in Experiment 5.3.

	Own outcomes disclosed	Both outcomes disclosed
Truthful	5 (14%)	13 (41%)
Deceptive, both 1 euro	29 (81%)	14 (44%)
Deceptive, both 5 euro	2 (5%)	5 (15%)

Discussion

In our third and final experiment we tested whether bargainers would prefer to understate their own outcomes or overstate those of another party. We developed a new bargaining paradigm and told participants that their outcomes would or would not be revealed to the opponent. When the participant's outcomes were not revealed to the opponent, bargainers clearly favored understating their own outcomes. In this manner, they were truthful about the opponent's outcomes and only lied about their own outcomes. This strategy prevented the opponent from discovering the deceit and from finding out that the distribution was actually unequal.

The situation changed when participants believed that their outcomes would be disclosed to their opponent after bargaining. Under these circumstances, there was a significant increase in the number of bargainers that told the truth. These bargainers thus disclosed that their proposed distribution was unequal, running the risk that the opponent would reject their proposal. In addition, more bargainers deceived the opponent by overstating the outcomes of the opponent. These bargainers seem to accept the fact that their deceit will be discovered eventually and might think that the opponent will accept the higher amount more readily. The majority of the bargainers, however, still preferred to understate their own outcomes even when the outcomes of both were revealed after bargaining.

General discussion

In three experiments we demonstrated that understating the own outcomes is perceived differently than overstating the outcomes of another party. In Experiment 5.1 and 5.2 we measured the reactions towards both forms of deception and found that overstating the outcomes of another party caused more anger and disappointment than understating the own outcomes. It is important to note that in both studies the final distribution of outcomes was the same under both forms of deception; only the way it was presented was different. In Experiment 5.3 we studied the actual use of deception and found that people preferred understating their own outcomes to overstating the outcomes of their opponent. Note also that this was true even when participants knew that their deceit would be revealed after bargaining ended. Our results show that both forms of deception differ in the reactions they provoke and the way they are used. We demonstrated these differences for people observing deception by others, for targets of deception and for people actually using deception themselves. The fact that the findings were similar across all these different perspectives in our opinion strengthens the conclusion that both forms of deception are fundamentally different.

Our findings further the understanding of deception and provide insight into why deception may be considered unethical. That deception is unethical is widely acknowledged in theories of ethics and also in many religious views (see e.g., Dees & Cramton, 1991). However, research on deception in bargaining has often focused on the fact that deception can be instrumental to further the own outcomes (see e.g., Boles, Croson, & Murnighan, 2000; O'Connor & Carnevale, 1997; Pillutla & Murnighan, 1995; Schweitzer & Croson, 1999; Steinel & De Dreu, 2004). More recently, research has also turned to the unethical side of deception. For example, Gneezy (2005) shows that deception is used less frequently when it is more harmful to another party. This finding shows that harm done to others is an important unethical aspect of deception. We add to this finding by demonstrating that not only actual harm makes deception unethical, but also harm caused by false expectations. Deception evokes false expectations in others and may cause anger and disappointment when actual outcomes turn out to be less favorable than expected. This is especially the

case when the outcomes of another party are overstated, while understating the own outcomes seems more acceptable.

Interestingly, a large number of bargainers in Experiment 5.3 lied about their own outcomes when they knew that their outcomes would not be disclosed to the opponent. This situation resembles many realistic bargaining settings in which the outcomes of other parties often remain unknown or uncertain. The large number of participants that used deception in such a setting may seem alarming, but we would like to point out that our design made an equal distribution of the outcomes impossible. Given that the outcomes would be unfair in any case, lying about your own outcomes may have been regarded as a solution to a difficult moral dilemma. Note that both self-interested and other-regarding motives could be involved in this type of deception. For example, bargainers may use deception in such situations to protect their reputation, but also to prevent the other party from feeling bad about the unequal distribution of outcomes.

Although our findings provide initial insight into why different forms of deception may be evaluated differently, future research could expand on these finding by investigating which motives are involved in both forms of deception. Are bargainers, for example, more willing to lie to protect their own reputation or are they also concerned about the feelings of another party? In addition, future research could test whether these effects also exist outside a bargaining context. Bargaining settings tend to be rather competitive in nature and therefore deception may be considered less unethical in bargaining than in other, more cooperative settings.

To conclude, our findings provide an interesting new direction for research on deception and different forms of deception. Research on deception has often focused on why people deceive, but not so much on why people would *not* deceive. Our findings may help to bridge this gap by showing why some forms of deception are less acceptable than others, providing insight into why deception is unethical.

6. General Discussion

In this dissertation, I set out to test an instrumental approach to deception. Previous research has often focused on self-interest as the main motive to use deception and on the fact that deception can be used to increase the own outcome (see e.g., Boles, Croson, & Murnighan, 2000; O'Connor & Carnevale, 1997; Pillutla & Murnighan, 1995; Schweitzer & Croson, 1999; Steinel & De Dreu, 2004; Van Dijk, Van Kleef, Steinel, & Van Beest, 2008). Focusing only on self-interest as a motive and on deception as a means to increase the own outcome may be a rather narrow perspective on deception. An instrumental approach offers a broader perspective on deception and focuses on the relation between the goals bargainers pursue and the means they have available to reach these goals. An instrumental approach presupposes that bargainers choose the means they consider most instrumental for reaching their current goals. As such, an instrumental approach incorporates the notion that different goals may lead to a different selection of means. In addition, it does not focus solely on deception as a means, but also stresses the importance of the availability of alternative means. Reasoning that bargainers may be held back by the unethical aspect of deception, an instrumental approach predicts that bargainers may (sometimes) prefer to use alternative means to deception.

Chapter 2 focused on the relation between the means bargainers have available and their use of deception. An ultimatum game was used to study this relation (Güth, Schmittberger, & Schwarze, 1982). It is important to note that the two players in the ultimatum game have different behavioral means. The allocator has the ability to formulate the offer, while the recipient only has the ability to accept or reject the offer. In a traditional ultimatum game, the threat posed by a rejection may be sufficient to persuade the allocator to make a generous offer (e.g., Camerer & Thaler, 1995; Komorita & Parks, 1995; Pillutla & Murnighan, 2003). In the current research, the effectiveness of a rejection was manipulated by varying the consequences it had on the outcomes of both the allocator and the recipient (see also Fellner & Güth, 2003; Suleiman, 1996). The means of rejecting thus was either highly effective or highly ineffective to the recipient for ensuring a reasonable outcome. Results showed that recipients turned to deception far more frequently when their alternative means of rejecting the offer was highly ineffective. No such effect was found for

allocators, as the manipulation did not affect the allocator's capacity to formulate the offer. Results showed that allocators preferred making a slightly more generous offer over using deception. These results show that to understand when and why bargainers use deception, one has to look at the alternative means bargainers have available to them. If the alternative means are ineffective in bringing about a desired goal, bargainers will turn to deception more readily. Chapter 2 thus demonstrates that the use of deception depends on the alternative means bargainers have available to them.

Chapter 3 extends these findings by focusing on the goals bargainers pursue and demonstrates that different goals lead to differences in the use of deception. Social value orientation was used to determine which goals bargainers pursued and a distinction was made between proself and prosocial bargainers (see also Van Lange, 1999; Van Lange & Kuhlman, 1994; Van Lange, Otten, De Bruin, & Joireman, 1997). Bargainers with a proself orientation aim to maximize their own outcome with little regard for the outcomes of other bargaining parties. In contrast, bargainers with a prosocial orientation aim to maximize joint outcomes and equality in outcomes. In our newly developed bargaining paradigm, the *Motivated Deception* Game, bargainers could achieve both goals through deception. The results showed that proself bargainers mainly used deception in a way that increased their own outcomes. For prosocial bargainers, the results were more varied. When prosocial bargainers faced a prosocial opponent, they most often did not use deception as both pursue the same goals. However, when prosocial bargainers faced a proself opponent, they did use deception in order to maximize joint outcomes and equality in outcomes. These findings demonstrate that the goals bargainers pursue have a huge impact on whether bargainers will use deception. The results show us that bargainers will use deception primarily if it helps them to attain their goals in bargaining.

Chapter 4 builds on these findings and once more confirms that the goals bargainers pursue influence their use of deception. The studies in this chapter showed that proself bargainers use deception more readily than prosocial bargainers when deception was presented as a means to increase the own outcomes. This finding confirms previous research (e.g., Steinel, Utz & Koning, 2010) and fits with an instrumental approach to deception. The experiments in Chapter 4 furthermore show that reactions to deceit can also be understood from an instrumental perspective. Bargainers found deception by their opponent more understandable and judged a deceitful opponent less harshly when the

opponent was in a weak position and had limited alternative means besides deception. This finding fits an instrumental approach as it shows that people feel that having little alternative means makes the use of deception more understandable and even more acceptable.

Finally, Chapter 5 also focused on reactions to deceit and focused on the role of false expectations that may result from using deception. Expectations play an important role in the bargaining process and the evaluation of its outcomes (e.g. Kahneman, Knetsch, & Thaler, 1986; Pillutla & Murnighan, 1996, 2003). Deception can evoke false expectations because others may base their expectations on the false information given through deception. In this chapter, two forms of deception were compared to each other with regard to such false expectations. Bargainers were confronted with an opponent who either overstated the outcomes of another person or who understated his own outcomes. Results showed that understating the own outcomes raised false expectations to a lesser extent and was deemed more acceptable than overstating the outcomes of another person. It was also demonstrated that people who were given the opportunity to use deception were more likely to understate their own outcomes than to overstate the outcomes of their opponent. These results show that false expectations may be an important reason not to use deception. In terms of an instrumental approach, false expectations may be regarded as harmful to others and may therefore be considered a reason not to select the means of deception.

The empirical chapters described above show that an instrumental approach to deception can help us understand why and when people use deception or - perhaps more importantly - refrain from using it. The results in this dissertation show that people do not always strive to maximize their own outcomes and that deception can also be a means to maximize joint outcomes or equality in outcomes. In addition, the availability and effectiveness of alternative means also plays a large role in the decision whether to use deception or not. In conclusion, an instrumental approach provides a broader and more complete perspective on deception in bargaining.

Directions for future research

The findings in this dissertation all provided support for an instrumental approach to deception. An instrumental approach may also provide a fruitful framework for future

research on deception. In this section, I describe some directions future research could take in studying deception from an instrumental perspective. One direction for future research could be to test whether an instrumental approach also applies to situations other than bargaining and laboratory settings. It is well-known that bargaining settings are often competitive in nature and that they are therefore also highly conducive to the use of deception (e.g., Lewicki, 1983; Tenbrunsel, 1998). Especially when a bargaining setting is framed as a competitive, the use of deception increases (Schweitzer, DeChurch, & Gibson, 2005). It may well be the case that in settings other than bargaining, self-interest is even less dominant as a motive to use deception. For example, DePaulo, Kashy, Kirkendol, Wyer and Epstein (1996) found that most people do not lie in their daily lives for material gains. Future research could investigate whether different motives and different uses of deception exist outside bargaining settings and whether an instrumental approach still applies to such settings. The work of Steinel, Utz and Koning (2010) takes a first step in this direction by showing that an instrumental perspective on deception also applies to information sharing in groups. The results showed that in such settings the motivation bargainers have influences the information-sharing process. In addition, future research could focus on multi-party negotiations and coalition formation. Research has demonstrated that social value orientation plays an important role in such negotiations (e.g., Van Beest, Andeweg, Koning, & Van Lange, 2008). Interestingly, recent research has demonstrated that using deception in coalition formation may also increase the risk of being excluded from a coalition (Van Beest, Steinel, Murnighan, 2008). Using deception to try to increase one's outcomes may thus be risky in coalition formation.

Another interesting direction for future research would be to study more passive forms of deception, such as withholding valuable information from others. One may wonder whether similar motives underlie passive and active and passive forms of deception. When someone commits an active act of deception, the deceiver takes the responsibility for providing information and for the correctness of this information. With passive acts of deception it is less clear who should be held responsible for not providing the correct information. One might argue that others are responsible themselves for obtaining correct information. That is, a salesman may not feel obliged to tell a customer about a discount, arguing that it is the customer’s own responsibility to learn about discounts. Consequently, the salesman may not consider his act to be an act of deception or an unethical act. In

addition, with passive forms of deception it may be less clear whether it was someone's intention to deceive or that the person just forgot to provide the information. Based on an instrumental approach, I expect that similar motives and processes underlie active and passive forms of deception. I expect that if people are willing to use active forms of deception, they would also be willing to use passive forms of deception. However, in settings where people refrain from using active deception they might still be willing to use more passive forms of deception, as there is more ambiguity involved in such passive forms of deception.

Furthermore, future research could focus more on the moral aspects of using deception. In other words, future research might study when and why people feel that is morally right or wrong to use deception and not so much on whether they used it. Measuring both moral aspects and deceptive behavior at the same time can be problematic. One reason is that there is not necessarily a strong relation between moral judgments and moral actions. For example, Hauser, Cushman, Young, Jin and Mikhail (2007) argue that people often judge or act swiftly and only later come up with a moral reasoning behind their judgments or actions. Measuring moral reasoning after people have decided on whether to use deception may therefore be difficult. Once people have decided to use deception, they may come up with a reason why they did so afterwards and may feel that it was morally right to do so. An example of such a reason could be that they considered it justified to use deception because they expect others to use deception as well in their situation. Although the reasoning is obviously false, it has been demonstrated that people expect others to be less honest after they have been lying themselves (Tenbrunsel, 1998). Measuring moral reasoning after giving people a choice to use deception may thus be problematic.

Measuring moral reasoning prior to offering people the option to use deception may also be problematic. Some people may approach a mixed-motive situation as a moral dilemma, while others may view the situation in terms of strategic strengths and weaknesses (see e.g., Liebrand, Jansen, Rijken, & Suhre, 1986; Sattler & Kerr, 1991). Confronting people with questions on the morality of using deception may force them to take a moral perspective that they otherwise may not have taken. As a result, such questions may influence their behavior and thus their decision to use deception or refrain from using it. Although it may be difficult to assess moral evaluations directly, more insight into moral processes could be provided through manipulations or personality traits. Future

research could, for example, investigate the role of reputation concerns or the risk of getting caught. When people are more concerned for repercussions one might assume that they also deem their behavior more immoral. In addition, personality traits could also provide insight into the moral side of deception. In this dissertation social value orientation played a prominent role, but another fruitful personality trait could be moral identity (see e.g., Aquino & Reed, 2002). Relating the importance of one's moral identity to one's deceptive behavior may provide insight in when deception is deemed immoral or not.

Although there are still many questions future research could and should answer, this dissertation - and the instrumental approach presented in it - in my opinion provides a solid base to further our understanding of deceptive behavior. The instrumental approach states that the use of deception will depend both on the goals bargainer's pursue and the means they have available to reach these goals. It presupposes that bargainers will select the means that they consider most effective for reaching their goals. Indeed, the results showed that there was a link between the means bargainers had and their use of deception. Moreover, the results also showed a relation between the goals bargainers pursued and their use of deceptive strategies. The results in this dissertation are thus in support of an instrumental approach to deception. In addition, the results show that not all goals or situations require the use of deception and that people may refrain from using deception due to the negative consequences it can have for others. It was already demonstrated that when deception harms others, people are less likely to use it (e.g., Gneezy, 2005). This dissertation adds to this finding that also false expectations may be considered harmful to others.

Even though the subject of deception is generally approached in a negative way, our results also show that not everyone uses deception and that it is sometimes used for more noble goals than promoting self interest. Returning to the tale of Pinocchio, we argue that not all lies are necessarily bad. Perhaps the blue fairy should have taught Pinocchio that it is not the lie per se that is bad, but rather the goal that it serves. In addition, she might consider taking into account the means people - and puppets - have in her own ethical judgment of lies.

References

Adams, J. S. (1963). Towards an understanding of inequality. *Journal of Abnormal and Normal Social Psychology, 67*, 422-436.

Adams, J. S. (1965). Inequity in social exchange. *Advances in Experimental Social Psychology, 62*, 335-343.

Aquino, K. F., & Reed II, A. (2002). The self- importance of moral identity. *Journal of Personality and Social Psychology, 86*, 1423-1440.

Bacharach, S. B., & Lawler, E. J. (1981). Power and tactics in bargaining. *Industrial and Labor Relations Review, 34*, 219-233.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.

Becker, G. M., & McClintock, C. G. (1967). Value: Behavioral decision theory. *Annual Review of Psychology, 18*, 239-286.

Blount, S. (1995). When social outcomes aren't fair: The effect of causal attributions on preferences. *Organizational Behavior and Human Decision Processes, 63*, 131-144.

Boles, T. L., Croson, R. T. A., & Murnighan, J. (2000). Deception and retribution in repeated ultimatum bargaining. *Organizational Behavior and Human Decision Processes, 83*, 235-259.

Camerer, C., & Thaler, R. H. (1995). Anomalies: Ultimatums, dictators and manners. *Journal of Economic Perspectives, 9*, 209 - 219.

Cayne, B. S., et al. (Eds.). (1991). *Webster's dictionary of the English language (1991 Edition)*. New York: Lexicon Publications.

Dees, J. G., & Cramton, P. C. (1991). Shrewd bargaining on the moral frontier: Toward a theory of morality in practice. *Business Ethics Quarterly, 1*, 135-167.

DePaulo, B. M., Kashy, D. A., Kirkendol, S. E. Wyer, M. M., & Epstein, J. A. (1996). Lying in everyday life. *Journal of Personality and Social Psychology, 70*, 979-995.

Edwards, W. (1961). Behavioral decision theory. *Annual Review of Psychology, 12*, 473-498.

Emerson, R. M. (1962). Power-dependence relations. *American Sociological Review, 27*, 31-40.

Emerson, R. M. (1972a). Exchange theory, Part I: A psychological basis for social exchange. In J. Berger, M. Zelditch Jr., & B. Anderson (Eds.), *Social theories in progress* (Vol. 2, pp. 38-57). Boston: Houghton-Mifflin.

Emerson, R. M. (1972b). Exchange theory, Part II: Exchange relations and networks. In J. Berger, M. Zelditch Jr., & B. Anderson (Eds.), *Social theories in progress* (Vol. 2, pp. 58-87). Boston: Houghton-Mifflin.

Fellner, G., & Güth, W. (2003). What limits escalation? Varying threat power in an ultimatum experiment. *Economics Letters, 80*, 53-60.

French, J. P. R. Jr., & Raven, B. (1960). The bases of social power. In D. Cartwright and A. Zander (Eds.), *Group dynamics* (pp. 607-623). New York: Harper and Row.

Gneezy, U. (2005). Deception: The role of consequences. *The American Economic Review, 95*, 384-394.

Güth, W., Schmittberger, R., & Schwarze, B. (1982). An experimental-analysis of ultimatum bargaining. *Journal of Economic Behavior & Organization, 3*, 367-388.

Handgraaf, M. J. J., Van Dijk, E., & De Cremer, D. (2003). Social utility in ultimatum bargaining. *Social Justice Research, 16*, 263-283.

Kadlec, D. (2002). Enron: Who's accountable? *Time*. Retrieved August 30, 2008, from http://www.time.com/time/business/article/0,8599,193520,00.html.

Kagel, J. H., Kim, C., & Moser, D. (1996). Fairness in ultimatum games with asymmetric information and asymmetric payoffs. *Games and Economic Behavior, 13*, 100-110.

Kahneman, D., Knetsch, K., & Thaler, R. (1986). Fairness as constraint on profit seeking: Entitlements in the market. *American Economic Review, 76*, 728-741.

Kelley, H. H., & Stahelski, A. J. (1970). Social interaction basis of cooperators' and competitors' beliefs about others. *Journal of Personality and Social Psychology, 16*, 66-91.

Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations. A theory of interdependence.* New York: Wiley-Intersience.

Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach and inhibition. *Psychological Review, 110*, 265-384.

Kipnis, D. (1972). Does power corrupt? *Journal of Personality and Social Psychology, 24*, 33-41.

Komorita, S. S., & Parks, C. D. (1995). Interpersonal relations: Mixed-motive interaction. *Annual Review of Psychology, 46*, 183-207.

Koning, L., Van Dijk, E., Van Beest, I., & Steinel, W. (2010). An instrumental account of deception and reactions to deceit in bargaining. *Business Ethics Quarterly, 20*, 57-73.

Koning, L., Steinel, W., Van Beest, I., & Van Dijk, E. (2010a). *Deception and false expectations*. Manuscript in preparation for publication.

Koning, L., Steinel, W., Van Beest, I., & Van Dijk, E. (2010b). *Goals and the use of deception*. Manuscript in preparation for publication.

Koning, L., Steinel, W., Van Beest, I., & Van Dijk, E. (2011). Power and deception in ultimatum bargaining. *Organizational Behavior and Human Decision Processes, 115*, 35-42.

Kravitz, A. K., & Gunto, S. (1992). Decisions and perceptions of recipients in ultimatum games. *Journal of Socio-Economics, 21*, 65-84.

Leliveld, M. C., Van Beest, I., Van Dijk, E., & Tenbrunsel, A.E. (2009). Understanding the influence of payoff valence in bargaining: A study on fairness accessibility, norms, and behavior. *Journal of Experimental Social Psychology, 45*, 505-514.

Lewicki, R. J. (1983). Lying and deception: A behavioral model. In M. H. Bazerman & R. J. Lewicki (Eds.), *Negotiating in organization* (pp. 68-90). California: Sage.

Lewicki, R. J., Saunders, D. M., & Barry, B. (2010). *Negotiation* (6th edition). New York: McGraw-Hill.

Liebrand, W. B. G., Jansen, R., Rijken, V. M., & Suhre, C. (1986). Might over morality: The interaction between social values and the interpretation of decision-making in experimental games. *Journal of Experimental Social Psychology, 22*, 203-215.

Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. New York: Prentice Hall.

MacKinnon, D. P., & Dwyer, J. H. (1993). Estimating mediated effects in prevention studies. *Evaluation Review, 17*, 144-158.

McClintock, C. (1977). Social motivations in settings of outcome interdependence. In D. L. Druckman (Ed), *Negotiations: Social-psychological perspectives* (pp. 49-77). California: Sage.

McClintock, C. G., & Allison, S. (1989). Social value orientation and helping behavior. *Journal of Applied Social Psychology, 19*, 353-362.

Messick, D. M., & McClintock, C. G. (1968). Motivational basis of choice in experimental games. *Journal of Experimental Social Psychology, 4*, 1-25.

Mitchell, T. R., & Biglan, A. (1971). Instrumentality theories: Current uses in psychology. *Psychological Bulletin, 76*, 432-454.

Murnighan, J. K., Babcock, L., Thompson, L., & Pillutla, M. (1999). The information dilemma in negotiations: Effects of experience, incentives and integrative potential. *The International Journal of Conflict Management, 10,* 313-339.

O'Connor, K. M., & Carnevale, P. J. (1997). A nasty but effective negotiation strategy: Misrepresentation of a common-value issue. *Personality and Social Psychology Bulletin, 23*, 504-515.

Pillutla, M. M., & Murnighan, J. K. (1995). Being fair or appearing fair: Strategic behavior in ultimatum bargaining. *Academy of Management Journal, 38*, 1408-1426.

Pillutla, M. M., & Murnighan, J. K. (1996). Unfairness, anger, and spite: Emotional rejections of ultimatum offers. *Organizational Behavior and Human Decision Processes, 68*, 208-224.

Pillutla, M. M., & Murnighan, J. K. (2003). Fairness in bargaining. *Social Justice Research, 16*, 241-262.

Pruitt, D. G., & Carnevale, P. J. (1993). *Negotiation in social conflict.* Oxford: Oxford University Press.

Roth, A. E., Murnighan, J. K. (1982). The role of information in bargaining: An experimental study. *Econometrica, 50*, 1123-1142.

Rubin, J. Z., & Brown, B. (1975). *The social psychology of bargaining and negotiations*. New York: Academic Press.

Suleiman, R. (1996). Expectations and fairness in a modified ultimatum game. *Journal of Economic Psychology, 7*, 531-554.

Schweitzer, M. E., & Croson, R. (1999). Curtailing deception: The impact of direct questions on lies and omissions. *International Journal of Conflict Management, 10*, 225-248.

Schweitzer, M. E., DeChurch, L., & Gibson, D. E. (2005). Conflict frames and the use of deception: Are competitive negotiators less ethical? *Journal of Applied Social Psychology, 35*, 2123-2149.

Steinel, W., & De Dreu, C. K. W. (2004). Social motives and strategic misrepresentation in social decision making. *Journal of Personality and Social Psychology, 86*, 419-434.

Steinel, W., Utz, S., & Koning, L. (2010). The good, the bad and the ugly thing to do when sharing information: Revealing, concealing and lying depend on social motivation, distribution and importance of information. *Organizational Behavior and Human Decision Processes, 113*, 85-96.

Straub, P. G., & Murnighan, J. K. (1995). An experimental investigation of ultimatum games: Information, fairness, expectations, and lowest acceptable offers. *Journal of Economic Behavior and Organization, 27*, 345-364.

Strudler, A. (1995). On the ethics of deception in negotiation. *Business Ethics Quarterly, 5*, 805-822.

Suleiman, R. (1996). Expectations and fairness in a modified ultimatum game. *Journal of Economic Psychology, 7*, 531-554.

Tenbrunsel, A. E. (1998). Misrepresentation and expectations of misrepresentation in an ethical dilemma: The role of incentives and temptation. *Academy of Management Journal, 41*, 330-339.

Thaler, R. H. (1992). *The winner's curse: Paradoxes and anomalies of economic life*. New Jersey: Princeton University Press.

Van Beest, I., Andeweg, R., Koning, L., & Van Lange, P. A. M. (2008). Do groups exclude others more readily than individuals in coalition formation? *Group Processes and Intergroup Relations, 11*, 69 - 81.

Van Beest, I., Steinel, W., & Murnighan, J. K. (2008). *Honesty pays: On the benefits of disclosing information in coalition formation.* Paper presented at the conference of the International Association of Conflict Management. Available online at http://ssrn.com/abstract=1298608.

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., Van Kleef, G. A., Steinel, W., & Van Beest, I. (2008). A social functional approach to emotions in bargaining: When communicating anger pays and when it backfires. *Journal of Personality and Social Psychology, 94*, 600-614.

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.

Van Lange, P. A. M. (1992). Confidence in expectations: A test of the triangle hypothesis. *European Journal of Personality, 6*, 371-379.

Van Lange, P. A. M. (1999). The pursuit of joint outcomes and equality in outcomes: An integrative model of social value orientations. *Journal of Personality and Social Psychology, 77*, 337-349.

Van Lange, P. A. M., & Kuhlman, D. M. (1994). Social value orientations and impressions of partner's honesty and intelligence: A test of the morality effect. *Journal of Personality and Social Psychology, 67*, 126-141.

Van Lange, P. A. M., Otten, W., De Bruin, E. M. N., & Joireman, J. A. (1997). Development of prosocial, individualistic, and competitive orientations: Theory and preliminary evidence. *Journal of Personality and Social Psychology, 73*, 733-746.

Vrij, A. (2001). *Detecting lies and deceit: The psychology of lying and the implications for professional practice*. New York: John Wiley & Sons.

Walster, E., Walster, G.W., & Berscheid, E. (1978). *Equity: Theory and Research*. Boston: Allyn & Bacon.

Samenvatting

In dit proefschrift werd een instrumentele benadering van misleiding onderzocht. Voorgaand onderzoek was vaak gericht op eigenbelang als een belangrijk motief voor misleiding. Tevens werd misleiding vaak onderzocht als een middel om de eigen opbrengsten te bevorderen (zie bijvoorbeeld Boles, Croson, & Murnighan, 2000; O'Connor & Carnevale, 1997; Pillutla & Murnighan, 1995; Schweitzer & Croson, 1999; Steinel & De Dreu, 2004; Van Dijk, Van Kleef, Steinel, & Van Beest, 2008). Deze benadering van misleiding is te eenzijdig en een breder perspectief op misleiding is wenselijk. Een instrumentele benadering biedt een breder perspectief en richt zich zowel op de doelen die mensen nastreven als de middelen die hen ter beschikking staan om deze doelen te bereiken. Een instrumentele benadering gaat er vanuit dat mensen het middel kiezen dat zij het meest effectief achten om een bepaald doel te bereiken. Bij een instrumentele benadering van misleiding wordt dus rekening gehouden met het idee dat verschillende doelen tot verschillen in het gebruik van misleiding kunnen leiden. Daarnaast onderschrijft een instrumentele benadering het belang van alternatieve middelen naast misleiding. Gezien het feit dat misleiding vaak als onethisch wordt bestempeld, kunnen mensen andere middelen de voorkeur geven boven misleiding.

In hoofdstuk 2 werd deze veronderstelde relatie tussen alternatieve middelen en het gebruik van misleiding getoetst in een ultimatum onderhandeling (Güth, Schmittberger, & Schwarze, 1982). In dergelijke onderhandelingen stelt een partij een verdeling van een aantal goederen voor. De andere partij kan dit verdelingsvoorstel vervolgens alleen aannemen of afwijzen. Het is belangrijk op te merken dat beide rollen dus verschillende middelen tot hun beschikking hebben. Bij veel ultimatum onderhandelingen is het risico op een afwijzing groot genoeg om een verdeler ertoe te bewegen een redelijk royaal bod te doen (Camerer & Thaler, 1995; Komorita & Parks, 1995; Pillutla & Murnighan, 2003). In dit onderzoek varieerden we de gevolgen van een afwijzing echter (zie ook Fellner & Güth, 2003, Suleiman, 1996). Het gevolg was dat afwijzen voor de ontvanger meer of minder effectief was als middel voor het verkrijgen van een redelijk bod. De resultaten lieten zien dat ontvangers van een ultimatum veel vaker misleiding gebruikten wanneer hun alternatieve middel van afwijzen minder bedreigend en dus minder effectief was. Voor de

verdelers had de manipulatie geen effect op hoe vaak zij misleiding gebruikten. Wel bleek dat verdelers een iets hoger bod deden als de dreiging van een afwijzing groter was. Deze resultaten tonen aan dat ook alternatieve middelen meegewogen moeten worden in de beantwoording van de vraag of mensen wel of geen misleiding zullen gebruiken. Als zulke alternatieve middelen afwezig of niet effectief zijn, zal de kans dat men misleiding gebruikt toenemen.

In hoofdstuk 3 werd de analyse verdiept door te onderzoeken of het nastreven van verschillende doelen ook leidt tot verschillen in het gebruik van misleiding. De persoonsvariabele sociale waarde oriëntatie werd gemeten als indicatie voor welke doelen mensen nastreven in een onderhandeling. Er werd een onderscheid gemaakt tussen mensen met een prozelf- en een prosociale oriëntatie (zie ook Van Lange, 1999; Van Lange & Kuhlman, 1994; Van Lange, Otten, De Bruin, & Joireman, 1997). Mensen met een prozelf oriëntatie zijn vooral gericht op het maximaliseren van hun eigen opbrengsten en hebben weinig oog voor de opbrengsten van anderen. Mensen met een prosociale oriëntatie daarentegen proberen de gezamenlijke opbrengsten te maximaliseren en te streven naar een gelijke verdeling van de opbrengsten. Beide doelen konden met behulp van misleiding worden behaald in een nieuw ontwikkeld paradigma. Zoals verwacht, lieten de resultaten zien dat prozelf onderhandelaars misleiding vooral gebruikten om hun eigen opbrengsten te maximaliseren. Voor prosociale onderhandelaar waren de resultaten meer gevarieerd en bleek de oriëntatie van de tegenstander een grote rol te spelen. Als prosociale onderhandelaars een tegenstander troffen die ook prosociaal was, dan gebruikten ze meestal geen misleiding. Beiden streefden immers hetzelfde doel na en misleiding was niet nodig. Tegen een prozelf tegenstander logen prosociale onderhandelaars wel veel vaker, maar zij deden dit dan wel op zo dat de uiteindelijke opbrengsten gelijk verdeeld zouden zijn. Deze bevindingen tonen aan dat de doelen die men nastreeft een grote invloed hebben op de beslissing of en hoe men misleiding gebruikt. Misleiding werd alleen gebruikt als het een effectief middel was om een gewenst doel te bereiken.

In hoofdstuk 4 werd bevestigd dat doelen een belangrijke rol spelen in de beslissing om wel of niet te misleiden. De resultaten lieten zien dat prozelf onderhandelaars vaker misleiding gebruikten dan prosociale onderhandelaars als het een middel was om de eigen opbrengsten te vergroten. Dit resultaat past binnen een instrumentele benadering van misleiding en is bovendien in overeenstemming met eerder onderzoek naar sociale waarde

oriëntatie en misleiding (zie bijvoorbeeld Steinel & De Dreu, 2004). Daarnaast lieten de resultaten in hoofdstuk 4 ook zien dat reacties op misleiding door een ander ook begrepen kunnen worden vanuit een instrumentele benadering. Onderhandelaars vonden een leugen begrijpelijker als deze van een onderhandelaar in een zwakke onderhandelingspositie kwam. Daarnaast vond men een liegende tegenstander in een zwakke onderhandelingspositie minder oneerlijk dan een liegende tegenstander in een sterke positie. Ook deze resultaten passen in een instrumentele benadering van misleiding omdat ze laten zien dat mensen meer begrip hebben voor een leugen van iemand in een zwakke positie.

Ook in hoofdstuk 5 stonden reacties op misleiding centraal. De vraag in dit hoofdstuk was welke rol valse verwachtingen spelen bij de beoordeling van een leugen. Verwachtingen spelen een grote rol in het onderhandelingsproces en de beoordeling van de uitkomsten (zie onder andere Kahneman, Knetsch, & Thaler, 1986; Pillutla & Murnighan, 1996, 2003). Misleiding kan valse verwachtingen bij anderen scheppen omdat zij hun verwachtingen zullen baseren op misleidende informatie. In dit hoofdstuk onderzochten we twee vormen van misleiding op dit aspect. We confronteerden deelnemers met een tegenstander die ofwel zijn eigen opbrengsten lager voor deed komen of de uitkomsten van een ander hoger voorstelde. De resultaten lieten zien dat het lager voorstellen van de eigen uitkomsten acceptabeler werd gevonden dan het overdrijven van de uitkomsten van een ander. Daarnaast werd ook aangetoond dat mensen zelf ook liever hun eigen opbrengsten lager voor deden komen als zij zelf de keuze hadden welke vorm van misleiding zij konden gebruiken. Deze resultaten tonen aan dat valse verwachtingen een belangrijke reden kunnen zijn om geen misleiding te gebruiken. In termen van een instrumentele benadering kunnen valse verwachtingen worden gezien als schadelijk voor anderen en dus als nadeel van het middel misleiding.

De empirische hoofdstukken in dit proefschrift laten allen zien dat een instrumentele benadering van misleiding ons kan helpen begrijpen waarom mensen misleiden of afzien van het gebruik van misleiding. Eigenbelang blijkt niet het enige motief te zijn waarom mensen misleiden en misleiding kan ook gebruikt worden voor andere doelen dan het vergroten van de eigen opbrengsten. Daarnaast blijkt dat ook de beschikbaarheid en effectiviteit van alternatieve middelen een grote rol speelt bij de keuze om wel of niet te misleiden. Tot slot zijn er ook belangrijke overwegingen om geen misleiding te gebruiken,

bijvoorbeeld omdat het andere schaadt door valse verwachtingen te wekken. Een instrumentele benadering houdt rekening met al deze factoren en is daarom een goed model om misleidend gedrag beter te begrijpen.

Dankwoord

Promoveren doe je nooit alleen. Ook tijdens mijn promotie heb ik veel hulp gehad van anderen. In dit hoofdstuk wil ik graag een woord van dank richten tot een aantal van deze mensen.

Allereerst wil ik mijn begeleiding bedanken voor tijd en moeite die zij in mijn promotie hebben gestoken. Tijdens mijn scriptie wekte Ilja mijn interesse voor de wetenschap en daarmee stond hij aan het begin van mijn wetenschappelijke carrière. De vele discussies die we gevoerd hebben, hielden mij scherp en nodigden me uit om de dingen vanuit een ander perspectief te bekijken. Wolfgang's nuttige opmerkingen en rake commentaren waren altijd verpakt in zijn welbekende humor. Eric's uitgebreide ervaring en kennis zijn voor mij een enorme bron van inspiratie geweest.

Naast mijn begeleiding wil ik de vakgroep Sociale- en Organisatie psychologie in Leiden bedanken. De vakgroep is hecht en biedt een heel prettige sfeer om in te werken. De instelling is zeer coöperatief en men is altijd bereid te helpen waar nodig. Voor mij was de vakgroep een tweede thuis en het was een plezier om samen te werken. Ik ben ook blij dat de Universiteit van Amsterdam mij de mogelijkheid heeft geboden mijn wetenschappelijke carrière voort te zetten.

Natuurlijk hebben ook veel mensen buiten het vakgebied een steentje bijgedragen. Hoewel mijn familie wellicht meer affiniteit heeft met vogels en kerncentrales dan met psychologie, hebben zij mij desondanks toch op vele manieren gesteund. Ook veel vrienden hebben mij gesteund; Astrid, Corry, Gerben, Lotje, Mariëlle, Marijke, Mark, Martine, Shaul, Sonja en Tony. Anne Marike en Rob wil ik in het bijzonder bedanken voor hun rol als paranimf tijdens mijn promotie. Jullie vriendschappen zijn me erg dierbaar. Het is verhelderend om zo nu en dan uit te leggen wat je ook alweer deed en waarom dat nuttig is. Daarnaast is het natuurlijk ook fijn om af en toe niet met wetenschap bezig te zijn.

Tot slot wil ik Jessanne bedanken. Naast mijn vriendin is zij natuurlijk ook mijn ‘partner in crime’ als het om sociale psychologie gaat. Ik waardeer onze discussies over psychologie, maar ben ook vooral blij met jouw geduld en begrip als het even niet meezit.

Curriculum Vitae

Lukas Frederik Koning was born on the 4th of September 1978 in Burgervlotbrug, The Netherlands. After finishing high school at the OSG in Schagen in 1997, he started studying psychology at Leiden University. He wrote his thesis on coalition formation under the supervision of Ilja van Beest. In 2004, he received his Master's degree in social and organization psychology. His thesis research sparked his interest in doing scientific research and therefore he applied as a PhD student at Leiden University. He started a PhD project on deception in bargaining under supervision of Eric van Dijk, Ilja van Beest and Wolfgang Steinel. This PhD project resulted in the present dissertation. Lukas now works as a post doc at the University of Amsterdam.

The “Kurt Lewin Institute Dissertation Series” started in 1997. Since 2009 the following dissertations have been published:

2009-1: Marijke Leliveld: Ethics in Economic Decision-Making

2009-2: Monique Pollmann: Accuracy and Bias in Person Perception

2009-3: Krispijn Faddegon: Regulatory Focus in Group Contexts

2009-4: Lieven Brebels: Mirror, mirror on the wall… Procedural fairness as an evaluative and regulatory looking-glass self

2009-5: Daphne Wiersema: Taking it personally: Self-esteem and the protection of self-related attitudes

2009-6: Judith D.M. Grob: Dial E for Emotion: Context and Consequences of Emotion Regulation

2009-7: Katherine Stroebe: Is this about me? Responding to subtle discrimination - beyond an individual versus group perspective

2009-8: Menno Vos: Identity patterns in diverse work groups: Improving social integration outcomes through relational identities

2009-9: Lennart Renkema: Facing Death Together: Understanding The Consequences of Mortality Threats

2009-10: Michael Vliek: Group-based social comparison processes: An intragroup level of analysis

2009-11: Karlijn Massar: Unconscious rivals: The automatic evaluation of rivals in jealousy-evoking situations

2009-12: Bart Terwel: Origins and consequences of public trust: Towards an understanding of public acceptance of carbon dioxide capture and storage

2009-13: Emma ter Mors: Dealing with information about complex issues: The role of source perceptions

2009-14: Martijn Veltkamp: On the Instigation of Implicit Motivation: How Deprivation and Positive Affect Cause Motivated Behavior

2009-15: Marret K. Noordewier: Consistency and the unexpected

2009-16: Sytske van der Velde: Imitation of Emotion: How meaning affects the link between imitation and liking

2009-17: Jacomijn Hofstra: Attaching Cultures: The role of attachment styles in explaining majority members' acculturation attitudes

2009-18: Jacqueline Tanghe: Affect in Groups: Convergence, Conditions and Consequences

2009-19: Anne Marike Lokhorst: Using Commitment to Improve Environmental Quality

2009-20: Jonathan van ‘t Riet: Framing Health Communication Messages

2009-21: Suzanne Pietersma: Persuasive Health Communication: A Self-Perspective

2009-22: Remco Wijn: A functional perspective on the justice judgment process and its consequences

2009-23: Niels van de Ven: The bright side of a deadly sin: The psychology of envy

2009-24: Anthon Klapwijk: The Power of Interpersonal Generosity

2010-1: Maarten Wubben: Social Functions of Emotions in Social Dilemmas

2010-2: Joyce Rupert: Diversity faultlines and team learning

2010-3: Daniel Lakens: Abstract Concepts in Grounded Cognition

2010-4: Luuk Albers: Double You? Function and Form of Implicit and Explicit Self-Esteem

2010-5: Matthijs Baas: The Psychology of Creativity: Moods, Minds, and Motives

2010-6: Elanor Kamans: When the Weak Hit back: Studies on the Role of Power in Intergroup Conflict

2010-7: Skyler Hawk: Changing Channels: Flexibility in Empathic Emotion Processes

2010-8: Nailah Ayub: National Diversity and Conflict: The Role of Social Attitudes and Beliefs

2010-9: Job van der Schalk: Echoing Emotions: Reactions to Emotional Displays in Intergroup Context

2010-10: Nevra Cem: Organizational citizenship behavior and counterproductive work behavior: Cross-cultural comparisons between Turkey and the Netherlands

2010-11: Ron Broeders: On Situated and Embodied Knowledge Regarding Moral Issues

2010-12: Margriet Braun: Dealing with a deviant group member

2010-13: Dennis Bleeker: Representing or defecting? The pursuit of individual upward mobility in low status groups

2010-14: Petra Hopman: Group Members Reflecting on Intergroup Relations

2010-15: Janneke Oostrom: New Technology in Personnel Selection: The Validity and Acceptability of Multimedia Tests

2010-16: Annefloor Klep: The Sharing of Affect: Pathways, Processes, and Performance

2010-17: Geertje Schuitema: Priceless policies. Factors influencing the acceptability of transport pricing policies

2010-18: Femke van Horen: Breaking the mould on copycats: What makes product imitation strategies successful?

2010-19: Niek van Ulzen: Exploring affective perception and social action

2010-20: Simon Dalley: Women's body dissatisfaction and restrictive eating behaviour: A tyranny of a thin-ideal or a fear of fat?

2010-21: Paul Preenen: Challenge at Work: A matter of give and take

2010-22: Katarzyna Ewa Kubacka: The Rules of Attraction: Trust, Anxiety and Gratitude

2010-23: Loes Kessels: May I have your attention please? A neuroscientific study into message attention for health information

2011-1: Elze Ufkes: Neighbor-to-neighbor conflicts in multicultural neighborhoods

2011-2: Kim van Erp: When worlds collide. The role of justice, conflict and personality for expatriate couples' adjustment

2011-3: Yana Avramova: How the mind moods

2011-4: Jan Willem Bolderdijk: Buying people: The persuasive power of money

2011-5: Nina Regenberg: Sensible Moves

2011-6: Sonja Schinkel: Applicant reactions to selection events: Interactive effects of fairness, feedback and attributions

2011-7: Suzanne Oosterwijk: Moving the Mind: Embodied Emotion Concepts and their Consequences

2011-8: Ilona McNeill: Why We Choose, How We Choose, What We Choose: The Influence of Decision Initiation Motives on Decision Making

2011-9: Shaul Shalvi: Ethical Decision Making: On Balancing Right and Wrong

2011-10: Joel Vuolevi: Incomplete Information in Social Interactions

2011-11: Lukas Koning: An instrumental approach to deception in bargaining